Celebrity Endorsement and Market Valuation: Evidence from India

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Introduction

Celebrity endorsement is one of the popular means of communication in advertising (Biswas et al. 2006; Pringle 2004; Spry et al. 2011; Tong and Hawley 2009). But does celebrity endorsement enhance long-term market performance of the firm? Extant literature does not answer this question. It generally focuses on effectiveness of overall marketing or advertising expenditure (Joshi and Hanssens 2010; Luo and Jong 2012). However, celebrity endorsement is a very specific, expensive, and significant form of advertisement technique (Thwaites et al. 2012) and calls for specific attention in terms of long-term financial returns. Furthermore, depending on national culture, its effectiveness may vary (Choi et al. 2005). Celebrity endorsement is the most commonly used means of advertising in India. According to an estimate, endorsement business in India is more than US$321 million (Mithel and Hector 2013). Given the significance of celebrity endorsements in India, it becomes vital to explore how such endorsement impacts long-term valuation of Indian firms. Since India is an emerging economy, many multinationals intend to expand their market in India. It is inevitable for managers intending to operate in India to understand if endorsements financially pay off or not in this country. To explore long-term financial effectiveness of celebrity endorsements in India, we rely on source credibility model (Ohanian 1990) and efficient market hypothesis (Fama 1970).

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Review of Literature and Hypothesis

A celebrity endorser is defined as "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement" (McCracken 1989). According to the source credibility model, celebrities by virtue of their credibility form strong associative link with brands in the mind of consumers and hence favorably influence their purchase intention (Hovland et al. 1951). Firms are thus able to charge premium prices on such brands, thus enhancing their profit margins, future expected cash flows, and hence market-based performance (Madden et al. 2006). But when firms rely on celebrities for endorsing too many of their brands, it is more likely that fit between brand and celebrity is weakened (as a particular celebrity cannot match up with too many images of different brands) or the celebrity overshadows the brand being endorsed. Consequently, neither purchase intention of consumers nor brand equity is significantly impacted (Erdogan 1999). This news is also absorbed in the stock market by virtue of lower stock market performance of the firm (Luo and Donthu 2006). We thus hypothesize:

H1: Brand endorsement follows a curvilinear relationship with firms' market-based performance.

Celebrity Rating

Celebrities are rated based on their performance in the chosen profession, which could be movies or sports (Cornwell et al. 2005; Yang and Shi 2011). The higher the rating or performance, the better the persuasive ability and credibility a celebrity has (Keel and Natarajan 2012). Hence, firms always try to engage highly rated and credible celebrities to form strong associative link between brand and celebrity in consumers' mind (Biswas et al. 2006; Turner 2004). However, once associative link is established between celebrity and endorsed brand in consumers' mind, subsequent poor performance of the celebrity may weaken this association (Carrillat et al. 2014) thus impacting valuation of endorsed brand as well (Sherry et al. 2013; Chung et al. 2013; Knittel and Stango 2013; Thwaites et al. 2012). For example, after Tiger Woods was caught in a scandal, the defame, upset the consumers and consequently also deteriorated the brand valuation of Nike (Knittel and Stango 2013).

H2: Celebrity rating has a positive relationship with firms' market-based performance.

Moderating Impact of Carrier Tenure of Celebrity

Celebrities endorse brands by virtue of their credibility (Goldsmith et al. 2000; Erdogan 1999), expertise (Ohanian 1990), and familiarity (Belch and Belch 2003). The rise and fall in the performances of celebrities affects their overall credibility and popularity (Agrawal and Kamakura 1995; Luo et al. 2010). But as the celebrity ascents the learning curve with increase in tenure in the industry, he/she improves on skills and expertise and hence becomes lesser and lesser prone to the short-term success or failures of his/her immediate projects. Thus, tenure of celebrities in the industry becomes critical factor in judging the impact of short-term performance and credibility of a celebrity on firms' valuation through brands endorsed (Mazzola et al. 2006). Broadly, the immediate performance effect of celebrity weakens, as tenure of the celebrity in the industry increases, thus positively impacting purchase intention, brand equity, profit margin, and hence market valuation of a firm. Hence, the impact of immediate rating which celebrities receive is diminished. Hence we hypothesize:

H3: Tenure of a celebrity in the industry negatively moderates celebrity rating and firms' market valuation relationship.

Data and Methodology

To test our hypotheses, we gathered data from several Indian archival sources, namely, Times Celebex rating database (a database of celebrity rating), CMIE, Prowess (financial database of Indian companies), and from other Internet search engines like Google. Celebex started rating Indian celebrities based on their popularity and performance in 2012. It rates celebrities on monthly basis and provides "T-score," i.e., total score to a celebrity for a particular month. We averaged this monthly rating index for a quarter. Thus, we collected data for 11 quarters, i.e., from January 2012 to September 2014.

