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The Impact of Co-branding on Firm Stock Value

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Co-branding has become a widely used marketing strategy, yet little attention has been paid to its impact on a firm's stock value. Prior literature has shown that using a co-branding strategy properly helps firms leverage the brand value and equity. By analyzing the stock price before and after co-branding announcement events in the U.S., this paper explores whether the introduction of co-branded products could positively impact a firm's stock value and how different attributes of co-branding structure influence firm stock value. The results suggest that co-branding events indeed lead to significant abnormal returns, and a high (vs low) co-branding integration and a long (vs short) co-branding duration can generate significantly higher abnormal returns. In contrast, previous co-branding experience and co-branding exclusivity do not affect the stock return. The managerial implications are discussed in the concluding section.

Keywords: Co-branding, co-branding structure, firm stock value, abnormal return, event study

Introduction

Brand plays a critical role in building the position of corporations in the international market (Douglas, 2001). The growing competition of the international market makes corporations realize that it is important to cooperate with other brands to form a brand alliance. A brand alliance is defined as combining two or more brands in marketing activities (Rao and Ruekert, 1994; Simonin and Ruth, 1998; Rao et al., 1999). It drives brand partnership development and benefits for the involving partner brands (Besharat & Langan, 2014; Newmeyer et al., 2014). For example, co-branding can enhance existing brand associations and improve brand awareness (Keller, 2008). Furthermore, co-branding is an effective strategy used in the international market. It helps multinational corporations attract consumers' attention and cut costs when entering new markets (Blackett and Russell, 1999; C. Nguyen et al., 2018; Park et al., 1996).

Previous literature demonstrates that a co-branding strategy is valuable in the marketing domain. As a type of brand association, co-branding is positively related to brand value and brand equity (Aaker, 1991; Aaker, 1996).

Balachander and Ghose (2003) show that advertising the new combined brand can positively affect family brands and reduce advertising expenditure for both parties. However, existing research has paid limited attention to how the co-branding announcement events impact a firm's stock value (Cao and Sorescu, 2013; Nguyen et al., 2020). This study aims to address this research gap. Specifically, using the event-study method, we investigated whether co-branding announcement events generate short-term abnormal returns in the U.S. stock market, and how the attributes of the co-branding structure further impact the abnormal returns. The results indicate that the introduction of co-branded products indeed generates positive abnormal returns, and high (vs low) co-branding integration and long (vs short) co-branding duration significantly influence abnormal returns. Our findings can provide practical guidance to both marketing researchers and brand managers in their branding related business practice.

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Literature Review

To adapt to the constantly changing market, marketers should adjust the branding strategy to take advantage of opportunities and deal with challenges (Batra et al., 2000; Rowley and Hanna, 2019). Aaker (1991) proposes that companies are increasingly interested in cooperating with other brands to achieve better development because the brand is the most valuable asset of the company (Bengtsson, 2002). The co-branding strategy has been extensively used by marketers for a few decades. For example, Bonne Belle and Dr. Pepper cooperated to make a new flavored lip balm in 1973. Previous marketing scholars labeled co-branding in different ways, such as joint branding (Rao and Reukert, 1994), composite brand extension (Park et al., 1996), brand alliance (Simonin and Ruth, 1998), and co-marketing alliance (Venkatesh et al., 2000).

Co-branding is broadly defined as any combined pairs of brands collaborating in marketing activities (Kapferer, 2012), such as promotion, advertising, services, or distribution (Grossman, 1997; Voss and Gammoh, 2004). Because using a co-branding strategy can potentially lead to image transference among corporate brands (Waters, 1997), existing parent brands would benefit from the co-branded products. Specifically, co-branding is viewed as the collective leverage of both primary brand and secondary brand through product or service association (Blackett and Boad, 1999).

In a co-branding event, both the primary brand and the secondary brand are combined at the same time to form the new co-branded product (Levin et al., 1996). The constituent brands stay independent not only before but also after producing the co-branded product (Ohlwein and Schiele, 1994). The involved firms should jointly launch a co-branding marketing strategy so that the targeted consumers could recognize the new co-branded product and alliance between constituent brands (Rao, 1997; Blackett and Russell, 1999).

