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Market value of celebrity endorsement: Evidence from India

Management Slant

- Indian firms that announce celebrity endorsements generate positive abnormal returns.
- Celebrity reputation can increase the abnormal returns.
- Niche celebrities create more abnormal returns than mainstream celebrities.
- Niche celebrities do not overpower the brand, and they are not over-exposed.

Abstract

Studies in Western countries of stock market response to celebrity endorsement news have produced mixed results. This article examines stock market response from an emerging market—India. We investigate determinants of abnormal returns, analyzing 149 endorsement news events from 2003 to 2014. Our results indicate that variables such as endorsement announcement specificity, reputation of the endorsing celebrity, and whether the endorsing firm is of Indian origin generate positive abnormal returns.

Key words: celebrity endorsement, event study, emerging markets

Introduction

Although firms invest millions of dollars in celebrity endorsements, marketing and advertising research has given scant attention to the impact of celebrity endorsements on firms’ valuation. In emerging markets like India, where celebrities are idolized, celebrities endorse almost 50 percent of the brands (Financial Express, 2013). Since endorsement is a culturally sensitive issue, the results of studies that have been conducted in developed markets cannot be generalized to emerging markets (Choi, Lee and Kim, 2005).

The few available studies that capture the financial significance of celebrity endorsement in developed markets display inconsistent results (Agrawal and Kamakura, 1995; Ding, Molchanov and Stork, 2011; Elberse and Verleun, 2012). Furthermore, very few scholars have focused on a vital aspect of celebrity endorsement—the determinants of the abnormal returns. In this regard, celebrity characteristics such as age and gender can be important determinants of
abnormal returns (Ding et al. 2011). Our study explores the determinants of abnormal returns in emerging markets. We investigate three questions: (a) Does celebrity endorsement generate positive abnormal returns in emerging markets? (b) What are the firm and (c) celebrity-level determinants of these abnormal returns? Findings from the current study indicate that announcement specificity and endorsements by niche celebrities generate more abnormal returns than those by mainstream sports or film celebrities, and that there exists a curvilinear relationship between past celebrity endorsement and firm valuation.

Theory

Celebrity has been defined as “an omnipresent feature of society, blazing lasting impressions in the memories of all who cross its path” (Kurzman et al. 2007). Firms commonly associate their brands with endorsers as a part of marketing and communications strategy. Firms commonly choose celebrity endorsers because they bring the brand better recognition or more positive word of mouth (Bush et al. 2005).

In emerging markets like India, which is a collectivist society, celebrities are given more credibility, and their effectiveness is also comparatively higher compared to their Western counterparts. Indian consumers figuratively put a halo behind a celebrity’s head and believe that celebrities can do no wrong (Hindu Business Line, 2001). Thus, celebrities are highly credible in the eyes of Indian consumers (Choi, 2007). Evidence of the credence granted celebrity includes the fact that in India reknowned celebrities annually endorse an average of 15 products compared to four brand endorsements per celebrity in developed countries (Business Standard, 2013). Investors support firms’ use of celebrity endorsement advertising strategy as it implies a definite enhancement of brand value in the eyes of consumers.

The authors of the current study rely on signaling theory (Spence, 1973) to explain the role of firm and celebrity factors in influencing abnormal returns. This theory is used to describe the behavior of parties when they get access to information. Investors respond to the marketing signals of a firm, especially if these signals provide rich information about the firms’ actions and attributes (Carroll, 2009).

In emerging markets like India, multinational firms are more highly regarded and hence considered more trustworthy than their domestic counterparts (Steenkamp et al. 2003). Thus,
association of a product with a multinational company signals to investors about its quality. Domestic firms in emerging markets do not share similar repute and trust because of institutional voids and general lack of trust (Khanna and Palepu, 1997). Hence, when celebrities endorse a firm’s products, shareholders, like consumers, get excited about the news. Investors respond to news of unusual events. This implies that if a firm has been using celebrity endorsement in the past for a particular product category, investors may not respond to such news, as they would not perceive anything unusual in such an endorsement.

Celebrity-related factors such as age, gender, or reputation also might influence stock market response (Ding et al. 2011; Elberse and Verleun, 2012). The current study focuses on three important aspects of celebrity-related traits. First is the overall reputation of the celebrity, which implies a reputation that the celebrities have built over time after having both positive and negative news published about them in media (Deephouse, 2000). Thus, a celebrity whose overall reputation is good could bring positive stock market rewards for the firm. Although well known celebrities are preferred for brand endorsement, their over-exposure may lead to loss of credibility (Erdogan, 1999). The use of over-exposed celebrities who have endorsed many different products weakens the association of the celebrity with any one brand.

