

## NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

### Iuliia Naidenova, Petr Parshakov, Alexey Chmykhov

# SOCCER SPONSOR: FAN OR BUSINESSMAN?

BASIC RESEARCH PROGRAM

**WORKING PAPERS** 

SERIES: Financial Economics WP BRP 28/FE/2014

#### SOCCER SPONSOR: FAN OR BUSINESSMAN?

This paper investigates how soccer sponsorship influences the financial performance of sponsors. We use an instrumental variable regression framework combined with a fixed effects model to avoid the possible endogeneity raised by omitted variables and reverse causality. The number of tweets containing both team and sponsor names were collected to use as the instrumental variable. Top European leagues were analyzed. Our results show that soccer sponsorship is more charity than commercial investment. Shareholders should be aware of sponsorship deals, and senior management should analyze the financial assumptions of cash flow forecasting for such projects carefully.

JEL Classification: L83; O16

Keywords: soccer, sponsorship, instrumental variable, twitter

<sup>&</sup>lt;sup>1</sup> National Research University Higher School of Economics. Laboratory of Investment Analysis and Department of Financial management, yunaydenova@hse.ru

<sup>&</sup>lt;sup>2</sup> National Research University Higher School of Economics. Asset Pricing Department, pparshakov@hse.ru

<sup>&</sup>lt;sup>3</sup> National Research University Higher School of Economics. Student of Economics Faculty, aschmykhov@edu.hse.ru

#### Introduction

«Soccer» or «football» in Europe is one of the most popular sports. It attracts a lot of people all over the world. Top teams attract thousands of people to stadia, millions more watch broadcasts. Soccer is a huge and rapidly developing business involving considerable amounts of money.

Every soccer club needs money to develop, to buy new players and to hire experienced coaches. Professional soccer clubs, playing in national premier leagues and in international competitions, generate considerable revenues from broadcasting deals, ticket sales and merchandise, but almost all of them require sponsorship support. That is why most clubs seek to sign contracts with different investors, generally companies, to attract these funds. A large part of such contracts are sponsorship deals with local or international companies. Sponsorship deals are based, at first glance, on the prospectively mutually beneficial partnership between companies and soccer clubs. Such partnerships are usually based on buying a place for the company logo or advertising message on the club's kit or stadium banners in order to show it to thousands of fans who come and watch their favorite team's matches. Companies also use star players to endorse products and increase brand awareness.

Each soccer club generally has several sponsors: kit sponsor, a shirt sponsor and lower-level sponsors. Sponsorship has become a form of exchange between the sponsor and the club it invests in, with both parties seeking to achieve their own strategic goals (Farelly & Quester, 2005). It looks simple: A company pays for an advertising opportunity. However, it is not as simple as it seems.

Sponsorship is a mutually beneficial cooperation where each company has its own commercial objectives (Jensen & Cobbs, 2014). Whether investments in soccer club help to improve company performance is an important question for company management. However studies have had mixed results finding positive and negative influences of sport sponsorship on company performance.

However prior research on sponsorship efficiency did not take into account the mutual influence of the willingness to become a sponsor and company performance. Sponsorship as a marketing technique can result in an increase in sponsor performance. If company is efficient and makes large profits it is more likely to become a sponsor. Thus methodological problems in regression analysis associated with endogeneity arise. This can lead to a bias in regression coefficients and inaccurate conclusions. The present paper addresses these issues.

The remainder of the paper is organized as follows. Section 2 provides the theoretical background on sport sponsorship and its influence on company performance. Section 3 describes sample selection, variables, research model, and analysis method. Section 4 presents the results which are discussed in Section 5.

#### Literature review

The topic of sport sponsorship and its effectiveness for sponsoring companies has been actively discussed since the 1990s. Generally sponsorship is "an investment, in cash or in kind, in a sport property in return for access to the exploitable commercial potential associated with that property" (Smith et al., 2008, p. 387). In other words sponsors pay sport clubs or sport events in order to promote their products and services, and to get a return on their investment. Verity states that sponsorship may be more effective than different traditional advertising campaigns or other promotional activities (Verity, 2002). There are a number of objectives and benefits that corporations pursue when sponsoring sport: overcoming cultural barriers, establishing relationships with media corporations, becoming involved with the community, increasing brand awareness and facilitating positive brand image, reaching new target markets, boosting sales and market share through brand loyalty, protecting against competitors, obtaining hospitality opportunities, and even improving employee morale or facilitating staff recruitment (Biscaia et al., 2013; Cornwell et al., 2005). However the major aim of sponsorship is usually an increase in company awareness and brand loyalty to improve company performance and to attract new shareholders.

