

# **Corporate Brand Effects in Brand Alliances**

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Online Supplemental Material

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Web Appendix A

List of Brand Allies and Corporate Parents with Mean Familiarity and Favorability Ratings\*

Brand Strategy	Corporation		Brand Allies								
	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	
Mixed	3M	3.80	3.91	Post-It	6.06	4.88	Scotch-Guard	4.78	4.06		
Mixed	Adidas AG	5.20	4.41	adidas	6.07	5.36	Reebok	5.79	4.21		
Portfolio	Brinker International	1.63	2.68	Chili's	6.71	6.29	On the Border	5.73	5.09		
Mixed	Campbell's Soup Co.	6.35	5.77	Pace Salsa	5.35	4.61	V8 V.Fusion	5.11	4.55	Godiva	5.21 4.47
Mixed	CBS	5.98	5.27	CBS	6.41	5.71	Showtime	4.94	4.27	The CW	3.78 3.39
Portfolio	Church and Dwight Co.	1.59	2.55	Arm and Hammer	5.06	3.56	Pepsodent	1.94	1.78		
Portfolio	Darden Restaurants, Inc.	1.73	2.79	Red Lobster	5.33	4.17	Olive Garden	6.25	6.25		
Mixed	Fiat S.p.A.	2.02	2.58	Alfa Romeo	2.53	2.29	Ferrari	5.67	5.30	Fiat	1.70 1.87
Mixed	Ford Motor Company	6.13	4.66	Ford	6.26	4.94	Mazda	5.64	4.15		
Mixed	Gap Inc.	5.82	4.85	Banana Republic	5.83	4.65	Old Navy	6.45	5.28		
Mixed	Johnson & Johnson	5.68	5.26	Tylenol	6.61	5.59	Band-Aid	6.33	5.82		
Mixed	Limited Brands	3.88	3.95	Victoria's Secret	6.93	6.93	The White Barn Candle Co.	3.80	4.80	Bath & Body Works	6.17 5.83
Mixed	Liz Claiborne	4.22	3.49	Luck Brand Jeans	5.16	3.63	Liz Claiborne	4.13	2.97		
Portfolio	LVMH	1.50	2.40	Givenchy	2.27	2.84	Louis Vuitton	5.28	4.92	Fendi	3.39 4.11
Mixed	Mars Inc.	3.83	4.05	M&M	6.39	5.81	Starburst	6.17	5.53		
Portfolio	Matsushita Ind. Electrical Corp.	2.07	2.69	Panasonic	6.14	5.35	Quasar	1.43	4.00		
Mixed	Michelin	5.16	4.42	Michelin	5.62	5.15	Uniroyal	3.00	3.25		
Mixed	Nestlé	6.10	5.84	Hot Pockets	6.24	5.05	Power Bar	4.71	3.66	Babe Ruth	5.84 4.71 Häagen-Dazs 5.08 4.39
Portfolio	News Corp.	2.57	3.28	My Space	6.23	4.06	Fox News	5.35	3.91		

\*Mean favorability and familiarity ratings are based on pretest data.

$\bar{F}_M$  = Mean Familiarity

$\bar{F}_V$  = Mean Favorability

Web Appendix A (Continued)

List of Brand Allies and Corporate Parents with Mean Familiarity and Favorability Ratings\*

Brand Strategy	Corporation		Brand Allies											
	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$	$\bar{F}_M$	$\bar{F}_V$		
Mixed	Nike Incorporated	6.45	5.68	Nike	6.90	6.28	Hurley International	3.97	3.59	Converse	4.90	3.88		
Mixed	PepsiCo	6.36	5.23	Pepsi-Cola	6.93	5.93	Gatorade	6.73	6.53					
Mixed	Phillips-Van Heusen	3.22	2.81	Calvin Klein	5.69	4.38	Izod	5.21	3.26	Sean John	3.94	2.33	Kenneth Cole	4.89 4.68
Mixed	Phillips-Van Heusen ( <i>continued</i> )			Speedo	5.91	3.50								
Portfolio	Proctor and Gamble	5.10	4.72	Downy	5.67	5.80	Old Spice	6.57	5.43	Oral-B	5.67	5.44		
Portfolio	Royal Phillips Electronics	2.97	3.21	Phillips	5.81	5.47	Magnavox	4.81	4.76	Sonicare	3.72	3.61		
Mixed	Sears, Inc.	5.03	4.23	Route 66	5.32	4.27	Structure	2.22	2.21					
Mixed	The Coca-Cola Company	6.55	5.80	Coca-Cola	6.81	6.38	PowerAde	6.16	4.84					
Mixed	The Walt Disney Company	6.43	5.84	ABC TV	5.42	5.06	Disney Consumer Products	5.31	4.79	ESPN	5.94	5.00		
Mixed	Time Warner	5.23	4.76	HBO	6.19	5.53	CNN	6.00	4.75					
Mixed	Toyota Motor Corporation	5.89	5.14	Toyota	6.48	5.47	Lexus	6.14	5.53					
Portfolio	VF Corporation	1.45	2.26	North Face	5.89	5.26	Nautica	5.32	4.53	Jansport	5.42	4.51		
Mixed	Viacom	3.15	2.98	Paramount Pictures	6.35	6.16	Comedy Central	5.86	4.95	MTV	6.53	5.25	Nickelodeon	5.67 4.14
Mixed	Volkswagen Group	5.43	5.04	Lamborghini	5.65	5.26	Audi	4.67	4.19	Volkswagen	6.28	4.78		
Portfolio	Yum! Brands	2.69	2.88	Taco Bell	6.36	4.76	Pizza Hut	6.42	5.06	KFC	5.84	4.06		

\*Mean favorability and familiarity ratings are based on pretest data.