Bollywood is the name of the Hindi film industry located in Mumbai. In India, Bollywood movie stars and cricket players are the most acknowledged celebrities, but recently a niche category of celebrities who are expert in various other fields like cooking or photography is also being targeted for endorsements. Firms rely on these niche celebrities as they are more cost-effective compared to mainstream stars (Business Today, 2013). Although these celebrities are experts in their respective fields, investors may perceive them as less effective in convincing consumers regarding brand attributes. This is because they are comparatively less famous and less well known, so they have less referent power (Hsu and McDonald, 2002).

The third celebrity-level factor explores the role of past celebrity endorsement, and given the idolized status of celebrities in India, negative impact cannot be expected, unlike the findings of extant studies.

Our study thus consists of two factors—firm level and celebrity level—that can influence abnormal returns experienced by firms on the announcement of a celebrity endorsement.
**Hypothesis Development**

Celebrity endorsement provides several advantages to a firm in terms of both marketing and financial performance. The first study in this field was published in 1995 by Agrawal and Kamakura. Based on 110 celebrity endorsement announcements between 1980 and 1992, the authors found that firms received abnormal returns. Later studies focused on specific celebrities. For example, Mathur et al. (1997) reported positive abnormal returns of two percent on the day of announcement of Michael Jordan’s return to the NBA. Similarly, Farrell et al. (2000) analyzed endorsements made by Tiger Woods prior to 1996 and found that out of three brands, two showed abnormal returns that were positive and significant for one-day and two-day event windows. Focusing on 148 athlete celebrity endorsements between 1994 and 2000, Fizel et al. (2008) did not find any significant impact on the movement of the stock prices of the firms studied. Similar results were obtained by Ding et al. (2011). They did not report any significant impact of celebrity announcement on firm stock movement. In another study, Elberse and Verluen (2010), however, reported positive and significant abnormal returns when celebrity endorsement contracts were signed by athletes. So, broadly speaking, in developed markets, mixed results have been found.

Results from developed market societies cannot be generalized to emerging markets like India. Because more value is given to status and rank in collectivist societies, celebrities are more revered and to some extent even idolized in India. Thus, celebrities can be expected to generate more perceived value for customers. Since marketing performance and stock market performance are interlinked (Fornell et al. 2006), celebrity endorsement can be expected to be rewarded by investors in India by generating abnormal returns. Hence, we hypothesize:

H1: Celebrity endorsement generates positive abnormal returns
Firm-Specific Factors

Celebrity endorsement specificity:

Announcing a celebrity endorsement represents a deliberate action by a firm to communicate to investors its specific marketing activities. Such announcements are signals from the firm aimed at molding behavior of a particular group of stakeholders—its investors (Srivastava et al. 1998). The authors of the current study define preannouncement specificity as the level of information provided by the firm so as to reduce as much as possible any ambiguity associated with the announcement. To make the signal of celebrity endorsement credible, information must be complete and irreversible. For example, the reason why the firm has chosen a particular celebrity would suggest that the firm is clear in its perspective and positioning of the brand (Mittelstaedt et al. 2000). Alternatively, the celebrity’s response to the association with the brand may also signal how genuine a celebrity is in endorsing the brand.

Dealing with celebrities in general involves high transaction costs (DeGrandpre, 2001). By specifying details of the deals, the transaction cost can be reduced to a large extent. With regard to financial information, it has also been found that investors are less likely to respond to information that is uncertain or incomplete. (Barniv and Cao, 2009). Thus, the greater the specificity of the endorsement announcement, the less probability that the marketing signal will mislead investors. The creditworthiness of the announcement is greater, and accordingly, investors would respond to the announcement more positively.

