



Celebrity Endorser Scandals: Do They Spill Over to the Sponsor Firms' Competitors?

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Celebrity Endorser Scandals: Do They Spill Over to the Sponsor Firms' Competitors?

Celebrity endorsement is an important advertising strategy, but it is not without risk. Several studies in the marketing-finance interface have investigated how negative publicity surrounding a celebrity endorser impacts sponsors' firm value. Little is known, however, how these events affect the sponsors' competitors. To address this research gap, the authors assess the impact of celebrity endorser scandals on competitor stock returns by using an event study approach. Examining a unique sample of 121 scandals, they find a negative contagion effect, that is, competitors experience negative abnormal stock returns. However, not all competitors are affected to the same extent. Cross-sectional regression analysis with multi-way clustering reveals that a scandal's negative effect is stronger the more the sponsor was affected by the event, but the effect is weaker for competitors in more concentrated industries.

Keywords: *Celebrity endorsement scandals, spillover, marketing-finance interface*

Track: *Marketing Strategy*

1. Introduction

Extant literature provides solid empirical evidence on the positive effects of celebrity endorsement announcements and celebrity performance while under contract (e.g., Chung, Derdenger, and Srinivasan, 2013; Elberse and Verleun, 2012). However, using celebrity endorsers is not free from risk, as celebrity adverse behavior may impair their own and the sponsors' image. Empirical evidence indeed indicates that a celebrity scandal can negatively impact the endorsed brand, resulting in reduced stock prices for the sponsor (Louie, Kulik, and Jacobson, 2001; Bartz, Molchanov, and Stork, 2013).

Little is known, however, on the consequences of celebrity endorser scandals for the competitors of the sponsor firm. Will their stock price increase, decrease, or are these firms not affected at all? Only two studies have addressed the issue of such spillover effects in a celebrity endorsement context so far. Carrillat, d'Astous, and Christianis (2014) show in a laboratory experiment that a fictitious scandal involving an athlete endorser not only negatively impacts consumer attitude towards the endorsed brand, but, due to a contagion effect, also harms competitor brands. In a case study, Knittel and Stango (2014) examine the stock market impact of Tiger Woods' adultery scandal. While they do not find a significant main effect of the scandal on competitors, they highlight the role of boundary conditions. Endorsement intensive competitors experience a negative contagion effect while not endorsement intensive firms can at least partly gain from the scandal by what is known a competition effect. Although these studies provide important first insights on celebrity endorser spillover effects, it remains unclear whether we can generalize a negative main effect and the moderating endorsement-intensity effect to a larger sample. Moreover, both studies only provide limited insights with regard to other factors that may impact the occurrence and magnitude of a spillover effect, leaving ample room for further research.

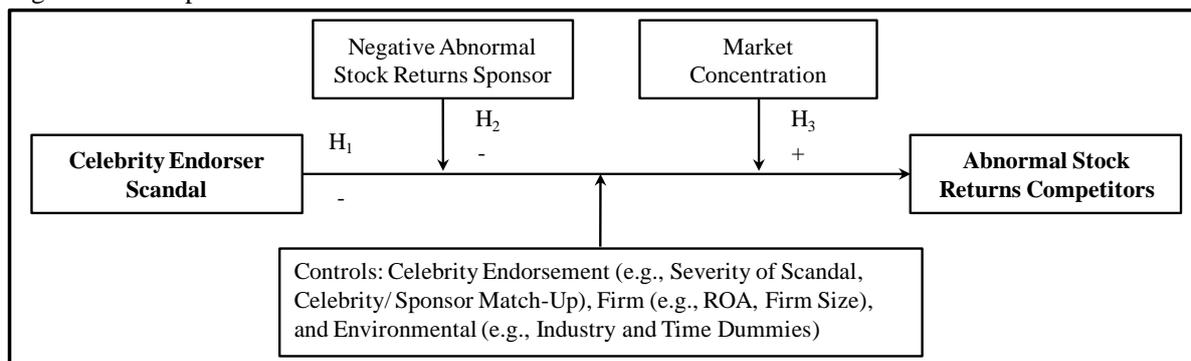
In this study, we address these knowledge gaps. First, we examine the consequences of a celebrity endorser scandal on the sponsor firms' competitors based on a broad sample of real-life scandals. Unlike Carrillat et al. (2014) who measure the effect on consumer attitude towards a brand, we focus on stock returns (Srinivasan and Hanssens, 2009). Stock returns enable us to investigate financial consequences and to present a more complete picture regarding the performance implications for competitors (e.g., effects on future cash flows and risk) (Barnett and King 2008). Comparable to our approach, Knittel and Stango (2014) analyze stock returns, but they conduct a case study using a single event only, so that they highlight the need for a broader study of many past events by stating "[...] it would be unwise to extrapolate our findings to the larger population of celebrity endorsers or to other types of scandals." (Knittel and Stango, 2014, p. 22). As our sample includes various types of scandals, involving a large number of celebrities and companies from different industries, we are able to make more generalizable statements with regard to celebrity endorser scandals and their impact on competitor firm value.