Cornwell and Maignan (1998) distinguish measurement of sponsorship effects as one of five main research streams in this area. The main difficulty in the evaluation of sponsorship is the differentiation of its effects from those of other advertising and promotional techniques (Pham, 1991; Miles, 2001; Miyazaki & Morgan, 2001). Most empirical studies on measuring sponsorship effects are based on consumer surveys (Cornwell & Maignan, 1998). However the researchers note that questionnaires can give biased results because of small samples and/or the self-selection of respondents (Sneath et al., 2006; Smith et al., 2008).

According to value-based management, market capitalization is one of the main indicators of company performance. Clark, Cornwell and Pruitt (2002) show sponsorship to have an effect on share price. The study shows that, overall, sponsorships were perceived positively by stock market investors. The event study done by Reiser, Breuer and Wicker (2012) provides evidence that sport sponsorship announcements positively impact stock returns, but this impact differs among sports and regions. Hanke and Kirchler (2013) find a statistically significant impact of the results at an individual match level of the seven most important soccer nations at European and World Championships on the stock prices of jersey sponsors. However research based on stock market data entails the analysis of listed corporations, thus a self-selection bias can occur.

Cornwell and co-authors (2005) used the Scholes-Williams standardized cross-sectional market model to test whether there is a change in stock prices connected with sponsorship announcements. They found no significant positive impact of sponsorship announcements on stock prices during the period of 11 days around the announcement date. On the other hand further tests considering longer periods around announcement day revealed a positive influence of the official announcement date. Thus, there is an impact but not in the short term before or after the announcement but the impact itself takes place. Deitz, Evans and Hansen (2013) show a strong shareholder wealth effect connected with the date of official sponsorship announcement.

Some papers, such as Biscaia et al. (2013) and Smith et al. (2008), are focused on the analysis of consumer purchase intention which is perceived as the most useful indicator of sponsorship effectiveness given its impact on future sales (Crompton, 2004). Smith et al. (2008) investigate the relationship between sport sponsorship and customer purchase intentions. Results show that fan passion and a perception of sponsor integrity can create purchase intentions. So purchase behavior is the link between sponsorship and company sales. Biscaia and co-authors (2013) examined the relationships between attitudinal and behavioral loyalty with sponsorship awareness and purchase intentions of fans of a professional soccer team. They found that sponsorship awareness significantly influences the attitude toward sponsors, and the attitude toward the sponsor was the strongest predictor of purchase intentions.

It is becoming more desirable to integrate the company brand directly into sport broadcasts rather than to use traditional TV advertising during commercial breaks (Jensen & Cobbs, 2014). According to their study, sponsorship exposure during sport events is necessary to create brand-awareness among people watching the event and it leads to the creation of brand equity which is one of the commercial objectives for most companies.

However the influence of sponsorship on company performance can be negative. Investigating the link between sports sentiment and stock returns Edmans et al. (2007) found an effect from losing knockout matches in international tournaments. Norman (2012) also notes both positive and negative comments – some fans criticize frequent reminders of a sponsor during broadcasts. Before deciding on sponsorship, a company should take into account that becoming a sponsor means a certain transformation of marketing strategy and possible changes in key aspects of marketing expenditures (Cornwell et al. 2005). The costs of changing marketing strategy can have a significant negative influence on company performance.

Moreover, financial performance can be a determinant of major investment decisions, particularly the decision to become a sponsor. Cobb-Walgren et al. (1995) show that companies which spend larger amounts of money on marketing achieve better brand recognition, brand equity and consequently have bigger returns on their investment which in turn, allows bigger marketing expenditure to be made. This logic may be applied to sponsorship as a part of marketing strategy (Cornwell et al., 2001). The bigger the budget is, the more money can be spent on sponsorship. Not every company is large enough or performs well enough to invest large amounts of money in non-traditional promotional strategies. Therefore sponsorship decisions depend on financial constraints (Gomes, 2001). Becoming a sponsor is an investment decision made by the company and there is a two-way relationship between company performance and its decision to sponsor a soccer club. Also the studies of Love and Zicchino (2006) and Eklund (2010) on the relationship between investments and company performance show that earnings are significant determinants of investments.