$\bar{F}_M$  = Mean Familiarity

$\bar{F}_V$  = Mean Favorability

## Web Appendix B

### Experimental Stimulus: Product Concept Description

Mountain Lake Inc. is a company with various products in the soaps and detergents category. The firm is developing a new product in this category. The new product is a concentrated laundry detergent with fabric softener. The firm will sell the product under the brand name MAX. The new brand will be priced competitively with existing products of this type. The firm intends to offer the product through major retailers. The new product will be advertised on standard media including TV, radio, and magazines. The firm will also use sales promotions including coupons and point of purchase materials. The promotional strategy will emphasize MAX's gentleness and cleaning power.

An element of MAX's marketing plan includes an agreement with Nike which is owned by Nike Incorporated. As part of this agreement, Nike's name and logo will appear in MAX's advertisements and promotional material.

*Note: Underlined items were changed contingent on the focal brand to ensure fit.*

Web Appendix C  
Scale Items and Measurement Model

Measures	Standardized Loading	Composite Reliability	AVE
Percieved Quality of the Focal Brand		.90	.65
1. The workmanship of the Max brand is likely to be very high	.76		
2. The Max brand appears to be of very high quality	.82		
3. I would consider the Max brand to be very functional	.76		
4. The Max brand is likekely to be durable	.84		
5. The Max brand would be very dependable.	.87		
Attitude toward Brand Ally		.93	.81
1. Good - Bad	.93		
2. Pleasant - Unpleasant	.90		
3. Favorable - Unfavorable	.87		
Attitude toward Corporate Ally		.95	.86
1. Good - Bad	.91		
2. Pleasant - Unpleasant	.96		
3. Favorable - Unfavorable	.92		

Model fit:  $\chi^2 = 280.43$ ,  $p = < .001$ ,  $df = 41$ ; GFI = .95, AGFI = .91; NNFI = .96; CFI = .97; SRMR = .028 and RMSEA = .079; All loadings are significant at  $p < .05$ .

## Web Appendix D

### Multilevel Regression Model for Corporate-Brand Effects on the Focal Brand in a Brand Alliance

#### *First-level Model*

Our first-level model suggests that the consumer's evaluation of the focal brand, in this case the perceived quality of the fictional focal brand in a brand alliance ( $PQ_{ijk}$ ), is a function of that consumer's attitude toward the brand ally ( $X_{ijk}$ ) and attitude toward the brand ally's corporation ( $Y_{ijk}$ ). At this level, the consumer's attitude ratings are expressed as deviations from the mean attitude for all consumers who rated the same brand ( $Aba_{ijk} - \overline{Aba}_{jk}$ ) or corporation ( $Aca_{ijk} - \overline{Aca}_k$ ).

Because the expression of terms in deviations rapidly becomes extremely complex, we introduce a few simplification tactics in our notation. While  $X_{ijk}$  and  $Y_{ijk}$  variables correspond to first-level deviation factors, the introduction of bars (as in  $\overline{X}_{jk}$  and  $\overline{Y}_k$ ) suggests deviation factors from higher levels in the model.  $X_{ijk}$  and  $\overline{X}_{jk}$  correspond to product-brand deviations at the first and second level respectively, while  $Y_{ijk}$  and  $\overline{Y}_k$  represent corporate-brand deviations at the first and third-levels respectively. The subscript  $i$  refers to the  $i^{\text{th}}$  individual,  $j$  refers to the  $j^{\text{th}}$  brand and  $k$  refers to the  $k^{\text{th}}$  corporation, and note that each individual  $i$  is nested in brand  $j$  which is nested within corporation  $k$ .

$$PQ_{ijk} = \beta_{0jk} + \beta_{1jk}X_{ijk} + \beta_{2jk}Y_{ijk} + e_{ijk}, \quad (1)$$

where:

$PQ_{ijk}$  = the consumer's perceived quality rating of the focal brand.

$X_{ijk} = (Aba_{ijk} - \overline{Aba}_{jk})$ ; the consumers' attitude toward the brand ally minus the average attitude toward the brand ally within that brand.

$Y_{ijk} = (Aca_{ijk} - \overline{Aca_k})$ ; the consumers' attitude toward the brand ally's corporation minus the average attitude toward the brand ally's corporation within that corporation.

$\beta_{0jk}, \beta_{1jk}, \beta_{2jk}$  = random variable regression parameters to be estimated.

$e_{ijk}$  = first-level random error term.