The co-branding strategy not only helps existing brands increase sales volume and expand sales territory but also helps the new brand gain credibility in the marketplace. For constituent brands, using a co-branding strategy enables firms to share risk, resources, and technology. In addition, the co-branding strategy has the potential to benefit the supplier, the manufacturer, and the retailer differently (Norris, 1992). Suppliers could gain more profit margins and stable demand, manufacturers could develop a competitive advantage over their competitors, and retailers could improve their sales volume through promotional support from the ingredient branding (Besharat and Langan, 2014; Newmeyer et al., 2014).

Although co-branding has been extensively researched in the marketing field, most existing studies are conducted in an experimental setting. How the co-branding events influence a firm's stock value and how the varied nature of co-branding structure impact the firm stock value is underresearched (Cao and Sorescu, 2013; Nguyen et al., 2020). Addressing the above research gap, this study focuses on how the introduction of co-branded products and the attributes of co-branding structure impacts a firm's stock value.

Hypothesis Development

Brand value is a differentiating factor among various brands in the market. When companies appropriately conduct a co-branding strategy and successfully transforming the product information that customers desire, the brand value would improve. Brand value is related to products, pricing, delivery, and service. When a brand is highly valued by the consumer, it brings the company with competitive advantages (such as brand equity) because customers would view the brand higher than its competitive brands (Lassar et al., 1995; Nguyen et al., 2020).

Brand equity is "a constellation of associations with brand names" (Swait et al., 1993, p. 25). Swait et al. (1993) claim that the name of the product is a signal for consumers and is associated with the brand image. According to Rao and Ruekert (1994), a brand name is a valuable asset to a company. A combination with other brand names to form a synergistic alliance can create more value for the focal company. Positive brand equity could improve brand awareness, brand image, customer loyalty, corporation heritage, and profit (Aaker, 1991). The stock market performance is closely related to marketing performance (Fornell et al., 2006). A co-branding strategy could provide companies with the strategic value to achieve a competitive advantage despite competition or recession (Temporal, 2000). Therefore, co-branding can be an effective marketing strategy in creating firms' brand value and competitive advantages. Based on the above discussion, we propose the below hypothesis.

H1: Co-branding event announcements generate positive abnormal returns in the stock market.

Different attributes of co-branding structure could also impact an involved firm's abnormal returns. According to Newmeyer et al. (2014), there are three co-branding structures, namely co-branding integration, co-branding exclusivity, and co-branding duration. Co-branding integration reflects the degree that the involved partner brands are mixed in both form and function. Co-branding integration can be either high or low. High co-branding integration indicates that the involving partner brands jointly create a completely new brand while low co-branding integration suggests the involving partner brands are largely separate in form. Co-branding exclusivity refers to the number of the involving partner brands (Newmeyer et al., 2014). High co-branding exclusivity suggests the core brand has a single or very few partnering brands while low co-branding exclusivity indicates the core brand has many partnering brands. Co-branding duration reflects the time length in which the involving partner brands collaborate. Long (vs short) co-branding duration suggests a long (vs short) period of time of collaboration. Table 1 provides definitions and examples of different levels of co-branding structures. According to the existing research, high co-branding integration, long co-branding duration and high co-branding exclusivity are found to generate a greater impact on brand evaluation. Applying this logic, we proposed the below three hypotheses.

H2: High co-branding integration generates significantly more abnormal returns than low co-branding integration in the stock market.
H3: High co-branding exclusivity generates significantly more abnormal stock returns than low co-branding exclusivity in the stock market.
H4: Long co-branding duration generates significantly more abnormal stock returns than low co-branding duration in the stock market.

Table 1. Co-branding structure

Co-branding structure	Levels	Results	Examples
Co-branding integration	High integration	Various brands jointly offer a completely new brand.	- Diet Coke with Splenda - Sonicare Crest IntelliClean - Toothbrush System
	Low integration	The joint presentation of brands.	- GoPro & Red Bull: "Stratos". - Apple Pay & MasterCard
Co-branding exclusivity	High exclusivity	The core brand has a single or few partner brand(s).	- Apple iPhone with AT&T - Apple Watch Nike
	Low exclusivity	The core brand has many partner brands.	- Multiple PC brands with Intel Inside; - American Airlines frequent flier miles with many car rental firms.
Co-branding duration	Long duration	The co-branding arrangement lasts a long period of time.	- Barnes & Noble and Starbucks - Apple Pay & MasterCard
	Short Duration	The co-branding arrangement lasts a short period of time.	- Disney's alliance with Burger King only for the Lion King movie - Garnier's sponsorship of the Australian Open.