#### Data and methodology

#### Framework

To analyze whether sponsorship deals are efficient investments for sponsoring companies we choose both short-term and long-term measures of company performance.

- Revenues. The main purpose of marketing techniques is to increase current and potential
  customer purchase intention, to attract new customers and to improve customer loyalty.
  This should result in increased company revenues. As sponsorship does not influence
  company costs directly, revenue is a better measure of sponsorship efficiency than profits.
- Equity capitalization. According to value-based management the most comprehensive measure of company performance is company value. Market capitalization reflects stock market expectations about future performance, particularly growth in customer number and loyalty. Compared to revenues, market capitalization takes into account future prospects and the size of the sponsorship. In other words, if sales increase but do not cover the sponsorship investment, the company value will decrease.

There is a lag between changes in investments and their reflection in the expectations of stock market investors. Sponsorship is a long-term investment. It takes some time to organize joint promotions of a club and its sponsor, and the placement of logos and banners. Also a period of time is necessary to establish an association between company and club and its effect on soccer fans. We use a lagged value of financial control variables in order to decrease possible endogeneity connected with the influence of dependent variables on indicators of financial performance. As control variables we use main value drivers: profitability, capital structure and size. Accordingly it is possible to represent the performance of firm i at time t as a function the following function:

$$perf_{it} = f(sponsor\_dummy_{it-1}; CV_{it-1})$$

Where  $perf_{it}$  is a performance measure of company i in period t normalized by asset value in the same period. This helps to avoid the influence of company size.  $Sponsor\_dummy_{it}$  is a dummy variable that equals 1 if company i is the sponsor of a soccer club in period t and zero otherwise.  $CV_{it}$  is a vector of control variables;  $leverage_{it}$  is the financial leverage of company i in period t, calculated as the ratio of total debt to total equity;  $roic_{it}$  is the return on the capital of company i in period t computed as operating profit divided by debt and equity capital invested into company;  $log(assets)_{it}$  is the natural logarithm of the assets of company i valued in period t reflecting the company size;  $crisis_t$  is a dummy variable that equals t if year t is 2008 or 2009, the period of world financial and economic crisis, to control for the influence of economic turmoil on company performance.

#### Data<sup>4</sup>

In our paper we examined the companies sponsoring soccer clubs from 7 soccer leagues: Barclays English Premier league, BBVA Spanish Premier league, French Ligue 1, Italian Seria A, the Scottish Premier League, Dutch Erdivisie and Turkish Superleague. Also we collected information about their title sponsors.

The data about sponsorship, namely who the title sponsor of the soccer club is, the period and value of the sponsorship contract, was collected from publicly available sources: official club websites, twitter pages, fan forums. Also such search engines as Google, Yahoo and Yandex were used. Financial variables were collected from the Bloomberg and Bureau van Djik databases and cover the period from 2001 to 2012. Our final dataset consists of an unbalanced panel of 226 observations for 78 companies, 39 of them are publicly traded.

-

<sup>&</sup>lt;sup>4</sup> The data is available on a request.

Table 1 shows the characteristics and number of sponsoring companies. Soccer clubs that play in the English Premier League are sponsored by large and growing companies. Professional soccer clubs in France are generally sponsored by companies with a high sales-to-assets ratio. Companies that have sponsorship contracts with Spanish La Liga and Scottish Premier League have high market capitalization relative to asset value.

Table 1. Variables mean values of financial variables for sponsoring companies

League	Sales / Assets	MV / Assets	ROIC, %	D/E, %	Log(Assets, mln. euro)	Sales growth, %	Number of companies
Ligue 1	1.88	0.83	11.73	104.96	2.88	8.55	12
Seria A	1.02	0.29	5.01	183.64	2.97	20.01	17
La Liga	1.03	1.36	11.06	55.82	2.52	20.54	13
Barclays	1.30	0.93	8.32	428.31	3.44	93.23	16
Eredivisie	0.46	0.41	10.09	44.85	4.99	56.22	2
Scottish	1.21	1.36	16.57	133.91	2.15	10.00	5

We suppose that sponsorship leads to higher sales relative to asset value. However a two-group mean comparison test shows that we cannot fully reject the hypothesis that sales are higher when a company is not a sponsor (Table 2).

