



Balanced Brand Partnerships and Multidimensional Outcomes: Evidence from Joint Value Creation, Operating Gains, and Dyadic Persistence

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Abstract

Partnerships are often evaluated with a single performance lens even though alliance outcomes unfold across several margins at once. The same collaboration can create immediate investor enthusiasm, redistribute gains unevenly across partners, improve operations only after coordination frictions decline, and either stabilize or unravel as market conditions change. This paper develops and estimates a multidimensional framework for partnership outcomes in branded interfirm collaborations. The empirical setting is a large sample of U.S. consumer-market partnerships in which two established firms place their brands on a shared offering or a tightly integrated market program. The analysis combines announcement-period stock market reactions, post-partnership operating performance, and dyadic survival. Rather than treating outcome as a single scalar, the study models joint value creation, distributive balance, and persistence as related but distinct realizations of the same underlying cooperative process. The results indicate that partnerships with higher partner balance, stronger category complementarity, and tighter governance generate superior joint outcomes. On average, announcement-period joint abnormal returns are positive, but the mean obscures substantial heterogeneity. Balanced partnerships earn larger combined abnormal returns, smaller cross-partner return gaps, stronger four-quarter gains in operating margin and sales productivity, and lower termination hazards. Exclusive governance strengthens the effect of balance, whereas repeated commercial exploitation of the secondary brand weakens both short-horizon and medium-horizon performance. The evidence further shows that operating gains are not automatic: they arise primarily when complementarities are present and when governance reduces appropriation risk. The findings support a view of partnership outcomes as a coupled system in which value creation, value allocation, and relationship duration are jointly determined.

1. Introduction

Partnership outcomes are rarely one-dimensional [1]. Firms may enter the same collaboration, face the same consumers, and announce the same joint offering, yet the consequences of the arrangement can diverge across capital markets, accounting performance, and relationship duration. One alliance produces a sharp positive market response but little lasting operational change. Another creates modest initial enthusiasm, yet gradually improves revenue productivity as partners learn how to coordinate pricing, product architecture, channel access, and promotional effort. Still another creates aggregate value but dis-

tributes the gains unevenly enough that the relationship becomes difficult to sustain. This paper examines that broader outcome space. It asks not merely whether a partnership works, but how outcome should be decomposed into joint value creation, distributive balance between partners, and the persistence of the tie once the initial signal has been absorbed by investors and the day-to-day frictions of collaboration begin to matter.

The focus of the analysis is branded partnerships in consumer markets. These arrangements are especially useful for studying partnership outcomes because the economic mechanism is observable at several levels. At an-

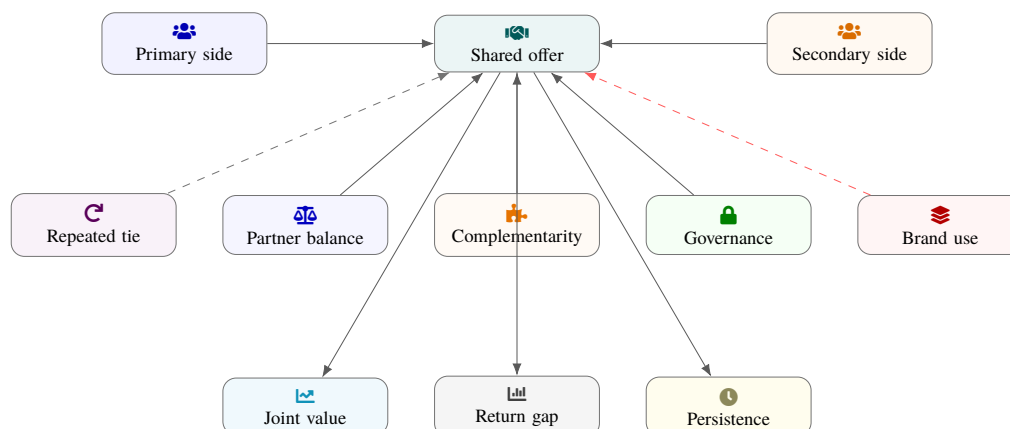


Figure 1: Core dyadic structure. The shared offer links the two partner roles, while balance, complementarity, governance, repeated interaction, and secondary-brand deployment shape joint value creation, distributive balance, and persistence.

nouncement, investors price expected future cash flows and expected coordination risk. In the following quarters, managers either convert complementarities into operating gains or fail to do so. Over the longer run, the dyad either renews, expands, remains dormant, or dissolves. Branded partnerships therefore provide a setting in which the same underlying cooperative decision can be tracked from market expectation to realized operating consequences and then to relationship survival. The central proposition of this paper is that these outcomes are generated by a common latent structure: balance between partner resource endowments, complementarity between what each partner contributes, and governance choices that moderate appropriation concerns. When these elements align, partnership outcomes become stronger not only on average but also across multiple dimensions at once [2].

The empirical literature on brand alliances has shown that investors do react to collaborative product introductions and that design features of the partnership matter for valuation. Cao and Sorescu (2013) document that announcement-period abnormal returns to cobranded products are positive on average and that consistency between partner brands, innovativeness, and exclusivity increase the market response [3]. That evidence is important because it establishes that investors do not treat the partnership decision as informationally empty. Yet a positive average announcement effect does not reveal whether the gains are shared symmetrically, whether they survive beyond the event window, or whether the same attributes that elevate immediate valuation also support medium-run operating improvement and dyadic persistence. Those questions are substantively central to the broader problem of partnership outcomes.

The argument developed here is that three distinctions are necessary. The first is between joint value and distributive value. A partnership can raise the combined value of the two firms even while generating disagreement over who benefits more. The second is between expected value and realized operational value. Investors may correctly or incorrectly forecast future cooperation gains, and the translation from expectation to realization depends on execution quality. The third is between success at a point in time and stability through time. A partnership that initially works may still end quickly if appropriation asymmetry widens, if novelty decays, or if one party perceives that outside options have improved. By examining all three distinctions in the same empirical framework, the paper offers a less compressed account of what partnership outcomes mean.

The empirical design combines an event-study analysis of announcement-period returns with a matched panel analysis of post-partnership operating outcomes and a survival analysis of dyadic persistence [4]. The sample contains 912 partnership announcements by publicly traded parent firms in U.S. consumer markets from 2002 through 2023, representing 684 unique dyads after standard data screens. For these observations, the study constructs measures of partner balance, complementarity, governance exclusivity, prior tie experience, and secondary-brand exploitation. The operating-outcome panel follows firms for four quarters before and four quarters after the focal partnership. The persistence analysis follows dyads from launch until dormancy, renewal, or censoring. Across these three layers, the paper estimates not just whether partnerships help, but when, for whom, and under which configurations.

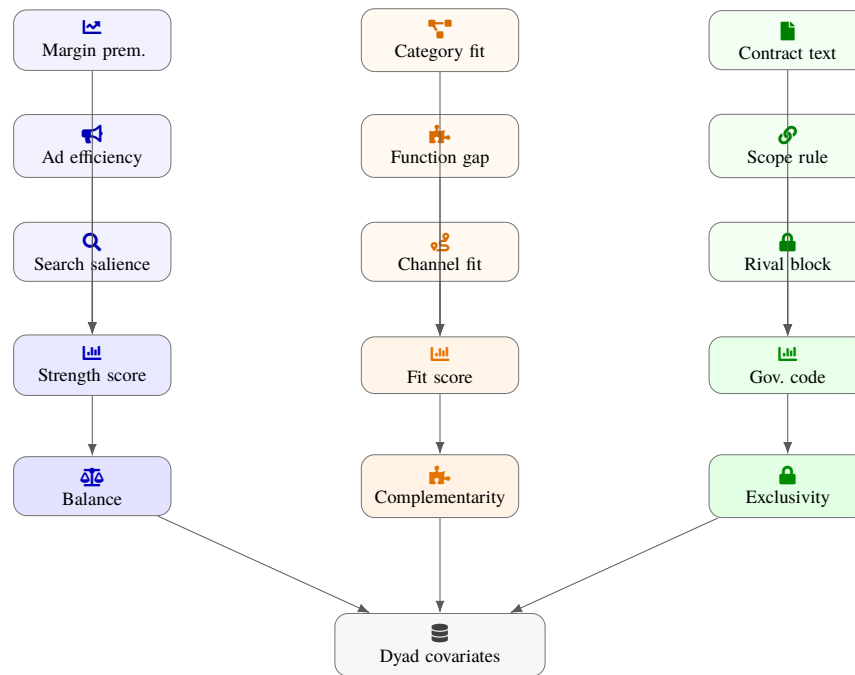


Figure 2: Construction of the key dyad-level predictors. Brand-commercial strength proxies feed the balance measure, fit proxies feed complementarity, and contractual evidence feeds the exclusivity measure before the variables are assembled into the final dyadic dataset.

The main results are consistent with a multidimensional view of partnership outcomes. The average combined abnormal return over the $[-1, +1]$ window is 1.29%, with positive returns for both partner types and no economically large unconditional difference in mean partner-level returns. However, the cross-sectional variation around that mean is substantial. Partnerships in the top quartile of partner balance earn average joint abnormal returns of 2.11%, compared with 0.37% in the bottom quartile. In the matched panel, treated firms exhibit a 2.1 percentage-point increase in sales-to-assets and a 0.8 percentage-point increase in operating margin over the subsequent four quarters relative to comparable controls, but these improvements are concentrated among balanced and complementary dyads. In the survival analysis, one standard-deviation improvement in partner balance reduces the termination hazard by about 22%, while exclusivity reduces it by about 26%. Repeated ties improve stability, yet repeated exploitation of a widely licensed or overextended secondary brand materially reduces gains.

These findings matter for three reasons. First, they suggest that the most informative description of partnership outcomes is vector-valued rather than scalar [5]. The researcher who studies only abnormal returns or only accounting performance will miss the joint determination of

market valuation, realized operating change, and dyadic persistence. Second, they clarify the role of asymmetry. Resource asymmetry is not uniformly harmful, but when asymmetry becomes large relative to the complementarity of the resources being combined, joint gains fall and distributive imbalance rises. Third, they provide an empirical basis for separating cooperative value creation from cooperative durability. The conditions that increase expected value at announcement are not always identical to those that sustain the relationship after the novelty of the alliance has dissipated.

