

## The Impact of Sports Sponsorship on the Brand Value of the Tunisian Company

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### *Abstract*

*The major objective of this study is to test if the sport sponsorship can influence investors' behavior. The paper analyzes the effect of the final of African Nations Championship Handball games announcements on the stock price of Tunisian sponsoring firm by investigating whether sponsorship announcements have an effect on abnormal returns on share prices. Using event study methodology, the results provide evidence that the market react with the result of the games. Result reveal that abnormal returns positively impact stock returns. The impact of Handball club performance was found to be significant.*

**Key Words:** *Abnormal returns, event study, final of African Nations Championship Handball games, sponsorship and Tunisian Stock Market.*

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### **Introduction**

The transformation of marketing through the use of major sponsorship programs has mandated significant changes in many aspects of traditional advertising, including content, media choice and placement, and the overall pattern of spending in many firms (Cornwell et al., 2005). The sponsor finances the sponsored entity in order to secure the rights to exploit the commercial potential derived from its association with that property (Meenaghan, 1983). Recently, sponsoring sport has become a popular way for firms as away to promote the brand of their product. More companies choice to use sponsoring sport and pay tens of millions dollars because the TV audience of many footballs reaches an important part of popular. As result, companies suppose that sport sponsorship is a key component of the marketing communication ad it dedicate an important part in his marketing budgets. Sponsoring sport postpones from traditional communication such as advertising, sales promotions, public relation or personal selling as it attempts indirectly to persuade consumers' (Meenaghan et Shipley, 1999; Tripodi, 2001).

Farely et al. (1997) argues that sponsorship is designated as a strategic communication tool. Roy et Cornwell (2003) explain that the sporting event is the fastest tool in marketing communications. Most prior

studies utilize the event study approach and show that football game results affect the stocks of the teams that play (Renneboog et Van Brabant 2000). Farrell et Frame (1997) document a positive share price reaction following sport sponsorship announcements. Based on a sample of 110 publicly announced endorsement sport sponsorship contracts, Agrawal et Kamakura (1995) found a positive effect. The same result is verified by Miyazaki et Morgan (2001) on the 27 announcements of sponsorships related to the 1996 Olympics. In contrast, Farrell et Frame (1997) reported decreasing share prices, also examined the same 1996 Olympics. However, Clark et al. (2009) analyze 114 title sponsorship announcements and found overall no share price reaction.

All previous studies on the effect of sponsorship announcements on the company's share price is mainly focused on the US (e.g., Agrawal et Kamakura, 1995; Clark et al., 2009; Miyazaki et Morgan, 2001; Samitas et al., 2008) and reported a contradictory results. However, and to our knowledge there is no research which analyses the effects of sport sponsorship announcements on share price of the sponsor in the Tunisian stock market.

Sponsorships in Tunisia are now taking a new shift, since certain companies are engaging in more sponsorship sport activities. The sport is the primary focus of sponsorship. Indeed, the peculiarity of contemporary communication in modern sport is that sponsorship activity. It has become an increasingly important field in all communication tools. This activity constitutes significant marketing investments for sponsoring companies. So, following the example of most of the countries of the world, the Tunisian sport became a real social phenomenon and sports clubs, in particular of football, set up themselves as real economic and commercial entities, draining some money through players' transfers, the sponsors and also the television rights.

Except that, in spite of these facts, the sponsoring sport is still limited in Tunisia. One can wonder however whether the contracts of sport sponsorship are a worthwhile investment, add value for the company by increasing stock prices. Therefore, the purpose of this study is to analyze the impact of sport sponsorship announcements on company value. This effect is investigated using the concept of abnormal returns around the date of the match final to African nation championship handball (CAN). Abnormal returns are defined as the difference between expected stock returns and actual observed stock returns.

The remainder of the study is organized as follows. We present first literature review and research hypotheses. We describe previous studies the data collection in the third section. We detail our sampling methodology in the fourth section. We present our results in the fifth section, and we conclude in the final section.

## Literature Review and Hypothesis Development

Many companies invest heavily in sponsoring in general and specifically sport sponsorship as part of their communication strategies (Cornwell, 2008; Olson et Thjomoe, 2009). Sponsoring is an investment opportunity, where there is to build brand equity and corporate image (Cornwell et al., 2001). According to Meenaghan (1983), sponsorship is a "*provision of assistance either financial or in kind to as activity by a commercial organization for the purpose of achieving commercial objectives*".