Table 2. Comparison of company sales-to-assets ratio before and after becoming a sponsor

Group	Obs	Mean	Std.Err.	Std.Dev.	[95% Conf. In	nterval]
0 (not sponsor)	408	1.37	0.09	1.85	1.19	1.55
1 (sponsor)	243	1.22	0.08	1.27	1.06	1.38
combined	651	1.31	0.06	1.66	1.19	1.44
diff		0.15	0.13		-0.11	0.42
diff = mean(0) - mean	(1)				t	= 1.13
Ho: $diff = 0$				degr	ees of freedom =	649
Ha: $diff < 0$			Ha: diff	<i>&lt;&gt;</i> 0	Has	diff > 0
Pr(T < t)	= 0.8701		$\Pr(T > t) = 0$	.2599	Pr(T > t) =	= 0.1299

#### Methodology

However, a two-group mean comparison test does not provide us with all the required information. The main disadvantage of this method is that we cannot control company performance indicators (e.g. revenue or capitalization) for other sources of variance. For that reason we use a regression analysis.

Applying a regression analysis, we should keep in mind the exogeneity restriction which is one of the major assumptions of the OLS regression technique. There are two sources of endogeneity in our sample. The first is the omitted variable bias: although we are trying to control all significant variables of revenue or capitalization variance, we could easily miss an important variable. The second problem is reverse causality: companies with higher

performance are more likely to be sponsors than companies with lower performance. These problems can lead to a bias in the results.

To deal with the first problem, we use a fixed effect estimator. This is possible because of the panel structure of our data. Using such an estimator, we allow an unobserved variable which could influence financial performance to be included in our model. In other words, we allow our sample to have cross-company heterogeneity. We assume these unobserved characteristics to be constant in time. Using "within" estimator, we get rid of the endogenous variable and the first bias. The following equation represents our first model:

$$perf_{it} = \beta_1 + \beta_2 \cdot sponsor\_dummy_{it-1} + \beta_3 \cdot CV_{it-1} + f_i + \varepsilon_{it}$$

Where  $f_i$  is the fixed effect of the unobservable individual characteristics of each company, all other variables are as defined above. The results for the different performance indicators are presented in Table 6, columns 1 and 3.

The second problem can be solved by implementing an instrumental variable (IV) regression framework. To eliminate the reverse causality bias we should find an instrument which is highly correlated with our endogenous variable (sponsorship) but not correlated with the error term in the explanatory equation; in other words, the instrument cannot suffer from the same problem as the original predicting variable.

We use an IV based on twitter data. Data containing the number of tweets containing both team and sponsor company name, for example, "Liverpool" + "Standard Chartered", is collected. Different combinations of short team and sponsor names, for instance "LFC" or "Liverpool", were used. Then the results for various combinations of names for each team and its sponsor were summarized.

Such an IV is relevant as number of tweets, or the joint popularity of a team and sponsor imply a strong correlation with the sponsorship variable. In other words, this IV differs from zero only for sponsoring companies. The IV is valid because the joint popularity is exogenous to financial performance. The IV influences performance only because it is correlated with our endogenous variable, the sponsorship dummy.

Table 3 contains descriptive statistics of the IV (the first row). The standard deviation is high, therefore the log of the IV is taken (in order to avoid problem with logarithm of zero value, one is added to a number of tweets). This is made only for technical reasons and does not imply quality of IV.

Table 3. Descriptive statistics of the IV

	Observations	Mean	Std. Dev.	Min	Max
twitter	960	79.40	551.49	0	10760
Log(twitter)	960	0.70	1.75	0	9.28

Table 4 shows the number of tweets for teams from different championships in each year. For all championships the results have increased by the end of period. It is interesting that the Scottish and Eredivisie (The Netherlands) championships joint popularity is higher than for Barclays league, for instance. Though this seems to be strange, we should keep in mind that we

are talking about *joint* popularity of teams and sponsors, not about popularity of teams or championships.