### *Second-level Model*

We model the second-level equation using the mean level of attitude toward the brand ally deviated from the mean level of attitude toward the brand ally within its corporation. Thus, brand allies are arrayed relative to their corporate portfolio-mates. Based on this we model the first-level random parameter estimates as functions of the relative standing of the brand within its corporation:

$$\beta_{0jk} = \beta_{0k} + \gamma_{0k}\bar{X}_{jk} + u_{0jk}, \quad (2)$$

$$\beta_{1jk} = \beta_{1k} + \gamma_{1k}\bar{X}_{jk} + u_{1jk}, \quad (3)$$

$$\beta_{2jk} = \beta_{2k} + \gamma_{2k}\bar{X}_{jk} + u_{2jk}, \quad (4)$$

where:

$\beta_{0jk}, \beta_{1jk}, \beta_{2jk}$  = first-level random regression parameters.

$\bar{X}_{jk} = (\overline{Aba_{jk}} - \overline{Aba_k})$  = the average attitude toward the brand ally within brand minus the average attitude toward the brand ally within the brand's corporation.

$\beta_{0k}, \gamma_{0k}, \beta_{1k}, \gamma_{1k}, \beta_{2k}, \gamma_{2k}$  = random second-level regression parameters to be estimated.

$u_{0jk}, u_{1jk}, u_{2jk}$  = second-level random error terms.

### *Third-level Model*

We model the third-level equation using the mean level of attitude toward the brand ally's corporation deviated from the mean level of attitude toward the corporation across all corporations. Thus, corporate-brands are arrayed based on consumers' average attitude toward that corporation relative to the consumers' average attitude toward all corporations. The effects of these third-level variables flow to the first-level random parameters estimates through the second-level effects.

$$\beta_{0k} = \beta_0 + \delta_{00}\bar{Y}_k + v_{00k}, \quad (5)$$

$$\gamma_{0k} = \gamma_0 + \delta_{01}\bar{Y}_k + v_{01k}, \quad (6)$$

$$\beta_{1k} = \beta_1 + \delta_{10}\bar{Y}_k + v_{10k}, \quad (7)$$

$$\gamma_{1k} = \gamma_1 + \delta_{11}\bar{Y}_k + v_{11k}, \quad (8)$$

$$\beta_{2k} = \beta_2 + \delta_{20}\bar{Y}_k + v_{20k}, \quad (9)$$

$$\gamma_{2k} = \gamma_2 + \delta_{21}\bar{Y}_k + v_{21k}, \quad (10)$$

where:

$\beta_{0k}, \gamma_{0k}, \beta_{1k}, \gamma_{1k}, \beta_{2k}, \gamma_{2k}$  = random second-level regression parameters.

$\bar{Y}_k = (\overline{Aca}_k - \overline{Aca})$  = the average attitude toward the brand ally's corporation minus the average attitude toward the brand ally's corporation across all corporations.

$\beta_0, \gamma_0, \beta_1, \gamma_1, \beta_2, \gamma_2$  and  $\delta_{00}, \dots, \delta_{21}$  = third-level regression parameters to be estimated.

$v_{00k}, \dots, v_{21k}$  = third-level random error terms.

A cross-level effect occurs when the estimate of the first-level regression coefficient is different at different levels of second or third-level variables. In other words, when the higher level variables explain variance in the intercept or slope estimates of lower level coefficients we refer to it as a cross-level effect. This implies that there will be cross-level interaction terms such as  $(\bar{Y}_k \times \bar{X}_{jk} \times X_{ijk})$  and  $(\bar{Y}_k \times \bar{X}_{jk} \times Y_{ijk})$ . The models set out in the second- and third-level



above are not directly estimable because the respective  $\beta$ 's,  $\gamma$ 's and  $\delta$ 's are not observed (Raudenbush and Bryk 2002). However, by substituting the higher level equations into the lower level equations it is possible to arrive at a single prediction equation. In the case at hand, substitution results in:

$$\begin{aligned}
 PQ_{ijk} = & \beta_0 + \delta_{00}\bar{Y}_k + \gamma_0\bar{X}_{jk} + \delta_{01}\bar{Y}_k\bar{X}_{jk} & (11) \\
 & + \beta_1X_{ijk} + \delta_{10}\bar{Y}_kX_{ijk} + \gamma_1\bar{X}_{jk}X_{ijk} + \delta_{11}\bar{Y}_k\bar{X}_{jk}X_{ijk} \\
 & + \beta_2Y_{ijk} + \delta_{20}\bar{Y}_kY_{ijk} + \gamma_2\bar{X}_{jk}Y_{ijk} + \delta_{21}\bar{Y}_k\bar{X}_{jk}Y_{ijk} \\
 & + u_{0jk} + u_{1jk}X_{ijk} + u_{2jk}Y_{ijk} + v_{00k} + v_{01k}\bar{X}_{jk} \\
 & + v_{10k}X_{ijk} + v_{11k}\bar{X}_{jk}X_{ijk} + v_{20k}Y_{ijk} + v_{21k}\bar{X}_{jk}Y_{ijk} + e_{ijk}
 \end{aligned}$$