Existing empirical literature on different types of sponsorships have focused on how sponsorship can enhance the value of the firm can be summarized under three different aspects: marketing value creation, strategy value creation and finance value creation. The marketing-based value creation incorporates effect of sponsorship in terms of consumers' awareness. In addition, strategy-based value creation ties the marketing effort with company's communication strategy in order to create a sustainable competitive advantage. Finally, the finance value creation can be explained by the effect of psychology of actual and potential investors in financial decision and investment consideration is a result of many factors such as greed, sales sponsorship, fear, peer group pressure and risk seeking.

Several previous empirical studies have analyzed the effects of sport sponsorship announcements on the share prices sponsors' and have reported mixed results. Agrawal et Kamakura (1995), were the first researchers to use event-study approach, found a positive share price reaction based on a sample of 110 publicly announced endorsement contracts. Mishra et al. (1997) argued that there are statistically significant cumulative abnormal returns of 0.556%, which translates into a mean increase in equity value of \$94.34m. In their work, Miyazaki et Morgan (2001) assess the effect of 27 sponsorship announcements related to the 1996 summer Olympics on shareholder value. The results reported that Olympic sponsorship rights profitable marketing activity by shareholders and statistically significant increase in share prices. Cornwell et al. (2005) reported a statistically significant and share prices reactions following the announcement of official product sponsorships. Shi et Gosh (2005) analyzed the effect of sponsorship announcements with major sports organizations find a significant and positive abnormal return for new announcements and significant and negative abnormal return for extensions or renewals of contracts.

In contrast, Farrell et Frame (1997) examine the effects of the single sponsorship sports event only of 26 sponsorship announcements of the 1996 Olympics in Atlanta, they detect negative abnormal returns. In a recent study, Clark et al. (2009) looking at a sample of 114 title sponsorship announcements of title sponsorships to golf tournaments and tennis, auto racing (NASCAR) and college bowls, they documented that there was no evidence that sponsorships conveyed information to investors. The authors found that the title sponsorships for NASCAR racing was associated with increasing share price and the announcement of college sport title events was associated with negative reactions. Kinney and Bell (2003) examine 61 sponsorship announcements from various types of sports. They documented no significant abnormal return for the overall sample, but they investigated positive abnormal returns for announcements related to baseball and to Olympics.

To summarize the above, it can be concluded that the results of previous research indicates that there can well be both wealth positively and negatively significant effects to sponsorship in general. Thus, prior research clearly indicated that the financial engagements in sport sponsorship activities as generally profitable Investments.

We expected that sponsorship increase future sales and profits and affect share prices of sponsoring firms should increase accordingly. Therefore, our hypothesis suggests that sport sponsorship announcements positively affect the share price of sponsoring company. Our hypothesis is the following:

***Hypothesis:** Sponsorship announcements for the African Nations Championship Handball are associated with positive abnormal returns around the actual date of final match.*

When the team arrived in the final match, it means a good performance. And the Tunisian Team participated in the 9 finals matches' from 1996 to 2012.

## **Data collection**

The sample is based on sport sponsoring deals between 1996 and 2012. The data comes from the sponsorship database from The African Nations Championship Handball (CAN). It mainly contains information about companies sponsors listed in the Tunisian stock market whom, supplemented with additional information, e.g., about daily share price data for each sponsor, daily stock return. The original database is enclosed a sample of Tunisian listed companies. Our sample cover a period from 1996 to 2012 and The CAN once take place every two years that is 9 announcements for every company. We noticed that only two Tunisian companies listed on the stock exchange (such as Tunisair and Arab Tunisian Bank) invested in the sport sponsoring, what gives us a total sample of 18 observations.

The Tunisian investors watched the handball games on TV, and if we want to analyze their behavior with marketing method, it seems difficult, so the financial technique is the better way; we find it in the next paragraph.