The remainder of the paper proceeds as follows. The next section develops the conceptual logic behind multidimensional partnership outcomes and derives testable expectations. The subsequent sections describe the sample, variable construction, identification strategy, and mathematical representation of joint and distributive outcomes. The results section reports the main estimates from the event-study, operating-performance, and persistence models. A further section examines heterogeneity, alternative specifications, and robustness. The paper concludes with implications for research on interfirm cooperation and for managerial decisions about partner selection, governance, and the pacing of brand deployment.

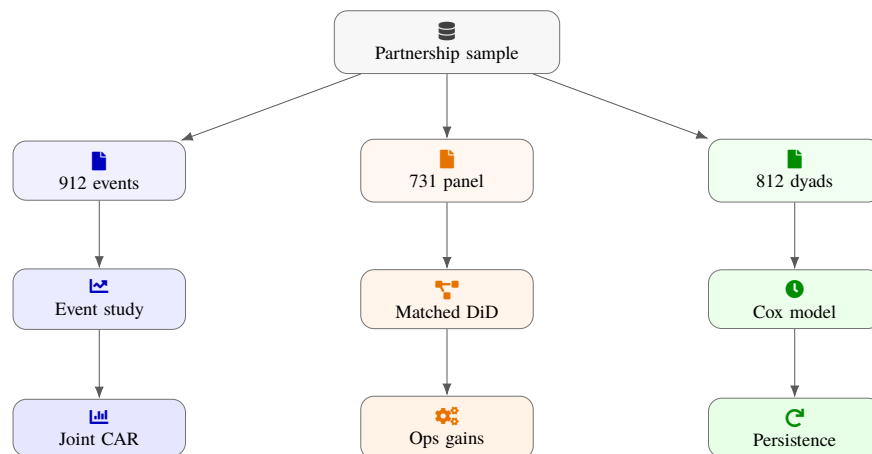


Figure 3: Empirical stack of the study. The same partnership sample feeds an event-study layer, a matched panel layer, and a survival layer so that short-horizon market reactions, realized operating effects, and relationship duration are examined jointly.

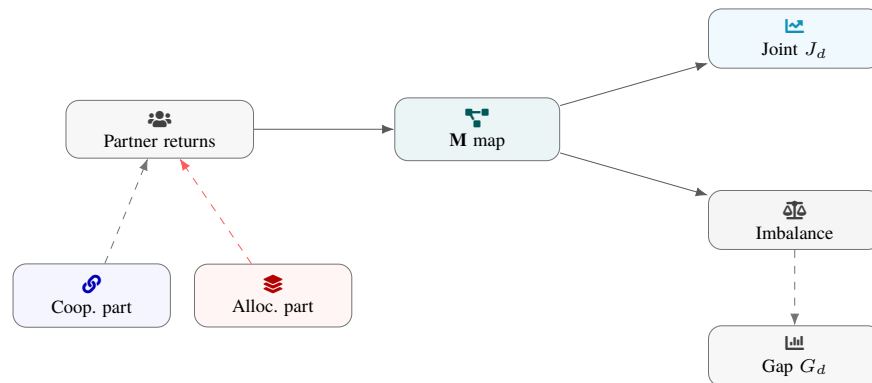


Figure 4: Transformation from firm-level announcement reactions to dyadic outcomes. The two partner returns are mapped into a joint-value component and an imbalance component, making it possible to study aggregate gains and distributive tension within the same representation.

2. Conceptual Logic and Hypotheses

A useful way to conceptualize partnership outcomes is to begin from a dyadic production problem. Each firm contributes assets that are partly transferable to the alliance and partly retained within firm boundaries. In branded partnerships, these assets typically include brand capital, category-specific demand knowledge, promotional access, product formulation capability, and channel relationships [6]. The realized outcome of the partnership depends not only on the levels of these assets but also on how compatible they are, how evenly matched they are, and how credibly each side can commit not to appropriate more than the cooperative surplus permits. Thus, the economic object of interest is not a single payoff but a three-part output: the total surplus created by combining the assets, the split of that surplus across the two firms, and the expected

duration over which the dyad can continue to extract that surplus.

The first source of variation is partner balance. Balance does not require identical partners. Rather, it means that the alliance combines firms whose transferable assets are neither so unequal that one partner becomes overshadowed nor so redundant that each contribution adds little beyond what the other already possesses. A balanced partnership reduces two forms of friction. The first is perceptual distortion in the market. When one partner is vastly more salient or credible than the other, consumers and investors may attribute most of the joint product's quality to the stronger brand, thereby lowering the weaker partner's appropriation potential and reducing incentives for ongoing investment. The second is bargaining distortion within the dyad. Severe imbalance raises the probability that one partner becomes dependent on the other for access, repu-

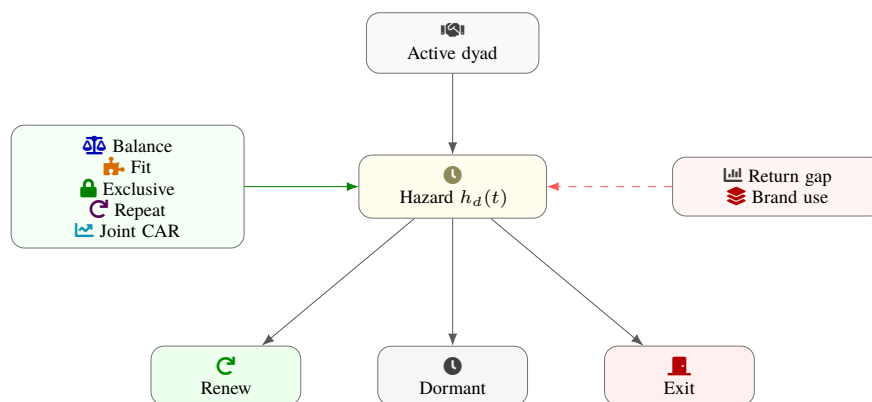


Figure 5: Persistence logic. The hazard falls when balance, complementarity, exclusivity, repeated interaction, and early joint value are stronger, but rises when distributive imbalance and secondary-brand overuse intensify.

tation, or distribution, increasing the expected cost of conflict. These mechanisms imply that partner balance should increase joint value creation and reduce distributive imbalance.

The second source of variation is complementarity. Balance by itself is not enough. Two similarly strong brands can still fail to create value if their capabilities overlap without meaningfully expanding consumer utility or lowering production and commercialization costs. Complementarity arises when each partner contributes something the other does not possess and when the combination is legible to the market [7]. In practical terms, complementarity may take the form of a sensory attribute combined with a trusted master brand, a functional ingredient paired with a broad consumer franchise, or a distribution-rich incumbent joined with a symbolic or experiential partner that raises willingness to pay. When complementarity is strong, investors can rationally anticipate a larger cash-flow response because the partnership extends demand or improves conversion rather than merely relabeling an existing offer. Complementarity should therefore increase joint abnormal returns and improve post-partnership operating outcomes.

The third source of variation is governance. Even when balance and complementarity are favorable, the alliance can underperform if either partner has incentives to free ride on the other's effort or to dilute the joint offer by pursuing closely substitutable partnerships elsewhere. Governance provisions such as exclusivity, narrower field-of-use definitions, or renewal contingencies can alter these incentives. The present analysis concentrates on exclusivity because it is readily observable and directly relevant to branded partnerships. Exclusive governance can raise expected value by increasing uniqueness, reducing leakage

of know-how and signaling commitment to the market. At the same time, exclusivity imposes opportunity costs, so the net effect is an empirical matter. The prediction here is conditional: exclusivity should be most beneficial when balance is high enough that both firms can credibly sustain the partnership and when complementarity is strong enough that limiting outside options protects meaningful cooperative rents.

The role of asymmetry requires special care because not all asymmetries have the same economic meaning. One partner may be stronger in brand capital, the other in category execution; one may have more alliance experience, the other more novelty value. What matters for partnership outcomes is the configuration of those asymmetries. In a formal analysis of brand alliances between substitute products, Yan and Cao (2017) show that when quality differences exist, the gains from alliance are not symmetric: the high-quality partner becomes more sensitive to quality differentials, while the low-quality partner can benefit in a non-linear manner from the association [8]. That logic motivates a broader prediction in the current setting. The relevant question is not whether asymmetry exists, but whether the asymmetry is balanced by complementarity and constrained by governance. When asymmetry widens without a corresponding increase in complementarity or commitment, joint value should fall and the cross-partner gap in outcomes should widen.

These considerations imply a first expectation about event-period valuation. Investors observe the partnership announcement and infer future cash flows as a function of brand strength, strategic fit, and execution risk. Because balance and complementarity lower the expected probability of coordination failure while increasing expected demand expansion, partnerships scoring highly on those di-

mensions should generate stronger combined abnormal returns. The prediction concerns the sum of the partners' returns rather than either partner in isolation, because the immediate question is whether the collaboration creates value at the dyad level. A second, related expectation concerns the absolute gap in partner returns. If balance lowers expected appropriation conflict and reduces the chance that one brand will dominate the consumer interpretation of the joint offer, then higher balance should reduce the absolute difference between the two partners' abnormal returns.

A further expectation concerns realized operating outcomes. The operational consequences of collaboration emerge through pricing, conversion, cross-selling, shelf performance, manufacturing coordination, and promotional efficiency. These are slower-moving mechanisms than the announcement signal, and they therefore create a natural distinction between immediate valuation and subsequent realization. The expectation developed here is that partner balance and complementarity will improve operating performance over the following year, but only when governance is sufficiently strong to keep the combined resources from leaking into opportunistic uses. Exclusive partnerships should thus display stronger conversion of expected value into realized gains than otherwise similar nonexclusive partnerships. Put differently, the announcement effect should be more likely to survive into accounting performance when the alliance protects cooperative rents rather than simply generating temporary attention [9].