Table 4. The average r	number of tweets	for teams from	different chan	npionships i	in each vear

Year	Barclays	La Liga	Ligue 1	Scottish	Seria A	Eredivisie	Total
2006	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0
2008	0.69	0.46	0	9.60	0.12	14.00	1.43
2009	9.56	1.08	0.08	27.80	0.82	23.50	6.79
2010	157.38	57.38	13.75	402.40	11.76	233.50	121.88
2011	378.75	54.54	45.42	845.20	30.41	784.50	244.75
2012	886.25	202.23	72.67	2190.40	105.88	2658.50	577.93

We use 2-stage LS method. In this case, the model is not super-identified, so using the method of moments is equivalent to using the two-step OLS. At the first stage we regress our endogenous variable on the IV. At the second we use estimates from the first stage instead of using the endogenous variable itself. Our specification is as follows:

$$perf_{it} = \beta_1 + \beta_2 \cdot sponsor\_dummy\_hat_{it-1} + \beta_3 \cdot CV_{it-1} + f_i + \varepsilon_{it}$$

$$sponsor\_dummy\_hat_{it} = \phi(\beta_1 + \beta_2 \cdot \log(twitter_{it}) + \varepsilon_{it}$$

where *sponsor\_dummy\_hat*<sub>it</sub> present fitted values from the first stage of 2sls, all other variables are as defined above. The second equation contains a probit model for instrumenting the endogenous variable. The endogenous variable is a *dummy* variable so we use probit model instead of linear regression at the first stage.

#### **Empirical results**

Table 6 shows the result of our investigations on the impact of sponsorship on company performance. The first and the third columns represent estimations of the basic model for two dependent variables, sales-to-assets ratio and market capitalization-to-assets ratio respectively. In both cases sponsorship influence on performance is significant. However, two measures of company performance react to sponsorship deals in different ways: sponsorship positively correlates with sales volume and negatively with market capitalization. This means that sponsorship correlates with higher sales but lower market capitalization.

Then we estimated a probit model for instrumenting the endogenous variable. In Table 5 the results of the estimation evidence that the IV is highly correlated with the sponsorship endogenous explanatory variable. Thus it can be a good predictor of the endogenous variable.

Table 5. First-stage IV estimates

Log(twitter)	0.301***
Log(twitter)	(0.028)
Constant	-0.654***
Constant	(0.049)
Pseudo R2	0.1202
Prob > chi2	0.0000
N	899

note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The dependent variable is sponsorship (dummy). Independent variable is log of the number of tweets containing both team and sponsor company name

When possible endogeneity connected with reverse causality in variables is taken into account and an IV is used, the effect of sponsorship on sales becomes insignificantly different from zero (second and forth columns in Table 6). At the same time in the market capitalization regression, the coefficient of sponsorship is still significant and negative.

First of all the difference in estimates between the basic models and the IV models show that some endogeneity is inherent in basic models, especially in the model of sales volume. This means that companies with higher sales are more likely to sponsor a soccer club. The high correlation between sponsorship and sales can be connected with the fact that companies aimed at revenue growth use various vehicles in order to increase sales. Such companies have prospects for high sales growth not only because of the sponsorship deal but also because of aggressive advertising or the launch of a new product. However, the regression analysis results for sales are poor. A possible explanation is that sales variance is mostly explained by unobserved company characteristics. We mostly control for them by using a fixed-effect estimator, but the coefficients are unidentifiable.

Secondly, sales and market capitalization react in different ways to sponsorship even after endogeneity is taken into account. This difference in estimates is possibly connected with the horizon of performance measure. Sales volume reflects short-term effectiveness of investments in customer attraction and loyalty. Market capitalization is a long-term performance indicator that reflects the averaged expectations of stock market investors. Theoretically, market capitalization converges to the averaged sum of expected free cash flows a company will receive in the future discounted by the appropriate discounting rate. Thus market capitalization takes into account future cash inflows and outflows connected with a sponsorship contract.

The results show that sponsorship deals do not lead to a significant increase in sales. Sponsorship, therefore, is not effective as a marketing technique and sponsorship results in an increase of cash outflows and insignificant growth in inflows. This logic is in accordance with the results of the market capitalization model: sponsorship decreases company market capitalization. Thus sponsorship is not an effective investment from the shareholders point of view. We also see that sales are almost constant and the influence of all chosen factors except sponsorship is insignificant. The coefficients for the other variables generally conform to intuition.