## Methodology and Research Model: Market-model Abnormal Returns

This paper uses event study methodology to identify stock market reactions to sport sponsorship of the final match. The event study methodology to analyze share price reactions to specific events has been widely applied in finance, marketing and economics (Karpoff et Rankine, 1994; Koku et al., 1997; MacKinley, 1997) and has been considered to be the standard approach to evaluate the sponsorship impact on firm stock returns (Agrawal et Kamakura, 1995). The underlying idea supposes that the share price should be reacted when investors receive new information about announcement the result of final match. This approach consist to compare stock returns around the event day with theoretical returns, where is expected in absence of the event and allows detecting if these investments marketing are viewed favorably by investors. Changes in stock return following the match result announcement imply the difference between investors' expectations about future profits of the company (Clark et al., 2009).

In our case the event is the fact of final game. We will start with the simplest event study procedure. The impact of final event on the firms' values was studied. Event study methodology is the following: Identification of the events of interest and definition of the event window:

The definition of the event is the date on which the event takes place and estimation windows. What is interesting in our investigation is that every Africa championship handball, Tunisian handball team is a finalist, which allowed us to take the day of the final match of the day as event [t = 0].

The estimation window is of 200 days, distance from before the event 30 days [-230, -31], and the event window is of 30 days. The use of this interval of times through the daily data is explained by the evaluation of prediction of a normal return during the event window in the absence of the event (Martinez, 1996). Also we define before event window (5 days) and after event window (5 days), p=11 days [-5, +5]. We chose a small interval not to have elements that interact.

We calculate the abnormal returns (AR) generated during the event window in order to estimate the effect of an event on the share price. For a share i and at the time t, the abnormal return is:

$$AR_{it} = R_{it} - E(R_{it})$$

Where:

$AR_{it}$  is the abnormal return

$R_{it}$  is the actual return of the share i at the time t

$R_{it} = \text{Log}((P_t + D_t) / P_{t-1})$

$P_{it}$  and  $P_{it-1}$  is the daily price quotation of the share i respectively to the time (t) and (t - 1),

$D_{it}$  is dividend received on the share i at the time t.

$E(R_{it})$  is expected or normal return of the stock at the time t.

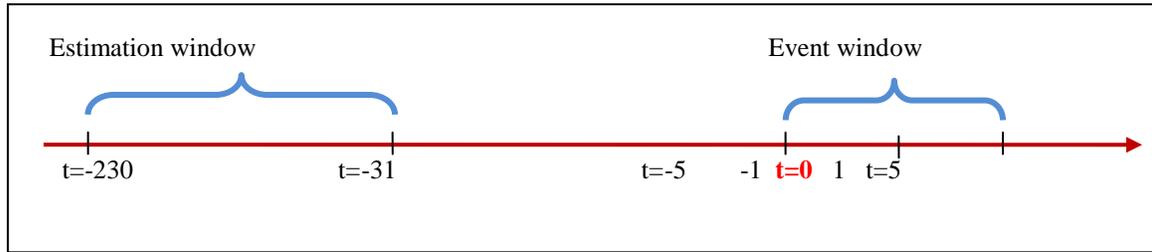
The actual return  $R_{it}$  can be observed in the data. However, the normal stock return should be estimated. The most common models for normal stock return are the constant mean return model and the market model. The normal stock return is assumed to be constant in the mean return model. This assumption seems to be very strong. Therefore we are going to use the market model.

This market model assumes that there is a linear relationship between the return of any stock to the return of market portfolio. As a result, we can run the following regression:

$$E(R_{it}) = \alpha_i + \beta_i Rm_{it} + \varepsilon_{it}$$

Where  $Rm_t$  is the actual return of the market at the time t;  $\varepsilon_{it}$  is the residual term of share i at the time t; and  $\alpha_i$  and  $\beta_i$  are the parameters, whom will be estimated based on the "estimation window". Formula calculate  $\beta$  is:

$$\beta = \frac{\text{cov}(R_i, Rm)}{\sigma^2(Rm)}$$



To calculate the actual return of the market, we used the TUNINDEX index. This is equivalent to the CAC40 in France and FTSE100 in Great Britain. Therefore, the actual return of the market will be:

$$Rm_t = \frac{(I_t - I_{t-1})}{I_{t-1}}$$

Where  $I_t$  and  $I_{t-1}$  are the daily price of the TUNINDEX, respectively to the time (t) and (t-1). By averaging the residuals across firms in common event time, we obtain the average abnormal returns  $AAR_t$

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

Where: N is the number of firms in the sample. In order to get more precise results, we are going to define the event window, where the announcement effect is going to be estimated. We are going to define the cumulative average abnormal return  $CAAR_t$  for the event window:

$$CAAR_t = \sum_{t=x}^y AAR_{it}$$

Tests used in event studies to assess the significance of abnormal returns for each date within the time interval of event window. The use of non-parametric tests allows us to confirm or reject the results obtained from the parametric tests. In this paper, to test our hypothesis proposed, we employed one parametric test 't-test' (T) was used to establish whether differences between the group of companies receiving qualifications and those receiving unqualified opinions were significantly different from zero. The test was run using the statistical program SPSS Version 10 for Windows.