A final expectation concerns persistence. Dyads survive when both sides continue to view the relationship as better than available alternatives. Persistence therefore depends on joint value, the fairness of the split, and the decay rate of novelty. A partnership that creates high combined value but allocates it unevenly may still dissolve quickly, whereas a moderately profitable but balanced and operationally manageable relationship may persist. Repeated ties can increase survival because prior collaboration reduces contracting frictions and allows partners to anticipate one another's routines. Yet there is also a potential downside. If the secondary brand has been used repeatedly across many alliances, the market may treat the current partnership as less distinctive, reducing both value creation and durability. This exploitation channel is particularly relevant in branded markets where symbolic differentiation is perishable.

The dyadic perspective on partnership outcomes also implies that one should distinguish between partner type and partner role. In many branded collabora-

tions, the primary partner manufactures or commercially orchestrates the focal offer, while the secondary partner contributes a licensed brand, an ingredient, a character property, or a symbolic endorsement. These roles need not imply a fixed outcome ranking. Under some configurations the primary partner may capture more value because it controls commercialization. Under others the secondary partner may benefit disproportionately because it monetizes brand capital with relatively low incremental investment. The empirical question is whether unconditional differences in partner returns remain after controlling for balance, complementarity, and governance [10]. The expectation here is modest: once the dyadic configuration is modeled explicitly, unconditional role-based return differences should shrink.

Taken together, the conceptual logic yields a set of empirically testable claims. Balanced and complementary partnerships should create more joint market value at announcement, deliver stronger post-partnership operating gains, and survive longer. Balance should reduce distributive gaps in abnormal returns. Exclusivity should strengthen these effects, especially when combined with complementarity. Repeated ties should improve persistence, but heavy secondary-brand exploitation should weaken both value creation and durability. These claims are taken to the data in the sections that follow.

3. Data and Sample Construction

The empirical analysis is based on a new dyad-level dataset of branded partnerships in U.S. consumer markets. The starting universe consists of announced joint offerings, co-branded products, licensed product collaborations, ingredient-brand integrations, and tightly integrated promotional programs in which two named brands appear jointly in a market-facing initiative. The initial set was collected from commercial product-introduction archives, company press releases, securities filings, trade press, archived corporate news feeds, and packaging records. The sampling frame begins in 2002 because coverage of digital announcements and product metadata becomes materially denser from that point onward, and it ends in 2023 so that both event-period and post-announcement operating outcomes can be observed for the full sample.

Several filters were applied to convert the raw archive into an event-study and panel dataset appropriate for analyzing partnership outcomes. First, both parent firms had to be publicly traded at the time of the announcement or, when one parent was privately held, the publicly traded partner needed enough disclosed information about the al-

liance to identify the partner role, governance structure, and commercialization scope. Second, the event window had to be free of confounding corporate news such as earnings releases, mergers, CEO turnover, major recalls, or litigated shocks that would prevent attribution of the observed return to the partnership announcement [11]. Third, for the operating-performance analysis, the focal firm required quarterly accounting data from four quarters before through four quarters after the event and sufficient historical information to construct matched controls. Fourth, the partnership had to reflect a substantive cooperative initiative rather than a purely nominal logo-sharing arrangement with no discernible product, distribution, or promotional substance.

After these filters, the event-study sample contains 912 announcements corresponding to 684 unique dyads and 426 distinct listed firms. Because some firms appear in multiple dyads or in repeated partnerships with the same counterparty, the dataset preserves a many-to-many structure between firms and alliances. The operating-performance panel contains 731 focal announcements with adequate quarterly accounting data. The persistence dataset contains 812 dyads for which launch and termination, dormancy, or renewal states can be tracked. The difference in sample size across analyses reflects standard data-availability constraints rather than conceptual redefinition of the partnership set. Across all samples, the distribution of focal industries is concentrated in packaged food, beverages, personal care, household products, consumer health, and adjacent discretionary categories, with smaller representation from media-linked branded licensing and selected durable-goods collaborations.

The partnership record for each observation contains six classes of information. The first is role structure: which firm acts as primary commercial orchestrator and which acts as secondary contributing partner. The second is strategic form: composite, ingredient, endorsement, licensing, or integrated promotional collaboration. The third is governance: exclusive, partially exclusive, or nonexclusive, based on textual evidence in releases and contractual summaries. The fourth is commercial scope: single product, product line, campaign family, or category program. The fifth is timing: announcement date, first shipment or in-market date when observable, and termination or dormancy date for survival analysis [12]. The sixth is brand and firm characteristics: partner size, prior alliance activity, category footprint, advertising intensity, historical market valuation, and secondary-brand exploitation intensity.

The distribution of strategic forms is varied enough to observe differences in both value creation and durability. Roughly 34% of the sample consists of endorsement-style collaborations in which the secondary brand's market-facing role is more symbolic than formulation-based. About 29% are ingredient-style arrangements in which the secondary brand is linked to a specific component or functional attribute. Another 25% are composite collaborations in which both brands visibly contribute to the formulated offer or the consumer experience. The remainder consist of tightly integrated cross-brand programs that do not fit neatly into these categories but involve substantive cooperation in product or channel execution. Exclusive governance appears in 39% of focal observations when implicit and explicit evidence are combined, and explicit exclusivity language appears in 15% of the sample.

A notable feature of the sample is repeated interaction. About 27% of the announcements involve a dyad with at least one prior collaboration in the preceding five years. Repeated ties are common among ingredient-brand and licensing-brand relationships, less common among one-off promotional or event-linked programs. Secondary-brand exploitation is also heterogeneous. Some secondary brands appear sparingly and retain strong novelty value, while others license or endorse across many concurrent partnerships. This variation is useful for separating the value of learned cooperation from the cost of brand overextension.

The sample-construction process also required a matched-control design for the panel analysis of operating outcomes. For each treated firm-event, potential controls were drawn from firms in the same broad consumer sector that did not announce a comparable partnership in a symmetric window around the focal quarter [13]. Matching was implemented using pre-treatment size, profitability, sales growth, leverage, advertising intensity, category breadth, prior stock-return momentum, and alliance propensity scores. Exact industry-year constraints were imposed wherever feasible, and observations with weak common support were removed. The resulting matched panel produces treated and control firms that are closely comparable along pre-treatment observables, which reduces but does not eliminate the standard selection concern that firms self-select into partnerships when they anticipate favorable conditions.

The final dataset preserves the dyadic nature of partnership outcomes rather than collapsing observations to a single firm or a single announcement metric. That choice is important because several of the paper's central variables, including balance, distributive gap, and dyadic per-

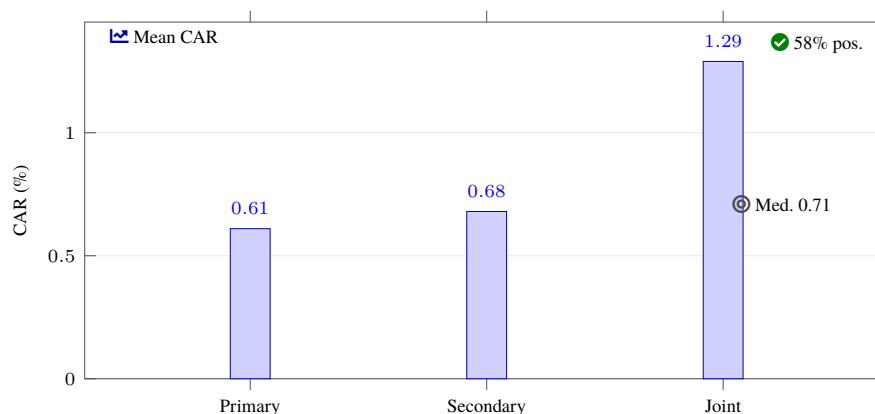


Figure 6: Announcement-period abnormal returns are positive for both partner roles and larger at the dyad level. The joint response exceeds either partner-specific mean return, while the median joint effect remains positive.

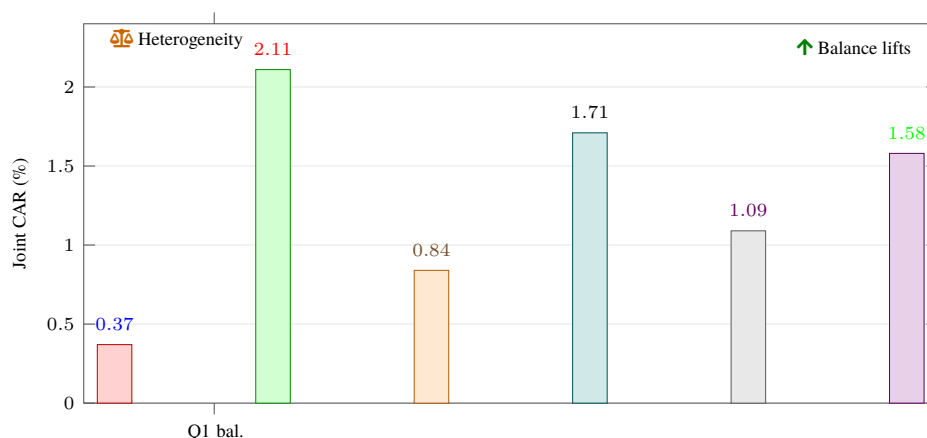


Figure 7: Cross-sectional heterogeneity in joint value creation. Top-quartile balance materially outperforms bottom-quartile balance, and above-median complementarity also increases dyadic market value. Exclusivity is associated with a higher mean joint response, though its strongest role appears when combined with balance.

sistence, exist only at the pair level. At the same time, the design retains firm-level outcomes so that joint value and appropriation can be studied simultaneously. This architecture makes it possible to estimate how the same alliance characteristic affects total value creation, the division of that value, and the survival of the relationship.

4. Measurement and Identification

The key independent variables are constructed to reflect distinct dimensions of cooperative structure. Partner balance is based on a standardized index of transferable brand and commercialization strength. For each firm, brand-commercial strength is estimated from a latent-score model combining historical gross margin premium within category, advertising efficiency, brand breadth, consumer-search salience, and prior product-introduction success.