Data

Search engines are used to collect the event announcement news. The exact announcement dates were checked through major news outlets in the U.S. and the official websites of the focal brands. The final sample of the study consists of 33 co-branding events announced in the U.S., 54 firms belong to four industries are selected from Bloomberg as the focal firms from 2004 to 2017. Following Johnston (2007), daily stock prices during the [-10, +10] announcement date event window of the focal firms are collected. Further, we included co-branding experience, whether it is a primary brand, firm size, and industry as control variables. The co-branding experience is calculated as the total number of co-branding events during the focal time window. The model

We used the event-study method to estimate abnormal returns which are defined as the differences between a brand's normal returns and the post-returns of a major economic event (Brown and Warner, 1985). Compared with abnormal returns, a normal return is calculated as a company's expected stock performance relative to the market index in the absence of any major economic events (Clark, Cornwell, and Pruitt, 2002).To estimate a firm's normal stock returns, a market model is employed in Equation (1). We retrieved the related brands' stock data from Bloomberg between January 2004 and December 2017 at the daily level. The CRSP index from Kenneth French's website was used as a benchmark for the market returns.

$$R_{it} = \alpha_i + \beta_i * R_{mt} + \varepsilon_{it} \qquad (1)$$

Specifically, where Rit stands for the estimation of brand i's normal stock returns at time t; α and β are OLS parameter estimates of the regression coefficients; R_{mt} is the market return at time t; ε_{it} is the error term reflecting the deviations of the actual returns on the days after the event from those predicted by the model. Further, the cumulative abnormal returns are calculated in Equation (2), where cumulative abnormal returns during the event period ranging from t1 to t2 are obtained by adding the abnormal returns on each day (Brown and Warner, 1985).

$$\text{Cumulative abnormal returns}_{\ i} = \sum_{t=t_1}^{t=t_2} AR_{it} \qquad (2)$$

Finally, the regression equation of estimated cumulative abnormal returns (CAR)it was performed as:

$$\begin{aligned} \textit{Cumulative abnormal returns}_{it} = \\ \beta 0 + \beta 1\ \textit{Cobranding integration} + \beta 2\ \textit{Cobranding exclusivity} \\ + \beta 3\ \textit{Cobranding duration} + \beta 4\ \textit{Primary brand} \\ + \beta 5\ \textit{Cobranding experience} + \beta 6\ \textit{Industry} + \beta 7\ \textit{Firm size} + \varepsilon it \end{aligned}$$

Results

Table 2 reports the cumulative abnormal returns for co-branding announcement event window of [-10, +10] days. Boehmer, Musumeci and Poulsen (BMP) test was used as portfolio test to account for event-induced volatility ($P < 0.05$) and generalized statistics ($P < 0.05$). The results in table 2 suggest that, before the co-branding event announcement date, none of the trading days show significant cumulative abnormal returns. However, after the co-branding event announcement date, the estimates of cumulative abnormal returns of the first trading day to the tenth trading day turn sharply positive with statistical significance. For example, the estimate of the third trading day accumulates 0.024 cumulative abnormal returns with a t-value equals 2.117. The tenth trading day also shows marginally significance (P = 0.083). Therefore, the significant cumulative abnormal returns start to emerge on the first trading day and further extend to the tenth day with a decreasing significance level, which provides fully support to H1.

Table 2. The results of cumulative abnormal returns

Date	Coef.	S.E.	value	p-value
-10	-0.001	0.002	0.816	0.816
-9	0.001	0.005	0.137	0.891
-8	0.003	0.006	0.450	0.653
-7	0.004	0.006	0.668	0.504
-6	0.005	0.007	0.806	0.420
-5	0.007	0.007	1.051	0.293
-4	0.006	0.007	0.848	0.397
-3	0.009	0.008	1.033	0.301
-2	0.012	0.009	1.412	0.158
-1	0.012	0.009	1.399	0.162
0	0.014	0.010	1.454	0.146
1	0.019	0.010	1.887	0.059
2	0.023	0.011	2.085	0.037
3	0.024	0.012	2.117	0.034
4	0.024	0.013	1.896	0.058
5	0.025	0.013	1.972	0.049
6	0.025	0.013	1.874	0.061
7	0.027	0.014	1.943	0.052
8	0.027	0.014	1.908	0.056
9	0.028	0.015	1.856	0.064
10	0.028	0.016	1.732	0.083