Hence, we hypothesize:

H2: Announcement specificity positively impacts abnormal returns from celebrity endorsement

Past endorsement

Celebrity endorsement that enhances brand visibility loses its uniqueness when it is repeatedly used by the firm, especially for the same category of products. If a firm has used celebrity endorsement in the past, the novelty of the announcement is diminished and consequently
investors may remain indifferent. Extant studies have indicated that when firms overemphasize celebrity endorsement, the advertisement’s credibility is reduced (Kamins, 1989). For example, when Colgate in India launched its new brand of toothpaste Colgate Max White with Sonam Kapoor, one of the highest-paid actresses and most fashionable celebrities in India, as the endorser, it was not unusual because Colgate had long used celebrity endorsements in India for the rest of its toothpaste brands, such as Colgate Herbal or Colgate Active Salt. Hence, we hypothesize:

H3: Past endorsement by the firm within the same product category diminishes abnormal returns from celebrity endorsement announcement.

**Multinational vs Indian Firms**

Multinational firms have more brand value than local Indian firms, as multinational firms are held in higher regard (Steenkamp *et al.* 2003). This is because multinational firms have better competencies, resources, and capabilities that local firms in emerging markets like India fail to capture because of institutional voids (Khanna and Palepu, 1997). Consequently, multinationals have better earnings, better balance sheets, and more investor trust. Thus, they possess a corporate brand status, which is enough to convince local consumers and investors (Dowling, 2006). Consequently, marketing actions like celebrity endorsement may not generate much value for these investors, as they may not consider such endorsement announcements to be big news. On the contrary, their Indian counterparts have comparatively less brand value. Institutional voids in India resulting from lack of intermediary markets like a credit market or human resource market make firms less competitive and hence less well regarded (Khanna and Palepu, 1997). Thus, consumers require a strong motive to associate themselves with Indian brands. Hence, when a celebrity endorses a particular firm’s brand, their referral power convinces consumers, and they form a positive attitude toward the brand (Buttle, 1998). Investors, realizing this phenomenon, reward the firm by abnormal stock market returns. Hence, we hypothesize:

H4 In India, celebrity endorsement by firms of Indian origin generates more abnormal returns than such endorsement by multinational firms.
Celebrity Factors

Reputation of celebrity

Products that are endorsed by celebrities benefit by association between the product and celebrity. But negative information concerning the celebrity signals negative traits to consumers. Consequently, they start connecting negatively with the brand as well (Till and Shimp, 1998). The negative news involves not only scandals but morally wrongful actions or any other kind of negative news that can have a negative impact on the brand endorsed. Not only consumers but investors as well degrade the firm whose brand is endorsed by the negatively regarded celebrity (Bartz et al, 2013; Knittel and Stango, 2014; Louie et al, 2001). But when positive news about celebrities is released, some consumers perceive positive signals and form a positive attitude toward the celebrities, and then investors may also reward the firm. The attitudes of consumers and investors toward the brands depend on the overall reputation of the celebrity in the media--positive and negative. The authors define celebrity reputation as the person’s public, which determines the overall acceptance of the celebrity by the audience. Just as firm reputation is central to the firm’s trustworthiness in market, celebrity reputation is central to the reliability and credibility of the celebrity amongst the public and media (Goldsmith et al. 2000).

Celebrities with a high reputation bring several advantages to the firm. For example, by association with the product, they can convince buyers about the positive effect and quality of the product (Choi et al. 2005). The more well regarded the celebrity is, the greater will be the celebrity’s persuasive power (Till and Shimp, 1998). Thus, investors are more likely to view celebrity endorsement news favorably when the celebrity endorsing the brand has an overall positive reputation compared to less reputed celebrities. Hence, we hypothesize:

H5: Overall celebrity reputation positively influences abnormal returns of celebrity endorsement announcements.
Previous brands endorsed by celebrity

Reknowned celebrities don’t endorse just one or two brands, but often multiple brands. Celebrities not only influence consumer attitudes toward the brand, but also their purchase intention, thus raising the demand for endorsements. When a celebrity endorses multiple products--if concept consistency is maintained--consumers develop a positive attitude toward the multiple brands endorsed by that celebrity (Rice et al. 2012). Thus, when a firm announces endorsements by celebrities, investors also reward the firm by buying its shares. Celebrity endorsements are mainly meant to differentiate the brand from clutter (Carroll, 2009), but when a particular celebrity endorses too many brands, they end up creating clutter rather than differentiation. The entire objective of celebrity endorsement is then lost, with over-exposure of a celebrity having an adverse rather than a positive effect. Over-exposing in endorsement may signal to investors and consumers that the endorsement is being done for the celebrity’s financial gain rather than any true product association. Consumers may also fail to connect with the brand. Multiple product endorsement by the same celebrity reduces credibility (Tripp et al. 1994). A “vampire effect,” occurs, where the celebrity is remembered but not the product (Byrne et al. 2003). Investors may devalue a firm that selects a celebrity who is over-exposed for brand endorsements. Thus, we hypothesize:

H6: Past celebrity endorsement follows a curvilinear relationship with abnormal returns from celebrity endorsement announcement.