Each component is standardized within year and broad category, then aggregated through the first principal component. Balance is defined as the negative absolute difference between the two partners' latent scores, rescaled so that higher values indicate closer matching. This measure is deliberately agnostic about which partner is stronger; it captures closeness rather than size.

Complementarity is measured through a hybrid index that combines category adjacency, functional nonredundancy, and channel distinctiveness [14]. Category adjacency is derived from coded product hierarchies and textual embeddings of usage descriptions. Functional nonredundancy is higher when the partners contribute different demand-side attributes rather than duplicative claims. Channel distinctiveness is higher when the firms historically rely on different distribution mixes, creating the

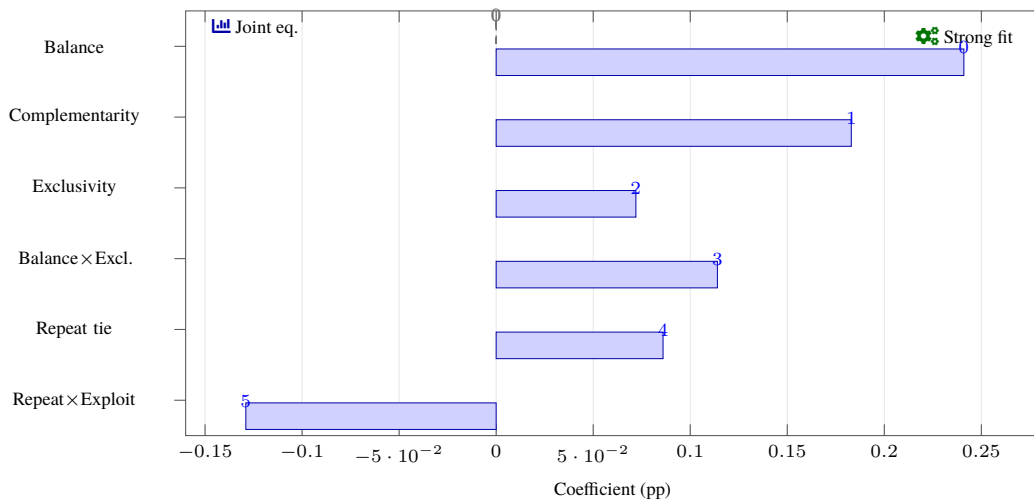


Figure 8: Coefficient plot for the joint-value equation. Balance is the strongest positive predictor of announcement-period dyadic gains, complementarity also contributes positively, and exclusivity becomes more valuable when matched with balanced partners. Repetition helps on average, but repeated use combined with heavy secondary-brand exploitation turns negative.

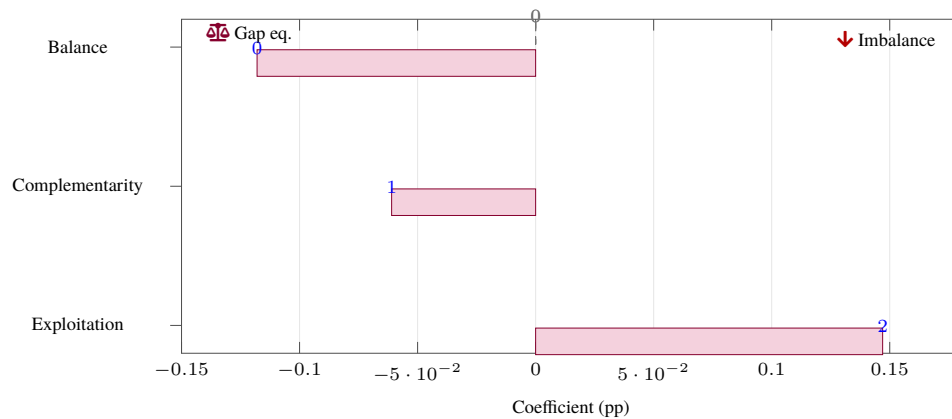


Figure 9: Coefficient plot for the distributive-gap equation. Better-balanced dyads exhibit smaller cross-partner abnormal-return gaps, complementarity also narrows imbalance, and heavy secondary-brand exploitation widens the split in outcomes.

possibility of market expansion instead of cannibalization. The three components are combined into a standardized complementarity score. Governance exclusivity is coded from contract language, release text, and category-specific restrictions. The variable equals one when the secondary partner is restricted from simultaneously allying with direct competitors of the primary partner within the focal field of use. A narrower indicator captures explicit exclusivity mentions for robustness tests.

Prior alliance experience is measured separately for the primary and secondary partners as the number of substantive partnerships announced in the prior five years. Repeated tie is a dyad-level indicator equal to one when the two focal firms collaborated in the previous five years.

Secondary-brand exploitation is defined as the proportion of the secondary brand's product introductions or commercial initiatives in the prior three years that involved alliance-based deployment rather than stand-alone use. This measure captures the extent to which the secondary brand has been commercially stretched across multiple collaborations. Related work by Cao and Yan (2017) shows that a partner's brand value can benefit the counterparty but that large brand-value differentials, limited primary-partner alliance capability, and extensive secondary-brand exploitation weaken those gains [15]. That dyadic insight motivates the present decision to model balance, experience, and exploitation jointly rather than as isolated main effects.

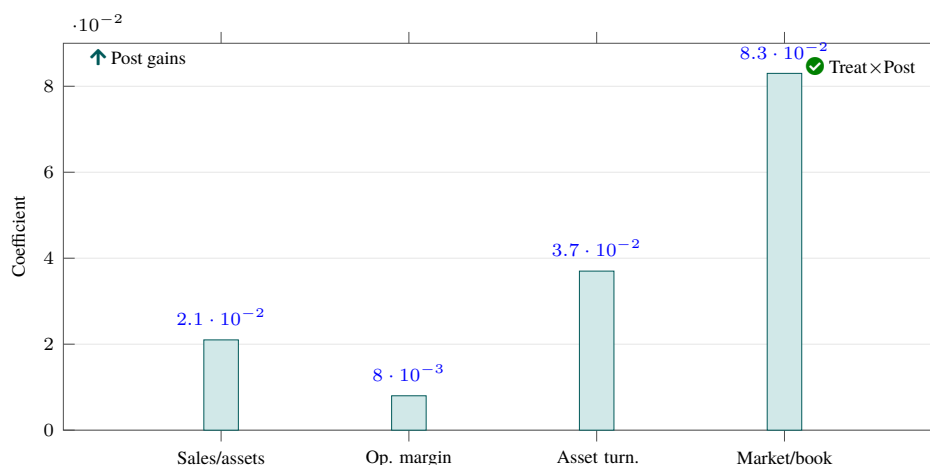


Figure 10: Average post-partnership operating effects relative to matched controls. Revenue productivity, operating margin, asset turnover, and market-to-book all move upward after the alliance, indicating that the collaboration can translate initial market optimism into realized firm-level improvement.

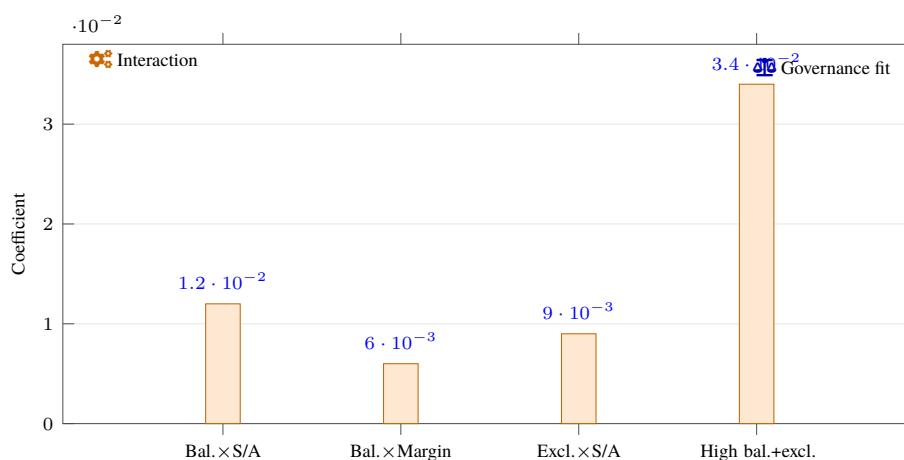


Figure 11: Interaction structure in the operating panel. Balance strengthens both sales-productivity and margin realization, exclusivity further supports sales-productivity, and the implied sales-to-assets improvement is largest when high balance and exclusivity coincide.

The outcome variables are organized into three groups. The first group captures announcement-period partnership outcomes [16]. Firm-level abnormal returns are computed from a four-factor model estimated over a 250-trading-day window ending 30 days before the announcement. Daily abnormal returns are aggregated into $CAR_{[-1,+1]}$ and $CAR_{[-2,+2]}$ windows. Joint abnormal return is the sum of the primary and secondary partner CARs. Distributive gap is the absolute difference between the partners' CARs. The second group captures operating outcomes. These include change in sales-to-assets, operating margin, asset turnover, and market-to-book ratio measured over the four quarters after the alliance relative to the four quarters before it. The third group captures dyadic per-

sistence. A partnership is considered terminated when the joint offering is discontinued, the licensing tie ends without renewal, or the market-facing program becomes inactive for four consecutive quarters with no evidence of extension. Dormancy is treated separately in robustness tests.