Second, we do not only measure overall performance implications, but apply cross-sectional regression analysis with multi-way clustering to reveal which boundary conditions influence competitor stock returns following a celebrity endorser scandal. Various stakeholders have an interest in better understanding the conditions that lead to a spillover effect after such an event. Marketing managers for example need to understand if, when, and how a competitor endorser scandal creates market opportunities or possibly requires protective measures for their own company. Based on a broad literature review and five expert interviews, our focus is on the boundary conditions of sponsor negative abnormal stock returns and market concentration that have been shown to be of particular relevance in a spillover context (e.g., Gaur, Malhotra, and Zhu, 2013).

2. Theory and Hypotheses

Figure 1 depicts our conceptual framework, which focuses on our main effect, that is, the stock market impact of a celebrity endorser scandal on sponsor competitors (H1), and our two boundary conditions of scandal spillover (H2, H3). We also include 17 control variables related to the celebrity endorsement (6 variables), the firm (7), and the environment (4).

Figure 1. Conceptual Framework



The general spillover literature supports both positive and negative spillover effects following a negative event (Lang and Stulz, 1992). However, in the case of a celebrity endorser scandal, a predominant negative effect on competitors seems most likely. First, the only existing empirical study that shows a main effect finds a negative effect (Carrillat et al., 2014), which can be explained by the theory of collective reputations (Tirole, 1996). All firms in an industry may suffer when any individual firm is engaged in a behavior that adversely impacts the industry's shared reputation (Jonsson, Greve, and Fujiwara-Greve, 2009). Further, investors are known to be rather risk-averse (Sharpe, 1965). In a situation characterized by high uncertainty due to the difficulty to predict the performance implications for a sponsor's competitors, we expect investors to avoid buying or even to reduce their holdings in competitor stocks. Consequently, our first hypothesis states that competitors will be on average negatively affected by a celebrity endorser scandal.

H1: A celebrity endorser scandal results in negative abnormal returns for the competitors of the sponsor firm.

From a stock market perspective, an average celebrity endorser scandal is considered a minor event. As our expert interviews with five senior level equity analysts and investors suggest, relevant boundary conditions of minor events spillover are easily observable and/or are part of market participants' general knowledge about a firm or industry. The spillover literature suggests that sponsor negative abnormal stock returns (e.g., Gaur et al., 2013) and market concentration (e.g., Hadlock and Sonti, 2012) meet these criteria. Building on signaling theory (Spence, 1973) and the structure-conduct-performance paradigm (Slade, 2004), we expect higher sponsor negative abnormal stock returns to strengthen and higher market concentration (i.e., less competition) to weaken the negative spillover effect. Thus:

H2: The negative effect of celebrity endorser scandals on competitor abnormal returns is strengthened by higher negative abnormal returns of the affected sponsor company.

H3: The negative effect of celebrity endorser scandals on competitor abnormal returns is weakened by a higher market concentration in the affected industry.

3. Research Method

3.1. Sample and data collection

To empirically analyze our hypotheses, we first had to compile a sample of celebrity endorser scandals involving at least one public sponsor company. Comparable to the related studies of Bartz et al. (2013) and Louie et al. (2001), we hand-collected our sample of celebrity endorser scandals by an extensive keyword search with the Google search engine as well as the LexisNexis and Factiva media databases.

