



When do B2B brands influence the decision making of organizational buyers? An examination of the relationship between purchase risk and brand sensitivity

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ABSTRACT

The dominant perspective on organizational buying behavior suggests that buyers tend to rely on objective criteria when making product choice decisions and that the potential influence of subjective cues, such as brands, on buyer decision making decreases with increasing risk. An alternative perspective, confirmed in this study by in-depth interviews with various managers, suggests that brands serve as a risk-reduction heuristic, whereby the influence of brands on decision making increases as a function of risk. Building on risk and information processing theories, this research builds on these complementary perspectives to propose that risk and brand sensitivity relate in a U-shaped manner, where brand sensitivity is highest in relatively low- or high-risk situations. The results of scenario- and survey-based field studies—involving 206 and 180 members of buying centers, respectively—suggest that both perspectives have merit and support the proposed nonlinear relationship. Moreover, the findings reveal that the risk-brand sensitivity relationship is moderated by competitive intensity, such that the linear (negative) and quadratic (positive) effects are stronger when competitive intensity is low.

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1. Introduction

While interest in business-to-business (B2B) branding continues to grow, studies within this domain have been slower to emerge than those that examine the roles of brands in consumer markets. To a large extent, this delay in academic research can be attributed to the field's organizational buying models, which portray buyers as being highly objective when making product choice decisions (e.g., Bonoma, Zaltman, & Johnston, 1977; Low & Mohr, 2001; Malaval, 2001). This view of organizational buyers as *objective* decision makers has not allowed a significant role for the influence of *subjective*, brand-based judgments on organizational buying deliberations. However, recent research suggests that brands can play an important, functional role in business markets, particularly as signals of product quality and of the overall relationship and experience a customer can expect from a supplier (Aaker & Joachimsthaler, 2000; Bendixen, Bukasa, & Abratt, 2004).

Despite growing empirical evidence suggesting that brands do influence organizational buying decisions, an understanding of when brands are likely to matter most in B2B contexts is still lacking (Zablah, Brown, & Donthu, 2010). A particularly important manifestation of this knowledge gap is the lack of studies examining the relationship between purchase risk and B2B brands' level of influence on the decision making of organizational buyers. This omission is noteworthy for the following reasons: (1) extant buying models suggest that purchase risk is a primary determinant of buyer behavior in organizational contexts (Johnston & Lewin, 1994; Newall, 1977); thus, the risk management implications of B2B branding needs exploration, and (2) based on existing theoretical models, available empirical evidence and insights gained from in-depth interviews with practitioners, it is unclear whether B2B brands are likely to be most influential under conditions of low, moderate or high purchase risk. For instance, recent studies find that brands can play a meaningful role in risky purchase situations (Homburg, Klarmann, & Schmitt, 2010; Mudambi, 2002). This finding, however, contrasts with the findings of established organizational buying models, which suggest that buyers offset heightened levels of risk by pursuing disciplined purchasing strategies built upon an extensive information search process. It is unclear whether the likely payoff from B2B brand-building investments is higher, lower or the same across conditions characterized by different levels of purchase risk.

This study examines the relationship between purchase risk and a buying center's level of *brand sensitivity*, which we define as the

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extent to which brand names receive active consideration in organizational buying deliberations (Hutton, 1997; Kapferer & Laurent, 1988; Zablah, Brown, & Donthu, 2010). Building on in-depth interviews with practitioners as well as risk and information processing theories, we propose and find that the relationship between the buying center's brand sensitivity and purchase risk is U-shaped such that brands serve as cues for choice simplification in low-risk situations and cues for risk-reduction in high-risk situations. Furthermore, we find that the relationship is: (1) moderated by the competitive intensity of the environment, (2) robust to our measure of brand sensitivity, and (3) may vary depending on the specific type of risk (e.g., social vs. performance) under consideration. Collectively, our study's results help bridge complementary perspectives regarding the relative influence of objective and subjective factors on organizational buying decisions.