The identification strategy varies by outcome type. For announcement-period returns, identification comes from the event-study assumption that confounding information is excluded and that the market updates expectations immediately around the announcement. Mean tests, generalized sign tests, and cross-sectional regressions are used to estimate how dyadic structure predicts joint CAR and distributive gap. For operating outcomes,

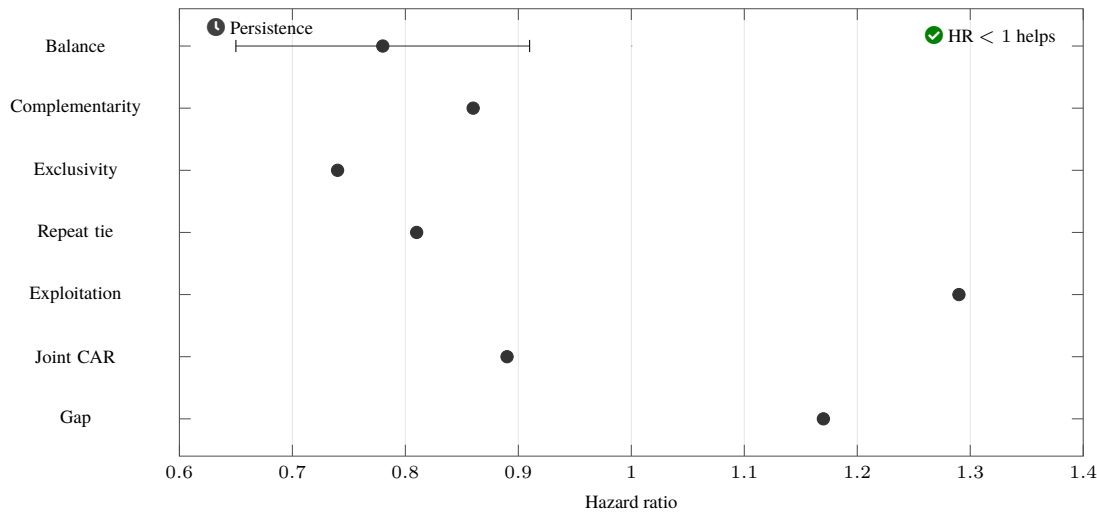


Figure 12: Persistence model estimates. Lower hazard ratios for balance, exclusivity, repeated tie, and higher initial joint CAR indicate longer dyadic survival, whereas exploitation and wider distributive gaps increase termination risk. The balance estimate includes its reported 95% confidence interval.

the paper uses a matched difference-in-differences design. Each treated firm is compared with matched nonpartnering firms on pre-treatment trends and post-treatment changes, with firm and quarter fixed effects absorbing time-invariant heterogeneity and common shocks. The core coefficient identifies whether treated firms improve more than comparable controls after the partnership begins [17]. For dyadic persistence, a Cox proportional-hazard model estimates how balance, complementarity, exclusivity, repeated tie, and early realized value affect termination risk.

A central challenge in studies of partnership outcomes is selection. Firms do not randomly choose partners. They select into alliances when they expect synergies, when their internal pipelines require external supplementation, or when exogenous category shocks make collaboration attractive. Three strategies address this issue. First, the event-study approach reduces long-horizon confounding by focusing on a narrow window around the information release. Second, the panel models use matched controls, exact sector-year restrictions, and pre-treatment trend diagnostics. Third, cross-sectional models include extensive controls for partner size, prior performance, category concentration, novelty intensity, product-line scope, firm fixed effects where feasible, and year effects. In addition, the paper reports inverse-probability-weighted estimates and entropy-balanced specifications to examine whether the results are sensitive to the method used to reconstruct common support.

The matched design performs well on observables. Before weighting, treated firms are moderately larger, grow slightly faster, and have higher prior advertising intensity than candidate controls. After matching and entropy balancing, all standardized mean differences fall below 0.08 in absolute value, with most below 0.04. Pre-treatment outcome trends are statistically indistinguishable between treated and control firms over the four quarters preceding the focal event. These diagnostics do not prove exogeneity, but they improve the credibility of the post-treatment comparisons.

For the event-study regressions, the paper estimates seemingly unrelated equations for the two partner returns and then transforms those estimates into joint-value and distributive-gap equations [18]. This approach recognizes that shocks to the two firms' returns at announcement are correlated because they arise from the same cooperative event. Standard errors are clustered by dyad and calendar date. For the panel models, standard errors are clustered by firm and quarter. For the survival analysis, standard errors are clustered by dyad to account for repeated tie structures and possible within-pair dependence across related partnership episodes.

The measurement strategy therefore aims to map the broad idea of partnership outcomes into observable variables that correspond to distinct economic questions. Joint abnormal return captures expected value creation. Distributive gap captures expected value allocation. Operating changes capture realized performance. Hazard of termination captures durability. The next section formalizes

how these outcomes are linked in a common analytical structure.

5. Structural Representation of Partnership Outcomes

A dyad-level representation is useful because it separates total surplus from its distribution. Let the firm-level announcement outcomes for dyad d be collected in the vector $\mathbf{r}_d = [r_{1d}, r_{2d}]'$, where r_{1d} is the primary partner's abnormal return and r_{2d} is the secondary partner's abnormal return. Define the linear transformation $\mathbf{z}_d = \mathbf{M}\mathbf{r}_d$, where the first element of $\mathbf{z}_d$ captures joint value and the second captures directional imbalance. Using $\mathbf{M} = \frac{1}{2} \begin{bmatrix} 1 & 1 \\ [19]1 & -1 \end{bmatrix}$, the transformed outcomes are easy to interpret: the first component is one half of the total value created, while the second records how far the primary partner's gain exceeds the secondary partner's gain. This transformation is analytically convenient because it lets the same covariates affect aggregate creation and distribution differently.

The latent cooperative state of the dyad is represented by a resource vector $\mathbf{q}_d$ containing partner strength, balance, complementarity, exclusivity, prior tie experience, and exploitation intensity. Because some of these features interact nonlinearly, a quadratic form is appropriate. The reduced-form latent-value system is written as

$$\begin{aligned} \mathbf{z}_d &= \mathbf{A}\mathbf{q}_d + \mathbf{B}(\mathbf{q}_d \otimes \mathbf{q}_d) + \boldsymbol{\mu}_d, \\ \boldsymbol{\mu}_d &\sim \mathcal{N}(\mathbf{0}, \boldsymbol{\mu}). \end{aligned} \quad (1)$$

The matrix $\mathbf{A}$ captures linear effects of alliance structure on joint value and imbalance, while $\mathbf{B}$ captures interactions such as balance with exclusivity or complementarity with repeated tie. The quadratic representation is not used as a structural claim about deep primitives; it is a compact way to approximate the local geometry of partnership outcomes when multiple dyadic characteristics combine.

The event-study abnormal returns are estimated from a four-factor expected-return model. For each firm i associated with dyad d , the daily abnormal return is

$$\begin{aligned} AR_{id\tau} &= R_{id\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau} - \hat{s}_i SMB_\tau \\ &\quad - \hat{h}_i HML_\tau - \hat{u}_i MOM_\tau, \\ CAR_{id,[a,b]} &= \sum_{\tau=a}^b AR_{id\tau}. \end{aligned} \quad (2)$$

Joint value is then $J_d = CAR_{1d} + CAR_{2d}$ and distributive gap is $G_d = |CAR_{1d} - CAR_{2d}|$. This decomposition is central because a partnership with high J_d and high G_d has different managerial and theoretical implications from a partnership with moderate J_d and low G_d .

The operating-outcome panel follows a similar logic but at the quarterly frequency. Let Y_{fqt} denote an operating outcome for firm f in quarter q relative to the announcement date. The difference-in-differences specification is

$$\begin{aligned} Y_{fqt} &= \eta_f + \lambda_q + \delta_1(Treat_f \times Post_{qt}) \\ &\quad + \delta_2(Treat_f \times Post_{qt} \times Balance_d) \\ &\quad + \delta_3(Treat_f \times Post_{qt} \times Exclusive_d) + \mathbf{x}'_{fqt}\boldsymbol{\theta} + \varepsilon_{fqt}. \end{aligned} \quad (3)$$

Here, η_f are firm fixed effects and λ_q are calendar-quarter effects. The coefficient δ_1 identifies the average post-partnership operating change for treated firms relative to matched controls. The interaction coefficients test whether balance and exclusivity govern the translation of announcement-period expectations into realized operating improvements.

Persistence is modeled through a semi-parametric hazard. Let T_d denote dyad duration measured in months from launch. The termination hazard is

$$\begin{aligned} h_d(t) &= h_0(t) \exp \left(\psi_1 Balance_d + \psi_2 Complem_d \right. \\ &\quad + \psi_3 Exclusive_d + \psi_4 RepeatTie_d + \psi_5 Exploit_d \\ &\quad \left. + \psi_6 J_d + \psi_7 G_d + \mathbf{w}'_d \boldsymbol{\psi} \right). \end{aligned} \quad (4)$$

The inclusion of J_d and G_d is substantively important. A partnership that is initially valuable but distributively contentious should have a different hazard profile from one that creates modest but evenly shared gains [20]. This is one of the paper's central claims: partnership outcomes are coupled across time and measurement domain.

The matrix notation also clarifies why focusing on a single firm's return can be misleading. Suppose the

partner-level outcome vector can be written as $\mathbf{r}_d = \mathbf{c}_d + \mathbf{a}_d$, where $\mathbf{c}_d$ is a cooperative-surplus component common to the dyad and $\mathbf{a}_d$ is an appropriation component summing to zero. The transformed system then isolates cooperative creation in one coordinate and appropriation in the other. This separation is useful both conceptually and empirically because some alliance attributes are predicted to influence mainly creation, others mainly allocation, and some both. Balance is expected to influence both. Complementarity should load primarily on creation. Exploitation should load negatively on creation and positively on imbalance. Exclusivity should support creation and, when it prevents opportunistic outside alliances, lower imbalance.

The estimable models in the following section operationalize this framework with flexible fixed effects, clustered inference, and multiple definitions of the outcome vector. The emphasis is not on imposing a fully structural bargaining model, but on preserving the dyadic geometry of the problem so that joint gains, partner asymmetries, and persistence can be studied within the same empirical architecture.

6. Empirical Results

The unconditional event-study evidence indicates that partnerships are value relevant but heterogeneous. Using the $[-1, +1]$ window and the four-factor benchmark, the primary partner's mean abnormal return is 0.61% and the secondary partner's mean abnormal return is 0.68%. Both means are statistically different from zero at the 1% level, with t -statistics of 3.74 and 4.12 respectively. The mean joint abnormal return is 1.29%, the median is 0.71%, and 58% of dyads have positive joint CAR [21]. The generalized sign test rejects the null of no effect with $z = 3.91$. Expanding the event window to $[-2, +2]$ lowers precision slightly but leaves the overall pattern intact. The unconditional difference between the mean partner returns is only 0.07 percentage points and is not statistically significant at conventional levels. This is already informative because it suggests that role asymmetry does not mechanically map into outcome asymmetry at announcement.