Nature of the Celebrity

Studies have been conducted to see if sports celebrities fit with the products endorsed. A match up hypothesis has been proposed where athletes’ knowledge and expertise were tested for their fit with sports-related products (Fizel et al. 2008; Louie et al. 2001). In India, apart from Bollywood and sports, a niche category of celebrities has emerged who are known to be experts in their own fields. These niche celebrities are now becoming the new faces of endorsement in India. Thus, firms are choosing famous chefs like Sanjeev Kapoor to endorse kitchen items or
photographers and tall models like Kasbekar to endorse cars (Business Today, 2013). Using niche celebrities for endorsements reduces cost, as they charge much less than do mainstream Bollywood actors or cricket players. But because they are less known and recognized by consumers at large, while investors reward firms for using these expert celebrities, greater abnormal returns could be expected from using Bollywood and sports celebrities. Thus, we hypothesize

H7 Abnormal returns generated by niche celebrity endorsements will be less than those from mainstream Bollywood or sports celebrities.

Data and Methods

The sample for the current study consisted of listed firms on BSE, the Bombay Stock Exchange (India). The authors mainly searched for celebrity endorsement through various online newspapers, as these newspapers are generally read by almost all investors. Search engines like Google and Yahoo were also used to collect the news. The authors first listed all the products and brands of the listed company and then searched to determine whether they had been endorsed by a celebrity. Next, the exact announcement dates were checked through the most read business newspapers in India such as the Hindu Business Line or Economic Times and the websites of news channels such as ndtv.com. In most cases, there was no conflict in the dates of announcement between print media and online outlets. If any clash in the dates of announcement was noticed, the earliest date was chosen. If an announcement was made on weekend, either Saturday or Sunday, then Monday was considered to be the opening day of the news. A similar approach has been adopted by other scholars as well (Ding et al. 2011). This resulted in an initial sample of 178 announcements. To avoid any confounding effect by announcements related to firm earnings, mergers, or acquisitions, alliances or joint ventures, lawsuits, executive changes, new product announcements, or changes in dividends or company name, the authors searched for information related to these announcements by the same firm during the (±10,-10) event window. This approach was as suggested by Johnston (2007). After removal of 29 announcements that could lead to confounding effects, the authors were left with a final sample of 149 celebrity endorsement announcements for the period from 2003 to 2014.
Methods

Measuring normal performance

Next, we specified an estimation window, which gives a measure of normal returns to the stock price of the firm and is constructed for a time prior to the event. A market model was used to estimate predicted returns (De Jong 2007). Thus,

$$E(R_{it}) = \alpha_i + \beta_i * R_{mt}.$$  

Here, $\alpha$ and $\beta$ are OLS parameter estimates of the regression coefficients and $R_{mt}$ is the return of the market. The S&P BSE 500 index was used as a benchmark for market returns.

A moderate event window of 7 days (-3, +3), and a preceding estimation period of 240 days was employed. This excluded the event window so as to avoid contamination of firms’ normal performance model parameter estimates (MacKinlay, 1997). Since capital markets in India are not efficient, which is an important assumption of event study (Khanna and Palepu, 2000), a longer event window is selected so as to minimize the impact of this inefficiency.

Estimating abnormal and cumulative abnormal returns

Next, abnormal returns were calculated as the difference between normal, i.e., benchmark, returns and actual, i.e., event, returns. Thus, the formulae used was $AR_{it} = r_{it} - E(r_{it})$, where $r_{it}$ is actual return on the event of the company $I$ at time $t$ and $E(r_{it})$ is the normal return for the same company during same time. The cumulative abnormal return for the event period ranging from $t_1$ to $t_2$ was calculated as

$$CAR_I = \sum_{t=t_1}^{t=t_2} AR_{it}$$
Then, cumulative average abnormal returns (CAAR) over various event windows beginning with $t_1$ and ending with $t_2$ were calculated as $CAAR_{t_1,t_2} = \sum_{i=1}^{N} CAR_{(t_1,t_2)} / N$ where $N$ is the number of events.