We focused on six industries which invest heavily in celebrity endorsement, namely, automobiles (two-wheelers and four-wheelers), textiles (suiting and shirting), footwear, jewelry, fast-moving consumer products, and telecom. We gathered a total of 118 firms from these industries, whose advertising intensities were above average. Some of these companies were Tata Motors (automobiles), Relaxo (footwear), Dabur (FMCG), Idea Cellular (telecom), and Joyalukkas (jewelry). Both Bollywood stars (actors, actresses, singers, music and movie directors) and sports celebrities from cricket like Sachin Tendulkar, tennis like Sania Mirza, etc. were considered.

Consistent with past literature (Penman 1996), we used price-to-earnings ratio to measure market-based financial performance of firms. Proportion of brands endorsed was measured as ratio of brands endorsed by celebrities to total brands offered by a firm to consumers. To estimate the curvilinear effect of proportion of brand endorsed, mean-centering technique was used so as to reduce multicollinearity (Bickel 2012). Rating of the celebrity was captured as average of T-score rating of celebrities for 4 months. Celebex provides rating on only top 100 Bollywood actors and actresses (Bollywood is the Hindi language movie industry of India stars). However, in India, music and movie directors and sports stars enjoy equal celebrity status. Thus, we used Forbes Celebrity 100 rating (which again started ranking Indian celebrities since 2012) for these celebrities and assigned them scores by tallying Forbes rating with Celebex rating. For example, if sports celebrity achieved 10th rank on the Forbes list, then he was assigned a T-score based on scores that the Bollywood celebrity achieved with 10th rating. Tenure of the celebrity was operationalized as natural log of total number of years a celebrity has spent in the Bollywood or sports industry. The interaction effect of tenure and celebrity rating was again calculated as multiplication factor after mean centering the two variables. Based on extant literature, we controlled for firms' marketing and R&D intensity, followed by age and size of the firm. Also manufacturing industries were dummy-coded as one and services as zero. Based on the discussion above, our model to be estimated could be represented as

$$\begin{aligned} P/E_{\mathrm{i,t}} = {} & \alpha_{10} + \beta_{11}\text{Brands Endorsed}_{\mathrm{i,t-1}} + \beta_{12}\text{Celebrity Rating}_{\mathrm{i,t-1}} + \\ & \beta_{13}\text{Celebrity Tenure}_{\mathrm{i,t-1}} + \beta_{14}\text{Brands Endorsed}_{\mathrm{i,t-1}} + \\ & \beta_{15}\text{Marketing Intensity}_{\mathrm{i,t-1}} + \beta_{16}\text{R \& D Intensity}_{\mathrm{i,t-1}} + \\ & \beta_{17}\text{Firm Age}_{\mathrm{i,t-1}} + \beta_{18}\text{Firm size}_{\mathrm{i,t-1}} + \varepsilon_{\mathrm{i,t-1}}. \end{aligned}$$

Furthermore, firms could self-select themselves to adopt celebrity endorsement-based advertisement (Ketchen et al. 2008). The Heckman two-step procedure (Heckman 1979) addresses this self-selection problem by using a two-stage estimation procedure. In the first stage, determinants of advertising intensity are incorporated, and in the second stage, normal regression with inverse mills ratio (correction factor) was considered. We rely on two measures, i.e., net cash flow from operating activities and sales volatility to (estimate) drivers of brand endorsement.

Results

In the present study, we estimated three models. Model 1 contained only control variables. Model 2 contained independent variables, and model 3 contained curvilinear relationship as well. Since beta coefficient of brand endorsed is positive and significant, and for the square term the beta is negative and significant, we receive evidence in support of the first hypothesis. Again since beta coefficient of celebrity rating is positive and significant, we receive evidence in support of the second hypothesis as well. Finally since beta coefficient of moderating effect is negative and significant, we receive evidence in support of the third hypothesis as well.

Conclusion

We find evidence in support of the three hypotheses, i.e., celebrity brand endorsement follows curvilinear relationship with long-term market-based performance, celebrity rating positively impacts firm valuation, and celebrity tenure negatively moderates impact of rating on market valuation of a firm. For managers our findings suggest that overemphasis on celebrity endorsement may result in suboptimal market-based performance of firm. Thus, firms should push brands to consumers not only through celebrity endorsement but through other promotional strategies as well. At least investors do not prefer firms to overemphasize on celebrity endorsement, mainly because of risk of match up or celebrity overshadowing effect associated with this positive form of advertisement. Furthermore, managers could avoid dampening effect of any dent in the image of emerging celebrities by choosing well-established celebrities. In developed markets' context, recent studies indicate that celebrity endorsement do not generate any positive abnormal returns (Ding et al. 2011). However, we do not find this to be a case, in India, especially in the long run. The differences in results could be explained because of differences in cultural context. Thus, when managers intend to communicate the advertising to consumers, endorsement could prove to be much beneficial technique. Our study captures only one Asian country, and results could vary from country to country. Thus, going forward research could be carried in other countries as well.

References available upon request.