In examining the purchase risk-brand sensitivity relationship, we make several meaningful contributions to the literature. First, we directly respond to calls for research that articulates the roles of brands in organizational buying contexts (Webster, 2000), and we advance understanding of how buying groups evaluate multiple product attributes and ultimately make purchase decisions (Marketing Science Institute, 2008). Second, our research is the first to empirically examine the purchase risk-brand sensitivity relationship. Third, in addition to extending B2B branding theory, the results offer managerial prescriptions for the most appropriate strategies to pursue depending on the strength of an organization's B2B brand.

The remainder of this article is organized as follows: First, we build on insights from in-depth interviews with practitioners and relevant theory to advance the study's hypotheses. Second, we outline the details and report the results of two studies performed to test the proposed U-shaped relationship between purchase risk and brand sensitivity, one of which considers an important moderator (i.e., competitive intensity) of this relationship. Third, we conclude with a discussion of the studies' implications for future theory and practice.

2. Conceptual background and theory development

2.1. The risk-brand sensitivity relationship in practice

To better understand the role of brands in practice, we conducted exploratory, in-depth interviews with marketing researchers/consultants ($n=3$), advertising executives ($n=2$), and marketing managers/executives ($n=16$). Twelve of the practitioners had significant experience in the B2B sector, and the advertising agency representatives had developed branding campaigns for clients in both sectors. The interviews consisted of a set of open-ended questions designed to explore the relationship between purchase risk and the role of brands in organizational decision making. The interviews lasted between 15 and 60 min and followed a semi-structured questionnaire or discussion guide. Consistent with existing guidelines (e.g., Willis, 2000), each participant was first briefed by the researcher and then interviewed in a precise manner and with ordered detail.

Despite the varied backgrounds of the practitioners who participated in the in-depth interviews, there was a great degree of consistency in their perspectives on the risk-brand sensitivity relationship. As the following excerpts strongly suggest, practitioners across various industries converged on one common conclusion: B2B brands are likely to matter the most in high-risk purchase situations, while the more objective factors (e.g., price) are likely to be more dominant in low-risk situations.

From my perspective, the brand is a reflection of the confidence I have in the firm to execute, so it receives a higher weighting in the decision process as the risk grows.(ML, Insurance and Financial Services Executive)

For a low-risk project, I would assign a heavy weight factor in my decision based on price, convenience—the economic impact to my bottom line—more so than brand. For a moderately risky project, I would do the same, with a slight increase in brand factor influencing my decision. However, for a high-risk project, I will rely heavily on the brand as an influencing factor for all the obvious reasons... High risk projects could mean my life savings, so price sensitivity diminishes and brand significantly influences my decision.(SW, Entrepreneur)

I am very conscious of brands when it comes to high risk or high dollar spends. I want to know that the company I buy from is reputable and brand typically defines that.(CB, Shipping and Logistics Manager)

Buyers are ambivalent to selecting the big brand because it sounds too easy...[but] in risky situations, brands are the sure thing.(SM, Brand Consultant)

When customers in our industry place a medium to high coefficient in front of risk (i.e., they are somewhat concerned or very concerned with reliability, speed and damages), then they typically will only solicit bids from carriers whose brands are associated with those types of qualities.(CS, Shipping and Logistics Executive)

2.2. The risk-brand sensitivity relationship in academic literature

Purchase risk refers to the perception of the uncertainty and adverse consequences associated with buying a product (Dowling & Staelin, 1994). Business market scholars generally conceptualize purchase risk as the economic and performance risk to the organization as well as the psychosocial risk to a buyer or buying center (e.g., the fear of negative impressions of peers or adverse effects on promotion prospects if a poor product choice is made) (Hawes & Barnhouse, 1987; Henthorne & LaTour, 1992; Mitchell, 1995). Thus, in contrast to risk conceptualizations in the consumer context, risk in the organizational buying context is likely to involve consequences that affect buyer-seller relationships, service delivery and/or a buyer's job security (Mitchell, 1999; Webster & Keller, 2004).