Table 6. The impact of sponsorship on company performance

	sales/FE	sales/FE+IV	MCap/FE	MCap/FE+IV
Lag of spanson dummy	0,031**		-0,291**	
Lag of sponsor_dummy	(0,014)		(0,133)	
Lag of		-0,046		-0,839**
Sponsor_dummy_hat		(0,056)		(0,396)
crisis	-0,028	-0,032	-0,447***	-0,516***
CHSIS	(0,027)	(0,028)	(0,109)	(0,118)

I an of loc(see to)	-0,050	-0,004	-1,192***	-1,138***
Lag of log(assets)	(0,055)	(0,059)	(0,342)	(0,373)
Log of D/E ratio	0,000	0,000	-0,000	-0,000
Lag of D/E ratio	(0,000)	(0,000)	(0,000)	(0,000)
Lag of Datum on Capital	0,003	0,003	0,027***	0,025**
Lag of Return on Capital	(0,002)	(0,003)	(0,009)	(0,010)
Constant	0,968***	0,813***	6,406***	6,423***
Constant	(0,204)	(0,207)	(1,361)	(1,387)
R <sup>2</sup> within	0,028	0,023	0,268	0,274
R <sup>2</sup> between	0,067	0,690	0,055	0,054
$R^2$ overall	0,408	0,339	0,018	0,016
N	226	226	211	211
F stat	1,56	0,69	13,62	17,11
Prob > F	0.2062	0,6359	0,0000	0,0000
		Note:	*** p<0.01, ** p<	0.05, *p < 0.1

The first and the third columns represent estimations of basic model for two dependent variables: Sales-to-assets ratio and Market capitalization-to-assets ratio respectively. The results for the IV are in the second and the forth columns.

#### **Conclusion**

Sponsorship is a marketing technique; it is done with the expectation of a commercial return. However our results show that in soccer and perhaps in some other spheres sponsorship is more charity than real commercial investment. Moreover stock market investors understand the inefficiency of sponsorship and react negatively to sponsorship deals. However such contracts are still in use as shareholders do not prohibit sponsoring sports. It is interesting question why stock market investors are willing to invest in sports without any monetary benefits.

These results can be interpreted as a managerial overestimation of sponsorship as a marketing technique. Despite soccer being a very popular game, ordinary promotion of a company through association with a soccer club does not bring enough benefits to cover funds invested in it.

Another possible explanation for shareholder and manager willingness to invest in soccer clubs is that they are interested in soccer and their implied utility level increases when they invest in a soccer club. This situation is possible if there are a small number of owners and/or the sponsoring company's managers are both managers and owners. Consequently, in further analysis ownership structure and the ownership share of senior managerment should be taken into account.

The results of this paper contradict previous papers. Questionnaire surveys found that sponsorship can stimulate consumer purchase intention. However if the increase in purchase intention is not realized, the company does not profit.

Previous papers that analyzed the effect of sponsorship on share price revealed both positive and negative relationships. These mixed results can be explained in two ways. Firstly, if endogeneity is present in the model, then parameter s estimates can be biased significantly.

Secondly, sponsorship in different sports requires different amounts of funds invested and brings a different impact. Soccer sponsorship leads to worse company performance. Perhaps the sponsorship mechanisms in soccer should be revised, and the sponsoring company should consider other ways of promotion in association with a soccer club.

Soccer sponsors are rather irrational when they decide to become a sponsor. An implication of this is that senior management should be careful concerning such decisions. Shareholders should, at least, be aware of sponsorship deals, and carefully analyze the financial assumptions of the cash flow forecasts of such projects.

Finally, a number of important limitations need to be considered. First, we analyze only some sponsors. For that reason we cannot conclude that all sponsorship is irrational. Nevertheless, our sample consists of sponsors of top league soccer clubs, so we suppose our sample to be representational. Further research might explore sponsorship deals in countries where soccer is less popular.

Second, we may have missed a variable which affects financial performance although we control for commonly accepted variables and include fixed effects.

Third, we expect sponsorship to affect performance in the next period after the deal, but there could be longer delay. This is a crucial assumption in our study. Nevertheless, we think this limitation applies only to sales performance indicators (model 1 and 2), because market capitalization reacts immediately to any important information. The fact that capitalization reflects all valuable information can also be argued, but we assume a semi-strong market form of efficiency in our study.