For average abnormal returns,

$$t_1 = \frac{AAR_t - 0}{\sigma_{AAR_t}} \rightarrow T_{N-1}$$

With  $\sigma$  (AARt) is the cross-sectional standard deviation. This one is estimated from the variance of abnormal returns:

$$\sigma_t(AAR) = \frac{\sigma_t(AR)}{\sqrt{18}}$$

We call back that only two Tunisian companies listed on the stock exchange (such as Tunisair and Arab Tunisian Bank) invested in the sport sponsoring, what gives us a total sample of 18 observations (N = 18). Thus:

$$AAR_t = AAR_{tunisair} + AAR_{ATB}$$

Thus :

$$\sigma_t(AAR) = \frac{[\sigma(AR_{tunisair}) + \sigma(AR_{ATB})]}{\sqrt{18}}$$

Thus :

$$\sigma_t(AR) = \sqrt{\frac{1}{17} \left( \sum_{i=1}^{18} AR_{it} - AAR \right)^2}$$

For cumulative average abnormal returns

$$t_2 = \frac{CAAR_t - 0}{\sigma_t(CAAR)} \rightarrow T_{N-1-K}$$

Where:

K is the number of days to estimate cumulative average abnormal returns

$$T = \frac{\frac{CAAR_t}{P}}{[\sigma(AAR) * \sqrt{P}]}$$

With:

$$\sigma(CAAR_t) = N \sigma(AAR_t)$$

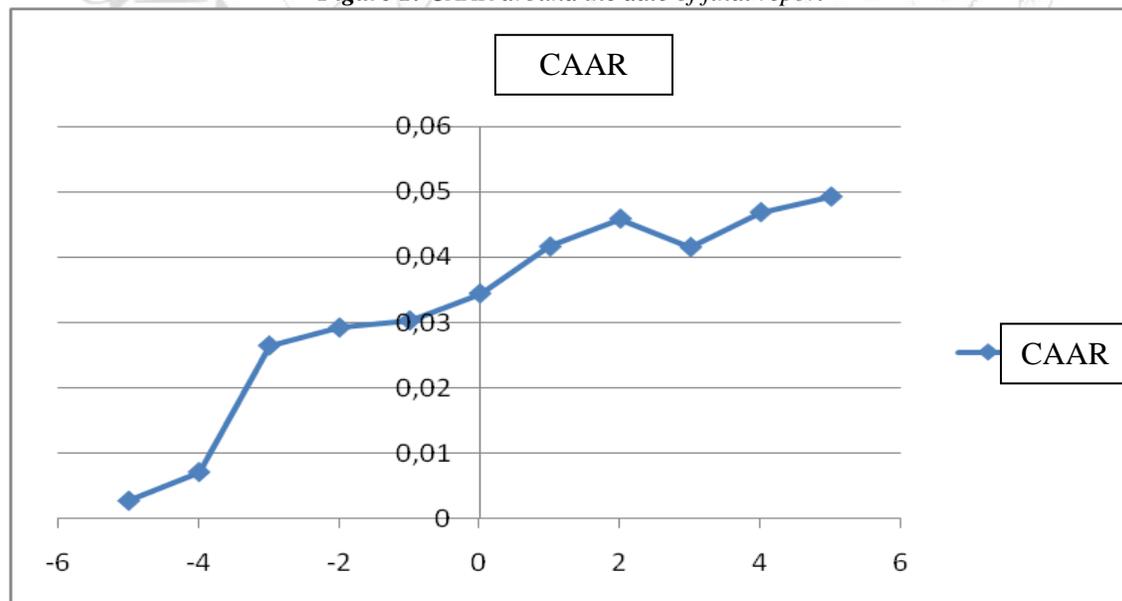
## Empirical Results and Analysis

*The results of the event study: abnormal returns*

We analyze graphically (Figures 1) and statistically (Table 1) the global reaction to a reaction of investors to the sponsorship of handball Tunisian team.