In a second step, we had to select the relevant competitors for each affected sponsor firm. Identifying competitors that directly compete with the sponsor firm is a major concern in our study, as we expect and Carrillat et al. (2014) show that spillover effects in our context are only observable between closely related firms. We do not rely on SIC codes, as Hadlock and Sonti (2012, p.189) state that "these codes can be noisy indicators of whether 2 firms directly compete". Instead, we turned to company reports (e.g., Hoover's) and professional databases (e.g., S&P Global Market Intelligence) compiled by industry experts that provide predefined lists of relevant competitors. As a general rule, we require a company to be listed as a competitor to a specific sponsor firm by four out of the five data providers selected.

We limited the scope of sponsor and competitor companies included in our sample to US-based companies and non-US companies that have US stock price data available (Bartz, et al., 2013). Following common recommendations, we further eliminated all companies for which a confounding event occurred within our event window. Our final useable sample for the spillover analysis consists of 121 events spread over a period from 1981 to the mid of 2015. These events involved 107 endorsers, 90 unique sponsor and 207 unique competitor firms. Some celebrities endorsed more than one firm and some sponsor and consequently competitor companies were affected by several events. In total, we obtained 594 observations in our competitor sample and 193 observations in our sponsor sample.

3.2. Empirical model

Event studies are a well established methodology in marketing to measure how an unanticipated event, in our case a celebrity endorser scandal, affects the market value of a company's stock (Delattre, 2007). We follow standard procedures as proposed by Brown and Warner (1985) in assessing competitor (cumulated) abnormal return CAR_i pertaining to a celebrity endorser scandal. In line with comparable studies, we apply the market model, using a 250-trading-day estimation window and the S&P 500 as a benchmark index, to obtain estimates of the expected returns. To take into consideration the possibility of information leakage prior to the event day (t_0) as well as dissemination of information over time after the day the scandal occurred, we consider an extended event window of eight days $[-2,+5]$ as being appropriate (Barnett and King, 2008).

The event study analysis allows us to determine the direction and extent to which a competitor stock price is influenced by a celebrity endorser scandal. In order to better understand the cross-sectional variation in these results, we regress individual competitor CARs against the independent and control variables outlined in our conceptual framework:

$$CAR_i[-t_1,t_2] = \beta_0 + \beta_1 (CAR_{Sponsor}) + \beta_2 (\text{Market Concentration}) + \beta_{3-19} (\text{Controls}) + \varepsilon_i \quad (1)$$

Notably, as the assumption of independence across error terms in our dataset might not hold, we follow Diestre and Rajagopalan (2014) who adopt multi-way clustering to account for the influence of clusters at firm and event levels (Cameron, Gelbach, and Miller, 2006).

4. Results

The results of our event study for the competitor firms are summarized in Table 1. Across all events, competitors were associated with a significant negative abnormal return of $-.10\%$ at the day a sponsor company experiences a celebrity endorser scandal. The cumulative effect over a two-day $[0,+1]$ and eight-day $[-2,+5]$ window is also negative as indicated by statistically significant CAARs of $-.22\%$ and $-.38\%$, respectively. Thus, in support of H1, the results provide evidence for a negative contagion effects. As expected and in line with other spillover studies (e.g., Barnett and King, 2008), the spillover effect is smaller in size and significance than the effect on the sponsor companies (CAAR $[-2,+5]$ of -1.16%). These results are robust to alternative market model specifications and the exclusion of outliers.

Table 1. Abnormal Stock Return Competitors

Event Day	Observations	Average AR	Pos:Neg	Adj.StdC Sect Z	Generalized Rank T
-2	594	.01%	301:293	.08	.10
-1	594	.07%	296:298	.67	.25
0	594	-.10%	283:311	-2.01**	-1.67*
1	594	-.12%	268:326	-2.41**	-2.00**
2	594	-.03%	299:295	.42	.12
3	594	-.04%	284:310	-1.52	-.76
4	594	-.12%	271:323	-2.44**	-2.02**
5	594	-.05%	290:304	-1.54	-.99
$[0,+1]$	594	-.22%	273:321	-2.58***	-2.23**
$[-2,+5]$	594	-.38%	264:330	-3.16***	-2.61***

*** $p < .01$, ** $p < .05$, * $p < .10$

Table 2 contains the results of our cross-sectional regression analysis. In our full model, in addition to the two hypothesized variables, we included all 17 control variables (max. VIF = 2.10). The significant beta coefficients for CAR sponsor ($\beta = -.29$, $p < .01$) and market concentration ($\beta = .11$, $p < .05$) provide support for H2 and H3, respectively. Our broad sample does not replicate the moderating effect of endorsement-intensity found in the case study of Knittel and Stango (2014). Results are robust to alternative variable and model specifications, methods of clustering, and multivariate outliers.