The existing literature has sought to explain how organizational buyers manage purchase risk by characterizing decision-makers as either objective or subjective. The first, more dominant perspective is derived from the classic models of industrial buying behavior, which assume that choice processes and group decision making are objective, seek "optimality," and are based on systematic information processing (Bendixen, Bukasa, & Abratt, 2004; Bonoma, Zaltman & Johnston, 1977). An objective or rational decision style is deemed to be the degree to which a manager relies on deliberation and calculation in making decisions (Simon, 1987). In theory, the purchaser or decision maker somehow estimates the relative value of each alternative in the choice set and then makes the optimal choice in a systematic manner. The seminal models of organizational buying behavior (Sheth, 1973; Webster & Wind, 1972) are grounded in the assumption of buyers as objective decision makers. Furthermore, the buyclass model of purchasing (Robinson, Faris, & Wind, 1967) classifies certain purchase situations as riskier than others and suggests that organizational buyers manage increasing risk by pursuing disciplined, "rational" strategies, such that the amount of information that they use to evaluate competing alternatives increases directly as a function of the purchase risk. According to this decision-making paradigm, brands would be unlikely to matter in risky purchase situations, a conclusion which is in sharp contrast to the insights gleaned from our interviews with practitioners.

A separate school of thought, which is more consistent with the conclusions from our practitioner interviews, challenges the depiction of buyers as objective decision makers who are highly disciplined in their quest to manage purchase risk. In perhaps the earliest work on the subject, *Duncan (1940)* found that while objective attributes tended to heavily influence organizational decisions, subjective factors such as company reputation and business relationships influence buying decisions as well. Other researchers, including *Peters and Venkatesan (1973)*, recognized that marketers must consider subjective elements, such as risk perceptions, in addition to more objective elements, such as price and functionality. *Wilson (2000)* contends that the assumption of buyer objectivity established in the classic models of organizational buying has outlasted its justification and that these models fail to account for the effects of excessive workloads, limited competence and buyer fatigue, all of which limit decision-making objectivity.

The so-called IBM effect (i.e., the “you won’t get fired for buying IBM” principle) provides a well-accepted, contemporary example of how buying centers weigh subjective factors relative to objective factors (*Lynch & de Chernatony, 2004; Peters & Waterman, 1972*). For decades, IBM was the enterprise systems market leader even though it lacked superior systems and functionality (or lower pricing). Buying centers ultimately relied on intangible factors, such as their vendor relationship, company reputation, service promises, and level of trust, to make their supplier decisions; in essence, they relied on the IBM brand’s promise of capable products, exceptional service and support, and long-term stability and chose it over its competitors.

This second perspective suggests that the value of strong brands stems from the positive signals that they communicate about an offer (*Erdem, Swait, & Louviere, 2002*). *Mudambi, Doyle, and Wong (1997)* note that in business settings, the interpretations of such signals often rely on risk-reduction terms; brand cues thus might seem critically important in high-risk situations but less relevant in other contexts. *Mudambi (2002)* even labels those buyers who perceive branding as important and generally operate in risky purchase situations as “branding receptive” buyers. Moreover, *Kotler and Pfoertsch (2006)* determine that risk reduction is by far the most important brand function in business markets, and *Homburg, Klarmann, and Schmitt (2010)* find that brand awareness is strongly related to firm performance in certain B2B buying conditions. This perspective suggests that a buying center member’s previous experience with a brand, his/her emotional anxiety over the purchase, or a vendor’s reputation might lead to an increased role for brand information. In light of this perspective, it appears that brands may meaningfully influence decision making in high-risk situations.

2.3. Determinants of risk and their implications for brand sensitivity

The organizational buying literature has spent significant effort in investigating the relationship between purchase situation variables (e.g., importance and complexity) and purchase risk (e.g., *McQuiston, 1989; Robinson, Faris, & Wind, 1967; Webster & Keller, 2004*). Purchase importance, i.e., the buying center’s perception of the relative impact of the product purchase on business objectives (*Cannon & Perreault, 1999*), is generally considered an important determinant of organizational buying behavior. The levels of purchase importance may affect a buying center’s brand sensitivity because of the variation they induce in the degree of purchase risk (*Valla, 1982*). When considering purchases of products that appear strategic in nature or important for ensuring firm productivity, buyers may depend more on brands with strong reputations to offset any uncertainty or unanticipated consequences.