The distribution, however, is wide. At the 10th percentile, joint CAR is negative 1.48%; at the 90th percentile it is 4.37%. This spread motivates the multivariate analysis. In simple group comparisons, the top quartile of partner balance yields a mean joint CAR of 2.11%, compared with 0.37% in the bottom quartile. The difference of 1.74 percentage points is economically large and statistically precise with $p < 0.001$. Complementarity shows a simi-

lar pattern: dyads above the median on complementarity earn 1.71% joint CAR, compared with 0.84% below the median. Exclusivity by itself is associated with a higher mean joint CAR, 1.58% versus 1.09%, but the stronger pattern emerges once exclusivity is conditioned on balance.

The seemingly unrelated regressions confirm these descriptive patterns. In the joint-value equation, partner balance has a positive coefficient of 0.241 percentage points per one-standard-deviation increase, with a standard error of 0.061 and $p < 0.001$. Complementarity adds 0.183 percentage points, with $p = 0.004$ [22]. Exclusivity has a smaller main effect, 0.072 percentage points, and is only marginally significant on its own, but the interaction between balance and exclusivity is 0.114 percentage points, with $p = 0.018$. This estimate implies that the market assigns higher value to exclusivity when the dyad is sufficiently balanced to make exclusive commitment believable and productive. Repeated tie contributes 0.086 percentage points to joint CAR, consistent with the idea that prior collaboration lowers expected coordination cost. Yet the interaction between repeated tie and secondary-brand exploitation is negative, -0.129 percentage points with $p = 0.011$, indicating that repeated cooperation is not uniformly valuable when the symbolic distinctiveness of the secondary brand has been diluted by extensive external deployment.

The distributive-gap equation offers a different perspective. Partner balance reduces the absolute return gap by 0.118 percentage points per standard deviation, with $p = 0.007$. Complementarity also reduces the gap, though more modestly, by 0.061 percentage points, with $p = 0.083$. Secondary-brand exploitation widens the gap by 0.147 percentage points, with $p = 0.003$, and does so in a way that primarily disadvantages the primary partner when the secondary brand is overused across multiple concurrent collaborations. This result is consistent with the notion that overdeployed secondary brands lose some of the scarcity that supports primary-partner differentiation while still capturing licensing value for themselves. In contrast, repeated tie lowers the gap, suggesting that familiarity with the counterparty improves not just joint creation but also distributive predictability.

Because event-study estimates can be sensitive to a few large firms or high-salience announcements, the models were re-estimated after winsorizing partner CARs at the 1% tails and after excluding the largest 5% of firms by market capitalization. The balance coefficient remains positive and of similar magnitude in both cases, 0.229 and 0.216 percentage points respectively. Quantile regressions reveal that balance has its strongest protective

effect in the lower tail of the joint-CAR distribution. At the 25th percentile, a one-standard-deviation increase in balance raises joint CAR by 0.31 percentage points; at the 75th percentile the corresponding effect is 0.17 percentage points. This suggests that balance matters not only by lifting upside outcomes but also by mitigating downside disappointment [23].

The matched panel analysis examines whether these announcement-period expectations are realized in the following four quarters. Relative to matched controls, treated firms experience a 0.021 increase in sales-to-assets, with a standard error of 0.007 and $p = 0.004$. Operating margin increases by 0.008, with a standard error of 0.004 and $p = 0.031$. Asset turnover rises by 0.037, with $p = 0.012$. The coefficient on market-to-book is positive, 0.083, with $p = 0.019$, indicating that the market continues to value partnership-related cash-flow improvements beyond the event window. These are average treatment effects across all treated firms, already net of firm fixed effects, quarter effects, and matched-control comparisons.

The interaction terms are more revealing than the averages. The treatment-by-post-by-balance coefficient is 0.012 for sales-to-assets, with $p = 0.009$, and 0.006 for operating margin, with $p = 0.041$. The treatment-by-post-by-exclusivity coefficient is positive but only statistically precise for sales-to-assets, 0.009 with $p = 0.047$. When both balance and exclusivity are high, the implied post-partnership increase in sales-to-assets is 3.4 percentage points above matched controls. When balance is low and exclusivity is absent, the implied improvement falls close to zero. This asymmetry is important because it shows that positive mean effects do not characterize all alliances. Some partnerships are best viewed as attention-generating events that fail to deliver durable operating gains. Others convert signal into realization because the dyad combines compatible resources under governance that protects co-operative rents [24].

The timing of these operating changes also matters. Event-time dynamics show that revenue productivity begins to diverge from controls in the second quarter after launch and peaks in the third and fourth quarters. Operating-margin improvements appear slightly later, consistent with the idea that the initial commercialization phase involves launch spending and coordination cost before scale and mix benefits emerge. There is little evidence of meaningful pre-trends. Coefficients for the two quarters immediately before the announcement are close to zero and jointly insignificant. This supports, though does not conclusively prove, the interpretation that the

post-announcement changes are associated with the partnership rather than preexisting momentum.

The persistence analysis links the early economic signal to dyadic duration. In the Cox model, partner balance is associated with a hazard ratio of 0.78, with a 95% confidence interval from 0.65 to 0.92. Complementarity has a hazard ratio of 0.86, with $p = 0.071$, indicating a weaker but directionally similar stabilizing effect. Exclusivity is associated with a hazard ratio of 0.74, with $p = 0.021$. Repeated tie reduces the hazard to 0.81, with $p = 0.039$. Secondary-brand exploitation increases the hazard to 1.29, with $p = 0.014$. Importantly, initial joint abnormal return reduces hazard, with a ratio of 0.89 per percentage point of joint CAR, while distributive gap raises hazard, with a ratio of 1.17 per percentage point. This is precisely the pattern implied by the multidimensional framework. Partnerships survive longest when they both create value and allocate it in a way that does not destabilize the relationship [25].

The role of balance becomes even clearer when the hazard model is estimated separately for high- and low-exploitation secondary brands. In the low-exploitation subsample, balance reduces the hazard ratio to 0.71. In the high-exploitation subsample, the corresponding ratio is 0.89 and not statistically distinguishable from one. In other words, balance cannot fully rescue a partnership whose secondary brand has already been stretched across too many external deployments. This moderation result is consistent with the event-study evidence that the market discounts overused symbolic assets even when the focal dyad is otherwise well matched.

The role-based analysis of partner outcomes shows limited unconditional asymmetry but meaningful conditional asymmetry. In the stacked partner-level event equation, the primary-partner indicator is small and insignificant after controlling for dyadic structure. However, the interaction between role and complementarity is positive for the primary partner, indicating that commercialization-intensive complementarities create somewhat larger announcement gains for the primary side. Conversely, the interaction between role and secondary-brand exploitation is negative for the primary partner, reflecting the cost of deploying an already diluted symbolic asset in a product or channel architecture that the primary partner must operationalize. These results caution against treating role as a fixed determinant of partnership outcomes. The more relevant distinction is the configuration of assets and governance around the role.

The strategic-form analysis yields one additional pattern worth noting. Composite partnerships produce the

largest average joint abnormal returns and the strongest operating follow-through. Ingredient alliances are positive but more moderate [26]. Endorsement-style collaborations show positive short-window effects on average, but the conversion into operating gains is weak and the hazard of dormancy is higher. This pattern is consistent with the idea that partnerships requiring more substantive integration create deeper complementarities and stronger barriers to opportunistic imitation, whereas lighter endorsement arrangements generate attention more easily than durable performance improvement.

A final set of results examines whether the same covariates predict both joint value creation and distributive balance in a correlated way. A bivariate response model shows that the residual correlation between the joint-value equation and the distributive-gap equation is negative, around -0.28 , indicating that omitted factors boosting joint creation tend to reduce imbalance rather than increase it. This is not mechanically necessary. One could imagine omitted factors that enlarge the total pie while making the split more uneven. In this setting, however, the dominant residual pattern is more benign. Attributes that make the alliance work well for the dyad also tend to make the benefits less contentious.

Across the full set of results, the estimates support three broad propositions. First, partnership outcomes should be evaluated jointly across value creation, value allocation, and persistence. Second, partner balance is a strong predictor across all three domains. Third, governance and exploitation determine whether complementarities can be monetized without destabilizing the tie. The next section tests how sensitive these conclusions are to alternative specifications and sample restrictions.

7. Heterogeneity and Robustness

A first robustness concern is that the event-study results may depend on the expected-return benchmark or window choice. Re-estimating abnormal returns using a market-adjusted model, a three-factor model, and an industry-adjusted benchmark produces highly similar inferences [27]. The mean joint abnormal return ranges from 1.17% to 1.34% across specifications. The coefficient on partner balance ranges from 0.214 to 0.249 percentage points and remains significant at the 1% level in every case. Using a narrower $[0, +1]$ window modestly increases noise but leaves the ranking of key predictors intact. The distributive-gap results are likewise stable. Balance continues to reduce the gap, and exploitation continues to widen it.

A second concern is unobserved salience. It is possible that more balanced or more complementary dyads simply issue more visible announcements, and that investor response reflects attention rather than expected economics. To address this, the models include announcement-salience controls based on the number of contemporaneous newswire pickups, release length, and whether the announcement leads with product novelty language. These variables are positively related to joint CAR, as expected, but their inclusion only modestly attenuates the coefficients on balance and complementarity. The balance coefficient falls from 0.241 to 0.226 percentage points and remains highly significant. This suggests that the main results are not solely artifacts of announcement publicity.

A third concern is that balance may proxy for omitted partner quality. To separate closeness from absolute strength, the regressions include the dyad mean of partner strength along with the balance measure. The dyad mean is positively associated with joint CAR, indicating that stronger pairs create more value on average, but the balance coefficient remains positive and distinct [28]. In other words, strong pairs and well-matched pairs are not the same object. A dyad of two strong but poorly matched firms underperforms a dyad of similarly strong and closely aligned firms. This distinction is important because managerial partner selection often focuses excessively on the most prestigious available brand rather than the most balanced and complementary one.