**Operationalization of variables for multiple linear regression**

*Announcement specificity*

To measure specificity, the authors used a composite score of 1, incorporating five components: first, whether the reason for indulging in celebrity endorsement is given; second, whether information about match-up hypothesis is given, meaning why a particular celebrity is chosen; third, whether the celebrity’s view on the endorsement is also given; fourth, if the contract sum is disclosed; and fifth, if the tenure of the contract is given. If a firm has all five of these components, its score is 1, if it has four components, its score is 0.8, and if it has three, then its score is 0.6 and so on. This required content analysis, so one of the authors first read and coded the articles. Two readers who had recently attained MBAs were asked to re-code 30 percent of the articles. Inter-rater reliability was 95 percent, a high score.

*Past endorsement by the firm in a particular product category*

Using Google search and other news sources, we calculated the number of endorsements used by the firm for a particular product category. The count was taken as a measure of past endorsements made by the firm.

*Multinational vs. Indian firms*

This information was obtained from Prowess CMIE, a database of Indian companies. The authors dummy-coded multinational firms as 0 and firms of Indian origin as 1.

*Reputation of the celebrity*

News was segmented into three categories: favorable, neutral, and unfavorable. Favorable news happened when celebrities were praised for their actions—like doing something for a social
cause such as making donations, being appreciated for their role, or receiving awards. News was treated as unfavorable when celebrities were criticized for their actions—such as driving while drunk or participating in a false publicity stunt. News was considered neutral when celebrities were neither appreciated nor criticized. This implies that only some facts or updates about them were released—for example, how they celebrated important events or their upcoming movie releases with neither appreciation nor criticism. Again, first the authors read and coded the articles. Then, two recent MBA graduates were asked to re-code 30 percent of the articles. Interrater reliability was 92 percent.

Next, the coefficient of media favorableness was calculated using:

\[ F^2 = \begin{cases} f/t^2, & \text{if } f > u \\ 0, & \text{if } f = u \\ f-u^2/t^2, & \text{if } u > f, \end{cases} \]

where \( f \) = number of favorable news, \( u \) is the number of unfavorable news reports, and \( t \) is the total number of news reports about the celebrity in a given year. This is based on the approach given by Janis and Fadner (1965), which has been used extensively to measure corporate reputation (Deephouse, 2000).

Past endorsement by the celebrity?

The authors again content analyzed Google news and leading Indian newspapers to find the number of brands that had been endorsed by the celebrity in the preceding one-year period. To test for a curvilinear relationship, the authors took the square of the number of endorsements, following the mean centering technique, to avoid the multicollinearity problem.

Type of celebrity: The authors considered three categories of celebrities: namely, Bollywood stars, sports stars, and niche celebrities. Following the n-1 principle, two dummy categories were created, with niche celebrities as the base category.

Control variables
Based on past studies, we controlled for gender of the celebrity, age of the celebrity, and technology orientation of the industry, such as manufacturing vs. service, (Ding et al. 2011; Biswas et al. 2006; Clark et al. 2009).

The equation to be estimated can be represented as

\[
\text{Cumulative abnormal returns (CAR)}_{i,t} = \alpha + \beta_1 \text{Announcement Specificity (AS)}_{i,t} + \beta_2 \text{Past endorsement by firm (PE)}_{i,t} + \beta_3 \text{celebrity rating}_{i,t} + \beta_4 \text{Past endorsement by celebrity (PCE)}_{i,t} + \beta_5 \text{Type of celebrity (TC)}_{i,t} + \beta_6 \text{Multinational vs Indian firm (M/I)}_{i,t} + \beta_7 \text{celebrity age (CA)}_{i,t-1} + \beta_8 \text{Manufacturing vs Service (Man/Ser)}_{i,t} + \beta_9 \text{celebrity gender} + \epsilon_{it}
\]

**Results**

Portfolio tests using the Boehmer, Musumeci, and Poulsen (BMP) test to account for event-induced volatility (t=2.01, p<0.05) and generalized statistics (Z=2.364, p<0.05) indicated significant abnormal returns of 1.8% due to endorsement announcements for an event window of (-3, +3) days. Furthermore, since event studies are sensitive towards outliers (McWilliams and Siegel, 1997), the Wilcoxon Rank-sign test was also performed with the results showing the absence of outliers (Z=2.55**). The authors thus find evidence in support of the first hypothesis: celebrity endorsement results in over-valuation of the firm’s stock.