Figure 1 shows that the cumulative average abnormal returns are positive around the date of final match, and they are in upward movement on the event period [-5; +5].

**Figure 1:** CAAR around the date of final report



The Figure 1 reveals that the abnormal returns on the financial market are increase after the match that sponsors are showed clearly in the TV and in the competition event. However, it is necessary to verify if the variation of the returns around the match is significant or not.

We note no significant results for the days before t-2, because there is not a lot of advertising for these championships before the final match where Tunisia is still present (luckily for the reliability of our study). Table 1 reports the summary statistics of the variables used in this study. This table provides the descriptive statistics for cumulative abnormal return.

**Table 1 : Cumulative abnormal return around event day**

<i>Jour</i>	<i>CAAR</i>	<i>T Student</i>
5	0,04924088	1,59328437
4	0,04686993	3,26202593*
3	0,04155109	2,41965257**
2	0,04587776	5,67213024*
1	0,04163083	3,36031564*
0	<b>0,03448209</b>	<b>2,0823423***</b>
-1	0,03035421	2,06769525***
-2	0,02928595	1,4834869
-3	0,02653182	0,95200426
-4	0,00723482	0,41054055
-5	0,00286239	0,16959199

\*\*\* significant at 1% ; \*\* significant at 5% ; \* significant à 10%

We observe a positive and significant action of sponsorship. On the following intervals, we obtain thresholds significant at 1%. The CAAR for [0, +1] is 4,163%.

The interval [0, +2] ; CAAR= 4,587 %, the same for [0, +4] ; CAAR= 4,686%.

Our sample found Investors' reaction lasted until the fourth day after the event statistically significant. The significant results on the event window of six days, from (t-1) day until (t+4), given the performance of the team and the big media in this short period. So, this result is also confirmed by consistently positive and significant CAARs across different time windows. For instance, between days -1 and +4 CAAR is 0,04686993 (t= 3,26202593) thereby supporting H1 for sponsorship of final match. It must be noted that these positive returns in sponsorship of final match. After, the 5<sup>th</sup> day, the sponsorship effect drop, the investors don't react, because handball games is not a daily preoccupation for companies since there is not a continuous noise in TV unlike football, it have a movement and announcement only when the Tunisian team qualifies for the final, so the decisive day is nearly before or after t=0 (especially as Tunisia wins most of times, first or second rang, only one times it is ranked third in Africa).

These observations show that the event gives favorable market information on firms that adopt such transactions like an increase in quotation of share Tunisain Company and ATB Bank.

The results from the event study approach across the entire sample indicate a significant positive impact of sport sponsoring Tunisian performance team on firm value.

Practically, it is also important to understand the full range of marketing initiatives involved in a sponsorship. Marketers should make every effort to establish a relationship with the sports event affiliated with the firms sponsored sport (Sherry, 1998). Therefore, positive changes in firm's value can be attributed to good fit between sports event and sponsoring.

## Conclusion

The major objective of this study to test if the result of championship handball game can influence investor's behavior: stock returns. In other words, we considered the effect of sponsorship announcement performance on the value of a sponsoring company. The paper deals with stocks reaction on result of championship handball sponsorship announcement using event study method. For this study, we examined the announcement data of two sponsors (Tunisair and ATB) of championship handball games. The sample of 18 observations over the period 1996 and 2012 for Tunisian sponsorship was used to study the

announcement effect in order to investigate the potent influence between the announcement of the result of the championship handball and investors' behavior. We found abnormal returns following matches of the final handball tournaments. The result of the handball games has a positive impact on stock price of sponsors. According to the literature, there are some effects of how investors make decisions. The main contribution of this study is to analyze how a stock return of sponsorship is influenced by the results of the game and to extend the literature of the marketing field toward investors' behavior.

This study has one limitation. This limitation relates to the selection of sample firms. Tunisian companies are publicly traded on the number of 58 companies, the number of companies' publicly traded and are sponsors, in the same time have created a strain in our study, because the number of observations is reduced (18).

Future research should further investigate the effect of other kinds of sponsorship such as art sponsorship, different kinds of sport. Also, it seems to us interesting to verify if the impact of the sponsorship or the games sponsorship program can influence transaction volume or stock volatility.

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