

# Essays on Brand Alliance in Marketing

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## Abstract

My dissertation aims to understand marketing activities that involve two or more disparate entities with linked association, resulting in joint promotion and branding. I investigate two such types of activity, an alliance between a celebrity and a brand, and an alliance between credit card companies and merchants. Both attempts to measure and identify the impact the promotion has on the consumer's decision process.

In the first essay, we quantify the economic worth of celebrity endorsements by studying the sales of endorsed products. We do so with the use of two unique data sets consisting of monthly golf ball sales and endorsers' quality levels. Our identification of the causal effect of a celebrity on the endorsed product is grounded on the endorsers' random performance over time that captures the variation in sales of the product.

Using two different approaches, reduced form and structural, we find that there are substantial celebrity endorsement effects. From our structural model we determine that endorsements not only induce consumers to switch brands, a business stealing effect, but also have a primary demand effect. We determine from 2000-2010, the Nike golf ball division reaped an additional profit of \$103 million through an acquisition of 9.9 million sales from Tiger Woods' endorsement effect. Moreover, having Tiger Woods endorse a brand leads to a price premium of roughly 2.5%. As a result, approximately 57% of Nike's investment of \$181 million endorsement contract was recovered just in US golf ball sales alone.

In the second essay, using daily customer transaction and program cost data from 2009-2011, we study the effects on consumer behavior of a novel Merchant Network Rebate Program implemented by a multinational bank in Singapore. With the only restriction being that it prohibits aggregation of rebate amount across cards, the rebate is instant with the same benefits offered to all bank issued credit cards, supplementing the existing card level benefits.

By examining consumer behavior in a network of rebate rewards program from Singapore, behavior in the rewards participating merchants are shown to vary considerably after the rebate program is introduced, even after one controls for variation due to merchants. The empirical analysis takes advantage of the variation of the time in which the rebates were rolled out across merchants as well as the variation of consumer shopping behavior in both the participating and non participating stores. In contrast to the normative prescriptions of economic theory, we find evidence that consumers spontaneously frame the rebate in terms of "losses" as oppose to gains on the value function. We examine and demonstrate that consumers not only wait for the optimal time to redeem, where redemption coincides with larger % off than previous opportunities but also put significant effort to amass rebates on a single card. With the restriction that prevents consolidation of amassed rebates across cards, the extent to which consumer use a single card to amass rebate results in forgoing the card level benefit made available to them