Table 2. Results of Cross-Sectional Regression Analysis

Dependent Variable: CAR Competitor $[-2,+5]$	Direction of Hypothesis	Base Model		Full Model	
		β	SE	β	SE
Predictor Variables					
CAR Sponsor (reverse-coded)	-	-.28***	(.06)	-.29***	(.06)
Market Concentration	+	.07*	(.00)	.11**	(.01)
Controls included		No		Yes	
R-Square		.08		.11	
Adj. R-Square		.08		.07	
F		14.29***		3.72***	
Observations		594		594	

Standardized beta coefficients; Standard errors in parentheses.

Note: Standard errors are heteroskedasticity robust and clustered at both event and firm level.

*** $p < .01$, ** $p < .05$, * $p < .10$

5. Discussion and Conclusion

5.1. Theoretical implications

This study contributes to extant celebrity endorsement and marketing-finance literature in several ways. First and foremost, we present evidence of financial spillover effects between a sponsor firm affected by a celebrity endorser scandal and its competitors. Previous empirical results regarding this issue are mixed (Carrillat et al., 2014; Knittel and Stango, 2014). Based on a broad sample of real-life celebrity endorser scandals, our results provide robust evidence for a predominant negative contagion effect. By addressing this research gap, we add to the celebrity endorsement literature and demonstrate how far-reaching the implications of a celebrity endorser scandal can be. This finding also enriches the spillover literature following marketing related events. Comparable to other disciplines (e.g., finance), spillover effects concerning the marketing function, especially advertising-related, are understudied (Fosfuri and Giarratana, 2009). Our study provides evidence that advertising failures by one company may significantly impact other companies in the industry, even in the case of what market participants consider minor events.

Besides the main effect, we analyze which boundary conditions influence the direction and magnitude of the spillover. Interestingly, variables we included as controls that are known to moderate the effect on sponsors, like severity of the event or endorser-company match-up (Bartz et al., 2013), do not influence the extent of the spillover effect on competitors. Also, we could not detect a moderating impact of competitor endorsement-intensity as reported in the case study conducted by Knittel and Stango (2014). Instead, we find the sponsor firm negative abnormal returns and market concentration to be relevant conditions of scandal spillover, highlighting their importance when studying spillover effects in the context of minor events. Our results indicate that in such a context, factors that are readily observable gain importance relative to event-specific factors, whose implications for competitor performance are difficult to assess in the short-term by stock market participants.

5.2. Managerial implications

In addition to these theoretical implications, our study also has relevant implications for practitioners. Sponsor companies typically provide for celebrity scandals by including morality clauses in endorsement contracts, and take out death and disgrace insurance coverage to limit the financial consequences of such events. They have to closely monitor the actions of their celebrity endorsers to timely take appropriate measures. Our study suggests that due to spillover effects, also competitors should keep an eye on their rivals' celebrity endorsers. Risk management systems can be adjusted to issue a warning when one of a company's peer firms gets involved in a celebrity scandal. This may trigger a more detailed investigation to evaluate the consequences for the own firm.

Existing research has documented the impact of celebrity endorsement scandals on a sponsor brand sales (Chung et al., 2013). Also in practice, most advertising executives and brand managers pay close attention to the development of sales figures following a negative event, as in many cases brand sales are considered a key performance measure. Knowing about the existence of spillover effects following a celebrity endorser scandal may enable competitor brand managers or the controlling function to better explain variations in their own brand sales and appropriately point out to this cause in management reporting. Moreover, senior management in turn may build on this argumentation when discussing firm sales or stock performance with the supervisory board or shareholders (Elberse and Verleun, 2012).

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