We further performed linear regression to examine how co-branding structure impacts the firm's cumulative abnormal returns. Table 3 summarizes the analyses results. The coefficient for co-branding integration is significantly positive (β = .037, P = 0.023), suggesting high co-branding integration generates significantly higher cumulative abnormal returns than the low co-branding integration. Thus, H2 is fully supported. The coefficient for co-branding duration is significantly positive (β = .054, P = 0.001), indicating long co-branding duration indeed generates significantly higher cumulative abnormal returns than the short co-branding duration. Therefore, H4 is fully supported. However, the coefficient for co-branding exclusivity is positive but without statistical significance (β = 0.009, P = 0.516). Therefore, H2 is not supported. In addition, the control variables of whether it is a primary brand, co-branding experience, firm size and industry did not show statistical significance. Overall, we find general support to our hypotheses which are in line with the existing experimental studies.

Table 3. Linear Regression Results

	Coef.	Std. Err.	t -value	P-value	[95% conf.	Interval]
Co-branding integration	0.037	0.015	2.410	0.023	0.005	0.068
Co-branding exclusivity	0.009	0.014	0.660	0.516	0.037	0.019
Co-branding duration	0.054	0.014	3.810	0.001	0.025	0.083
Brand dominance	0.012	0.018	0.690	0.497	0.048	0.024
Co-branding experience	0.006	0.007	0.880	0.389	0.008	0.021
Firm size	<0.001	<0.001	0.320	0.753	<0.001	<0.001
industry	0.002	0.004	0.550	0.588	0.010	0.006
Constant	0.032	0.021	1.490	0.148	0.076	0.012

DISCUSSION AND IMPLICATIONS

The launch of co-branded products into a new market is a branding strategy that has attracted great attention. This paper identifies the advantages of using a co-branding strategy and quantifies the financial market reactions when introducing a co-branded product or service. Introducing a co-branded product or service can significantly increase the short-term abnormal returns after the introduction date. Also, this positive effect is more salient for higher co-branding integration and longer co-branding duration.

First, strong brand associations of one constituent brand can lend credibility to the other constituent brand by transferring the positive signals to the consumer and increasing the likelihood that consumers will choose (Hillyer and Tikoo, 1995). Therefore, brand associations help consumers differentiate among brands and make buying decisions. The co-branding strategy brings together two or more brands. Consumers will then use the existing purchasing memory about the constituent brands to create an initial brand image of a new co-branded product or service.

Second, higher co-branding integration is valuable for companies to launch a co-branded product or service. As reported in Table 3, co-branding integration is significant at the .05 level. In comparison with low integration, high co-branding integration generates stronger stock returns. This suggests that when using a co-branding strategy, combing brands to make a completely new product (such as Crest Barbie toothpaste and Disney credit card) can generate a better financial reaction compared with a mere joint presentation of brands (such as Google & Luxottica launch wearable devices).

Third, the financial reaction of introducing a co-branded product is stronger when two brands announce long term cooperation. As reported in Table 3, the co-branding duration is significant at the .01 level. This result suggests that shareholders are more confident when the brand association lasts longer (e.g., Diet Coke with Splenda) than shorter (e.g., GoPro and Red Bull cooperate for "Stratos").

Limitations and Future Research

The financial performance of the co-branding strategy is still relatively underresearched. Although the analyses in this study demonstrate the positive impact of co-branding on firm stock value, this study has the following limitations that could be resolved by future research. Firstly, this research is limited by the availability of data. We have a limited number of co-branding events in the dataset. More cases of co-branding events could enhance the validity of the conclusion. Secondly, to identify more factors that can significantly influence stock returns, future research could look at other dimensions such as advertising, product attributes, corporate image, etc. Finally, this research shows that the co-branding strategy generates a higher return for companies. It is also interesting to compare its impact against offering a new product under a single brand.

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