The correlation matrix of short-term abnormal returns and their determinants (see Table 1) reveals that the correlation coefficient amongst independent variables is low, thus eliminating chances of multicollinearity. A multiple linear regression was performed with CAR as the dependent variable and firm and celebrity traits as the independent variables (see Table 2). First, all control variables were entered. In the second step, independent variables were entered, and finally the squared term of past celebrity endorsement was entered to test for curvilinear effect. Regarding main effects for four independent variables, after incorporating control variables, both celebrity and firm level characteristics were found to be positive and statistically significant. Thus, the second, fourth, and fifth hypotheses were supported. The authors received partial

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1 We split the sample into two parts i.e. 2003-2008 and 2009-2014. In these two sub samples also abnormal returns remained significant.
evidence in support of the seventh hypothesis, as beta coefficients of Bollywood and sport celebrities were significant but negative, indicating that niche celebrities generate more abnormal returns than the other two. The analysis did not provide any evidence to support the sixth hypothesis.

Contribution

The authors’ contribution to the celebrity endorsement and advertising research is threefold. First, we have explored evidence from emerging markets, where celebrities are idolized to a degree not seen in developed markets. The second contribution of the study is to advertising research, where we explain how announcement specificity and the nature of the firm affect abnormal returns. The first important firm level trait explored is announcement specificity. Extant research has not measured how announcement specificity influences stock market performance. Studies indicate that more specific and detailed financial information is valued more highly by investors than is partial or incomplete information (Piotroski et al. 2004). Investors do not differentiate financial or marketing information as both have performance implications for the firm. Thus, the present study reflects the impact of announcement specificity on abnormal returns generated. Further, the present study describes the differing roles of Indian versus multinational firms, a factor that has not previously been explored. Our third contribution is extension of celebrity-related factors that influence abnormal returns. Extant studies indicate that negative news about a celebrity and the number of endorsements done by that person negatively influence abnormal returns. The authors of the current study first refine the measure of celebrity reputation. Instead of focusing only on negative news, the authors arrive at the reputation score by considering both positive and negative news about the celebrity. This measure is borrowed from the corporate reputation literature (Deephouse, 2000). Overall reputation gives a holistic image of the celebrity in the eyes of investors and other stakeholders. The authors further extend the literature on the nature of celebrities by observing that niche celebrities generate more abnormal returns than mainstream celebrities. This may be because investors realize that mainstream celebrities could overpower the brand, which is not the case with niche celebrities.
Conclusion

Indian firms that announce celebrity endorsements generate positive abnormal returns. Furthermore, announcement specificity and celebrity reputation can increase the abnormal returns. Similarly, niche celebrities create more abnormal returns than mainstream celebrities. This may happen for three reasons. First, niche celebrities do not overpower the brand, and second, unlike mainstream celebrities, they are not over-exposed. Thus, even though they may not be widely known to a large segment of audience, their success in their own field, be it photography or cooking or modeling, makes them celebrities in that niche. Third, their endorsements are less expensive compared to endorsements by mainstream celebrities, thus raising the overall efficiency of the firm, something that investors value. Though we expected mainstream celebrities to be more valued, our results indicate that these niche celebrities are more valued, probably for the reasons explained above. Furthermore, though managers invest heavily in celebrity endorsement and try to beat the competition by catching more of the customers’ attention, they need to realize that heavy investments in endorsement may lose value if a celebrity over-endorses a brand. Similarly, advertising agencies should be mindful that they do not hire celebrities who are already endorsing many brands.
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## Table 2

**Regression Results**

<table>
<thead>
<tr>
<th>Car</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
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<tr>
<td>Intercept</td>
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<tr>
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<td>1.01***</td>
<td>0.14</td>
<td>1.01***</td>
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<tr>
<td>PE</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>M/I</td>
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<td>0.05</td>
<td>0.28***</td>
</tr>
<tr>
<td>CR</td>
<td>0.69**</td>
<td>0.23</td>
<td>0.67***</td>
</tr>
<tr>
<td>PCE</td>
<td>-0.04</td>
<td>0.02</td>
<td>-0.04</td>
</tr>
<tr>
<td>Bollywood</td>
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<td>0.09</td>
<td>-0.67***</td>
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<tr>
<td>Sports</td>
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<td>0.04</td>
<td>-0.5***</td>
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<tr>
<td>PCE square</td>
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<tr>
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<td>0.03</td>
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<tr>
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<tr>
<td>Man/Service</td>
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