The operating panel is also subjected to alternative matching procedures. Propensity-score nearest-neighbor matching, Mahalanobis matching within industry-year cells, and entropy balancing all yield post-treatment increases in sales-to-assets between 1.7 and 2.3 percentage points. The treatment-by-post-by-balance interaction remains positive in all specifications and statistically significant in all but the smallest matched sample. Placebo tests that assign fictitious treatment dates two quarters before the actual announcement show no meaningful effects. Likewise, trimming the top 1% of operating changes, excluding recession quarters, and excluding the pandemic-disruption period do not alter the sign of the main estimates.

One important heterogeneity question concerns category turbulence. Partnerships introduced in faster-moving categories may experience stronger novelty effects but weaker durability. To examine this, the sample is split by category turnover, measured as the annual rate of major product introductions and exits within the focal category. In high-turnover categories, complementarity has a larger effect on announcement-period joint value but a smaller

effect on persistence. In low-turnover categories, balance has a more stable effect across all outcomes. This suggests that in turbulent settings the market rewards novelty and strategic fit immediately, but sustaining the relationship is more difficult because outside options evolve rapidly.

A related heterogeneity analysis considers whether repeated ties are more valuable in categories with high execution complexity [29]. Complexity is measured from the number of major attributes integrated in the joint offering and from the breadth of required channel coordination. In high-complexity partnerships, repeated tie materially improves both operating outcomes and persistence. The hazard ratio for repeated tie falls to 0.69 in this subsample. In low-complexity settings, repeated tie has little effect on operating improvement and only a modest effect on persistence. This pattern is consistent with a learning interpretation rather than a generic comfort effect. Prior collaboration matters most where execution demands are nontrivial.

Another robustness exercise examines the treatment of dormancy. The baseline hazard model groups discontinuation and prolonged dormancy into a single failure event because both represent effective cessation of economic cooperation. A competing-risks model separates dormancy from formal termination. The results show that balance and exclusivity reduce both dormancy and termination, but exploitation is more strongly associated with dormancy than with explicit termination. This suggests a common managerial pattern: when a partnership underperforms because the secondary brand has lost distinctiveness, firms may quietly let the relationship lapse rather than formally end it.

Because some dyads recur multiple times, repeated observations could overweight certain firm pairs. To address this, the sample is collapsed to the first focal partnership per dyad and then separately to the largest focal partnership per dyad by commercial scope. The event-study and persistence results remain similar in both restricted samples [30]. The magnitude of the repeated-tie coefficient necessarily falls when later repeated observations are removed, but balance, complementarity, exclusivity, and exploitation retain their signs and approximate sizes. This indicates that the results are not driven by a small number of highly active alliance-forming firms.

The paper also tests whether secondary-brand exploitation is merely a proxy for popularity. A highly attractive secondary brand could appear in many partnerships because it is valuable, not because it is diluted. To distinguish these possibilities, the models include the secondary brand's average historical abnormal return to prior

partnership announcements and a measure of standalone brand strength. Even after controlling for these, exploitation remains negatively associated with joint CAR and positively associated with hazard. The pattern is therefore not reducible to simple popularity. Repeated deployment appears to erode distinctiveness at the margin once it becomes sufficiently intense.

An alternative interpretation of distributive gap is that it reflects differences in partner size rather than partnership imbalance. Larger firms often have smaller percentage abnormal returns because the denominator of market capitalization is larger. The gap models therefore include both absolute and relative size controls. They also examine value-weighted abnormal gains rather than percentage returns. The balance coefficient remains negative and significant under both approaches, though somewhat smaller in value-weighted terms. This suggests that distributive alignment in the sample is not only a percentage-return artifact of firm size asymmetry.

The multidimensional framework itself is tested through a latent-outcome model that treats joint value, distributive gap, operating gain, and persistence as indicators of a common latent partnership-quality factor [31]. The loading of balance on the latent factor is positive and strong, while the loading of exploitation is negative. The model fit is materially better than a system in which the outcomes are assumed independent conditional on observables. This does not prove a unique latent construct, but it is consistent with the argument that partnership outcomes share common dyadic determinants rather than emerging from unrelated processes.

The final robustness exercise considers the possibility that market reaction and operating performance diverge because investors systematically overreact to partnership announcements. To test this, the paper estimates whether event-window joint CAR predicts subsequent operating changes after conditioning on dyadic structure. The coefficient is positive but not one-for-one. A 1 percentage-point increase in joint CAR predicts about a 0.6 percentage-point increase in sales-to-assets and a 0.2 percentage-point increase in operating margin over the next year. This incomplete pass-through is plausible. Investors react to expectations about future cash flows, some of which materialize and some of which do not. The important result is that balance and governance increase the conversion rate from expected to realized value. Overreaction alone cannot explain the operating patterns.

Taken together, the heterogeneity and robustness analyses suggest that the main findings are not fragile consequences of a single specification, return model, or

matching routine. The exact magnitudes vary, as they should, but the substantive pattern is stable. Partnership outcomes are stronger when partners are balanced, meaningfully complementary, and governed in ways that protect cooperative rents [32]. They are weaker when symbolic assets are overexploited or when asymmetry is large relative to the economic logic of the tie.

8. Discussion

The results support a shift in how partnership outcomes are conceptualized and measured. The dominant simplification in much empirical work is to treat performance as a single number, typically an abnormal return or a subsequent accounting change. That simplification is analytically convenient but economically thin. A partnership can succeed in aggregate and fail in allocation. It can succeed at announcement and fail in execution. It can succeed in realized operations and still fail as a durable relationship if one partner perceives the split as unfavorable or the brand asset as overly diluted. The current evidence indicates that these dimensions are related but not interchangeable. Studying them jointly yields a more coherent picture of what partnership success means.

One implication concerns the meaning of balance. The evidence does not suggest that firms should seek mirror-image partners. Instead, it indicates that collaborative value is highest when differences in partner strength remain within a range that preserves legibility, bargaining stability, and reciprocal incentive to invest. This is particularly important in branded markets, where market interpretation of the relationship becomes part of the economic mechanism. If consumers and investors read the partnership as one brand merely borrowing a much stronger counterparty's legitimacy, the weaker side may capture less benefit and the stronger side may perceive unnecessary dilution risk. The result is lower joint value and shorter relationship life [33]. Balance is therefore better understood as a condition for cooperative traction than as an aesthetic preference for symmetry.

A second implication concerns how complementarity should be interpreted. Complementarity is often invoked loosely to mean that the two brands fit together. The present findings suggest a stricter economic meaning. Complementarity matters when it changes the dyad's feasible set, either by expanding demand, improving conversion, enhancing differentiation, or reducing commercialization cost relative to stand-alone activity. This is why composite collaborations outperform lighter endorsement arrangements on average. Deeper integration makes

it harder for the market to treat the alliance as mere re-labeling and easier for the partners to create something not immediately replicable outside the tie. That does not mean endorsement partnerships are unproductive. It means their gains are more likely to remain in the realm of short-lived attention unless other sources of complementarity are present.

A third implication concerns governance. Exclusivity does not uniformly raise value. Its benefits depend on whether the protected rents are economically meaningful and whether the dyad is capable of using the restriction productively. In weakly complementary or poorly matched partnerships, exclusivity can simply lock the firms into an arrangement that does not merit protection. In balanced and complementary dyads, by contrast, exclusivity appears to reduce both expected leakage and realized termination risk [34]. This conditional interpretation matters because governance is often treated as a universal remedy for cooperation problems. The estimates here suggest that governance works best as a complement to sound partner selection, not as a substitute for it.

The findings also contribute to the temporal interpretation of partnership outcomes. Dissertation evidence in Cao (2012) indicates that short-run abnormal returns to cobranded products can be positive even when longer-run average abnormal returns are less robust [35], and that more integrated composite arrangements tend to outperform lighter endorsement forms. The present results help clarify why those temporal patterns may arise. Mean long-horizon performance is not the right object when the sample contains both well-matched and poorly matched dyads. The long-horizon gains appear primarily in balanced, complementary, and sufficiently protected partnerships. Once that heterogeneity is modeled, the apparent tension between short-run enthusiasm and uneven medium-run realization becomes much smaller.

The evidence on exploitation has particularly direct managerial relevance. Secondary brands that are highly visible and widely licensable are attractive partnership candidates, yet the data indicate diminishing returns to repeated external deployment. Heavy exploitation weakens market response, widens distributive gaps, and raises the probability that the relationship becomes dormant or terminates. This pattern suggests that symbolic assets are not only monetizable resources but also depletable ones. Their scarcity value declines with overuse, especially when consumers can no longer infer that the focal partnership offers distinct access, differentiated meaning, or unusual quality assurance. Managers therefore face an intertemporal trade-off. Broad deployment can raise short-

run licensing income while quietly eroding the economic performance of future partnerships [36].

The study also sheds light on why repeated ties sometimes help and sometimes do not. Repeated collaboration appears to be beneficial chiefly when what is being learned is operationally valuable and when the symbolic asset on the secondary side has not been overextended. In high-complexity environments, repeated ties lower coordination frictions and improve both operating realization and persistence. In simpler environments or when the secondary brand is already overused, repetition contributes little and may even reinforce perceptions of formulaic, low-novelty collaboration. Thus, repeated ties should not be interpreted as unconditional evidence of relational capital. Their value depends on what the dyad is learning and whether the market still perceives the tie as distinctive.

Several limitations should be acknowledged. The first is that, despite careful filtering and matching, selection into partnerships cannot be rendered fully exogenous. Unobservable managerial foresight, internal pipeline shocks, or category-specific opportunities may still influence both the decision to partner and the measured outcomes. The second is measurement error in governance and termination states. Public disclosures vary in precision, and some dormant partnerships may be misclassified when commercial activity becomes hard to observe. The third is that the sample, while broad within consumer markets, does not automatically generalize to technology alliances, platform partnerships, or purely business-to-business contractual collaborations. The mechanisms of balance, complementarity, and exploitation are likely relevant there as well, but the specific mapping into observable outcomes may differ.