#### References

- Biscaia, R., Correia, A., Rosado, A.F., Ross, S.D., Maroco, J., 2013. Sport Sponsorship: The Relationship Between Team Loyalty, Sponsorship Awareness, Attitude Toward the Sponsor, and Purchase Intentions. J. Sport Manag. 27.
- Clark, J., T. Cornwell, and S.W. Pruitt. 2002. Corporate stadium sponsorships, signaling theory, agency conflicts and shareholder wealth. Journal of Advertising Research 42, no. 6: 16–32.
- Cobb-Walgren, Cathy J., Cynthia A. Ruble and Naveen Donthu 1995, "Brand Equity, Brand Preference, and Purchase In-tent," Journal of Advertising, 24 (Fall), 25-40.
- Cornwell T. B., Pruitt S. W., Clark J. M. 2005. The Relationship Between Major-League Sports' Official Sponsorship Announcements and the Stock Prices of Sponsoring Firms. Academy of Marketing Science Journal, 33, 401–412.
- Cornwell T. B. and Maignan I. 1998. An international review of sponsorship research. Journal of Advertising, 27(1), 1-21.
- Cornwell, Bettina, Roy, Donald P., & Steinard, Edward A., II 2001. Exploring managers' perceptions of the impact of sponsorship on brand equity. Journal of Advertising, 30(2), 41–52.
- Crompton, John L. 2004. Conceptualization and Alternate Operationalizations of the Measurement of Sponsorship Effectiveness in Sport, Leisure Studies, Vol.23, No.3, pp. 267-281.
- Deitz, G.D., Evans, R.D., Hansen, J.D., 2013. Sponsorship and shareholder value: A reexamination and extension. J. Bus. Res. 66, 1427–1435.

- Edmans, A., D. Garcia, and O. Norli. 2007. Sports sentiment and stock returns. Journal of Finance 62, no. 4: 1967–98.
- Eklund, J.E., 2010. Q-theory of investment and earnings retentions—evidence from Scandinavia. Empir. Econ. 39, 793–813.
- Farrelly, F.J., Quester, P.G., 2005. Examining important relationship quality constructs of the focal sponsorship exchange. Ind. Mark. Manag. 34, 211–219.
- Gomes, J.F., 2001. Financing investment. Am. Econ. Rev. 1263–1285.
- Hanke M. and Kirchler M. 2013. Soccer championships and jersey sponsors' stock prices: an empirical investigation, The European Journal of Finance, 19:3, 228-241.
- Jensen, J., Cobbs, J., 2014. Analyzing Return-on-Investment in Sponsorship Modeling Brand Exposure, Price and ROI in Formula One Racing.
- Love, I., Zicchino, L., 2006. Financial development and dynamic investment behavior: Evidence from panel VAR. Q. Rev. Econ. Finance 46, 190–210.
- Miles, L. 2001. Successful sport sponsorship: Lessons from Association Soccer the role of research. International Journal of Sports Marketing and Sponsorship 2, no. 4: 357–69.
- Miyazaki, A., and A. Morgan. 2001. Assessing market value of event sponsoring: Corporate Olympic sponsorships. Journal of Advertising Research 41, no. 1: 9–15.
- Norman, M., 2012. Saturday Night's Alright for Tweeting: Cultural Citizenship, Collective Discussion, and the New Media Consumption/Production of Hockey Day in Canada. Sociol. Sport J. 29.
- Pham, Michel Tuan 1991, "The Evaluation of Sponsorship Effectiveness: A Model and Some Methodological Considerations," Gestion 2000, 47-65.
- Reiser, M., Breuer, C., Wicker, P., 2012. The sponsorship effect: Do sport sponsorship announcements impact the firm value of sponsoring firms? Int. J. Sport Finance 7.
- Smith, A., Graetz, B., Westerbeek, H., 2008. Sport sponsorship, team support and purchase intentions. J. Mark. Commun. 14, 387–404.
- Sneath, J.Z., Finney, R.Z., Grace, A.G. 2005. An IMC approach to event marketing: the effects of sponsorship and experience on customer attitudes. Journal of Advertising Research. 45 (4), 373-381.
- Verity, J. 2002. Maximising the marketing potential of sponsorship for global brands. European Business Journal 4, no. 4: 161–73.

#### Iuliia N. Naidenova

National Research University Higher School of Economics Laboratory of Investment Analysis and Department of Financial Management e-mail: naidenovayn@gmail.com, Tel. +79226478770

Any opinions or claims contained in this Working Paper do not necessarily reflect the views of HSE.

© Naidenova, Parshakov, Chmykhov, 2014