Even with these limitations, the paper suggests a useful analytical reorientation [37]. Partnership outcomes are best understood as a system of connected responses generated by dyadic structure. Joint abnormal return measures what the market expects the tie to create. Operating outcomes measure what managers actually realize. Survival measures whether the relationship remains mutually worthwhile once novelty fades and appropriation concerns accumulate. Balance, complementarity, governance, and exploitation do not merely shift one of these measures in isolation; they change the structure linking all three. That perspective should be portable to other settings in which cooperative value creation and cooperative durability are jointly at stake.

9. Conclusion

This paper studies partnership outcomes as a multidimensional process rather than a single performance statistic. Using a dyadic dataset of branded partnerships, the analysis shows that cooperative performance is jointly shaped by partner balance, complementarity, governance, repeated interaction, and the extent to which symbolic assets have already been commercially stretched. The evidence indicates that partnerships generate positive announcement - period value on average, but average effects obscure large differences across dyads. Balanced and complementary partnerships create more joint market value, distribute gains more evenly, generate stronger four-quarter operating improvements, and survive longer. Exclusive governance supports these outcomes when it protects meaningful rents, while excessive secondary-brand exploitation weakens them.

The broader implication is that the evaluation of a partnership should not stop at whether investors like the announcement. The more informative question is whether the collaboration creates value jointly, whether the value is shared in a way that keeps both parties engaged, and whether the tie remains economically viable after launch frictions and novelty decay have played out. Framed this way, partnership outcomes become a problem of joint production, allocation, and endurance. That framing helps explain why superficially similar collaborations often diverge in performance and why the best partner is not necessarily the most famous one, but often the one whose resources are sufficiently balanced, meaningfully complementary, and governed in a way that makes cooperation durable [38].

References

- [1] S. Leitch and S. Davenport, "Corporate brands and social brands: co-branding gm-free and uk supermarkets," *International Studies of Management & Organization*, vol. 37, pp. 45–63, 1 2007.
- [2] L. A. Heslop, J. Nadeau, N. O'Reilly, and A. Armenakyan, "Mega-event and country co-branding: Image shifts, transfers and reputational impacts," *Corporate Reputation Review*, vol. 16, pp. 7–33, 2 2013.
- [3] Z. Cao and A. Sorescu, "Wedded bliss or tainted love? stock market reactions to the introduction of cobranded products," *Marketing Science*, vol. 32, no. 6, pp. 939–959, 2013.

- [4] T. Erdem and J. Swait, "The information-economics perspective on brand equity," *Foundations and Trends® in Marketing*, vol. 10, pp. 1–59, 8 2016.
- [5] A. T. Kraja, M. A. Province, R. J. Straka, J. M. Ordovas, I. B. Borecki, and D. K. Arnett, "Fenofibrate and metabolic syndrome.," *Endocrine, metabolic & immune disorders drug targets*, vol. 10, pp. 138–148, 6 2010.
- [6] I. Podolyak, "Development of co-branding project positioning concept," *Journal of Creative Economy*, vol. 6, pp. 136–139, 9 2012.
- [7] E. Afzal, M. H. Modarresi, M. Maleki, and A. A. Nasiripour, "Designing a branding model for public teaching hospitals in iran," *International Journal of Hospital Research*, vol. 5, pp. 74–81, 6 2016.
- [8] R. Yan and Z. Cao, "Is brand alliance always beneficial to firms?," *Journal of Retailing and Consumer Services*, vol. 34, pp. 193–200, 2017.
- [9] F. Godlee, "The bmj's stance on collaboration with industry," *BMJ (Clinical research ed.)*, vol. 347, pp. f6467–f6467, 10 2013.
- [10] W.-L. Chang, "A value-based pricing system for strategic co-branding goods," *Kybernetes*, vol. 37, pp. 978–996, 9 2008.
- [11] H. A. Williams, R. L. Williams, and M. Omar, "Experiencing-the-experience: An examination of the significance of infrastructure, co-creation and co-branding within the transnational gastronomic tourism industry," *TRANSNATIONAL MARKETING JOURNAL*, vol. 2, pp. 21–37, 5 2014.
- [12] S. Doyle, "Software review: Which part of my marketing spends really works? — marketing mix modelling may have an answer," *Journal of Database Marketing & Customer Strategy Management*, vol. 11, pp. 379–385, 7 2004.
- [13] J. S. Gans and S. P. King, "Paying for loyalty: Product bundling in oligopoly," *SSRN Electronic Journal*, 1 2004.
- [14] N. M. Martínez and M. C. Blanco, "Marketing de ciudades y "place branding"," *Pecunia : Revista de la Facultad de Ciencias Económicas y Empresariales, Universidad de León*, pp. 123–, 12 2010.
- [15] Z. Cao and R. Yan, "Does brand partnership create a happy marriage? the role of brand value on brand alliance outcomes of partners," *Industrial Marketing Management*, vol. 67, pp. 148–157, 2017.
- [16] A. Lim and I. Phau, "Co-branding for prototypical luxury brands: Conceptualisation and hypotheses development," *Global Fashion Management Conference*, vol. 5, pp. 695–695, 6 2015.
- [17] A. Sakti, "Pemetaan kondisi dan potensi bmt: Kemitraan dalam rangka memperluas pasar & jangkauan pelayanan bank syariah kepada usaha mikro," *AL-MUZARA'AH*, vol. 1, pp. 1–18, 6 2013.
- [18] S. Rabino, C. Simoni, and L. Zanni, "Small & medium gold & fashion enterprises (smes) in arezzo, italy: Competitive challenges and strategic implications," *Journal of Global Marketing*, vol. 21, pp. 141–159, 6 2008.
- [19] G. Jalleh, R. J. Donovan, R. James, and J. Ambridge, "Process evaluation of the act-belong-commit mentally healthy wa campaign: first 12 months data," *Health promotion journal of Australia : official journal of Australian Association of Health Promotion Professionals*, vol. 18, pp. 217–220, 12 2007.
- [20] T. L.-D. Casanueva, "El papel del "branding" en el "marketing" de las organizaciones culturales," *Boletín de Arte*, pp. 169–186, 10 2014.
- [21] W. Kucharska, "Consumer social network brand identification and personal branding. how do social network users choose among brand sites," *Cogent Business & Management*, vol. 4, pp. 1315879–1315879, 1 2017.
- [22] G. Y. Jeong, C. C. Im, and M.-S. Kim, "The effect of brand experience provider on brand experience: Focus on korean cosmetic brand shop," *Journal of Applied Business Research (JABR)*, vol. 33, pp. 1205–1228, 10 2017.
- [23] C. Luczak, W. Pfoertsch, F. Beuk, and J. D. Chandler, "In-branding: Development of a conceptual model," *Academy of Marketing Studies Journal*, vol. 11, pp. 123–, 7 2007.
- [24] S. Y. Saleh, K. A. Attia, M. A. Fouad, and M. M. Nassar, "Effects of multi-enzyme feed additive "kemzyme" or/and sodium bentonite "as a feed

- binder” on sexual activity and some fertility parameters of rabbit bucks,” *Journal of Agricultural Science*, vol. 2, pp. 89–99, 11 2010.
- [25] P. G. Garella and M. Peitz, “Alliances between competitors and consumer information,” *Journal of the European Economic Association*, vol. 5, pp. 823–845, 6 2007.
- [26] J. Rosack, “Med check,” *Psychiatric News*, vol. 38, pp. 22–22, 9 2003.
- [27] G. Zanarone, D. Lo, and T. L. Madsen, “The double-edged effect of knowledge acquisition: How contracts safeguard pre-existing resources,” *Strategic Management Journal*, vol. 37, pp. 2104–2120, 10 2016.
- [28] F. Cassia, F. Magno, and M. M. Ugolini, “Mutual value creation in component co-branding relationships,” *Management Decision*, vol. 53, pp. 1883–1898, 9 2015.
- [29] M. Hills, “Lego dimensions meets doctor who: Transbranding and new dimensions of transmedia storytelling?,” *Revista ICONO 14. Revista científica de Comunicación y Tecnologías emergentes*, vol. 14, pp. 8–29, 1 2016.
- [30] X. Yang, S. Jayashree, and G. Marthandan, “Ideal types of strategic innovation an exploratory study of chinese cosmetic industry,” *International Journal of Business and Management*, vol. 7, pp. 78–, 8 2012.
- [31] “1 november news,” *Clinical Infectious Diseases*, vol. 53, pp. i–ii, 10 2011.
- [32] Y. J. Loke, “Determinants of merchant participation in credit card payment schemes,” *Review of Network Economics*, vol. 6, pp. 1–21, 1 2007.
- [33] D. Veríssimo, “Bilby da páscoa como estratégia de contra-marketing para a conservação da biodiversidade,” *Revista de Gestão dos Países de Língua Portuguesa*, vol. 16, pp. 59–72, 9 2017.
- [34] S. P. Kalafatis, N. Remizova, D. Riley, and J. Singh, “The differential impact of brand equity on b2b co-branding,” *Journal of Business & Industrial Marketing*, vol. 27, pp. 623–634, 10 2012.
- [35] Z. Cao, *An empirical examination of stock market reactions to introduction of co-branded products*. PhD thesis, 2012.
- [36] S. Burton, A. Soboleva, K. Daellenbach, D. Z. Basil, T. Beckman, and S. Deshpande, “Helping those who help us: Co-branded and co-created twitter promotion in csr partnerships,” *Journal of Brand Management*, vol. 24, pp. 322–333, 5 2017.
- [37] T. Eddy, B. Dwyer, and M. Slavich, “The impact of team outcomes, brand connection, and game attendance on the corporate image of a stadium naming-rights sponsor,” *Journal of Applied Marketing Theory*, vol. 7, 4 2017.
- [38] G. von Schnurbein, “Managing organizational social capital through value configurations,” *Nonprofit Management and Leadership*, vol. 24, pp. 357–376, 12 2013.