Researchers have also examined how purchase complexity—the buying center’s perception of the relative level of sophistication of the product being considered (*Cannon & Perreault, 1999*)—affects purchase risk. In complex purchase situations, buying center

members should perceive substantial risk (*McQuiston, 1989; Mitchell, 1995*), and complex purchase situations make it difficult for buying centers to evaluate purchase choices ex ante or anticipate a supplier’s performance ex post. In these cases, buying team members should depend on familiar associations and processing shortcuts to reduce their ambiguity and sense of risk (*Keller & Staelin, 1987*).

In addition, prior research shows that intangibility correlates positively with purchase risk (*Laroche et al., 2004; McDougall & Snetsinger, 1990; Murray & Schlacter, 1990*). Service marketing researchers generally differentiate between goods and services according to their levels of intangibility, and they note that goods tend to be easier to evaluate than services due to several characteristics, such as their perceived level of tangibility. However, even if services tend to be more intangible than goods, researchers also recognize that all products and services possess varying degrees of intangibility (*Shostack, 1977*). Organizational buying scholars conceptualize B2B products as being composed of bundles of tangible and intangible attributes; the tangible attributes generally include the product, price, and various functional specifications, whereas intangible attributes include company reputation and various augmented services (*McQuiston, 2004; Mudambi, Doyle, & Wong, 1997*). However, industrial products tend to require higher levels of customization that add to perceptions of intangibility and thus risk (*Rangan & Isaacson, 1991*). Consequently, buyers must engage in complex decision-making activities to gain a sufficient grasp of product offerings. Buyers may rely on brand cues to manage the risk of evaluating a product that they perceive to be intangible in nature (*Brady, Bourdeau, & Heskell, 2005*).

2.4. A summary of the purchase risk-brand sensitivity relationship in B2B markets

The term ‘brand’ can refer to people, things, and ideas, as well as the processes of targeting, positioning, and communicating offerings (*Stern, 2006*). In B2B settings, branding is a multidimensional construct that includes product characteristics, brand image, support and distribution services, company reputation, and company policy (*Cretu & Brodie, 2007; McQuiston, 2004*). Therefore, B2B brand perceptions are influenced, to some extent, by associations related to an ongoing relationship, corporate reputation and service experiences.

Our focal construct, brand sensitivity, refers to the degree to which brand information is actively considered in organizational buying deliberations (*Hutton, 1997; Kapferer & Laurent, 1988*). While it does not explicitly capture the relational and experiential aspects that may be associated with B2B brands, it was chosen as the key outcome variable in this study because our focus is on understanding *when* brands are most likely to influence the organizational buying process. That is, it was critical that the outcome measure used in the study explicitly gauges the extent to which brand information permeates the decision-making process. As *Zablah, Brown and Donthu (2010)* note, other commonly employed brand constructs do not explicitly account for the extent of influence of brand information in the decision-making process. For that reason, brand sensitivity was deemed as the most appropriate outcome variable for this study.

A theoretical framework that accounts for the complementary nature of objective, measurable information and more subjective, brand-oriented information is critical to understanding the true role that brands play in organizational buying contexts. According to the more objective decision-making perspective, brand sensitivity should decrease as a function of increasing purchase risk. In contrast, the more subjective, brand-driven perspective suggests that brand sensitivity is likely to increase as a function of increasing purchase risk. By building on information processing theory (IPT), we propose that both perspectives have merit and are useful for understanding the purchase risk-brand sensitivity relationship.

According to the IPT, not all decision-making processes are objective or rational in the purest sense. Rationality refers to “the extent to which the decision process involves the collection of information relevant to the decision, and the reliance upon analysis of this information in making the choice” (Dean & Sharfman, 1993; p. 589). IPT recognizes that decision making may involve the use of judgment, experience, and other less objective factors because buying center members are limited by their bounded rationality (Cyert & March, 1963), such that incremental information processing might become so overwhelming that it exceeds the decision makers’ functional capacity (Moorman, 1995; Ronchetto, Hutt, & Reingen, 1989; Siggelkow & Rivkin, 2005; Tushman & Nadler, 1978). Beyond a certain threshold, decision makers adopt various shortcuts and decision heuristics, such as weighing brand information or the reputation of market leaders more heavily, to reduce their cognitive strain and risk perceptions (e.g., Anderson, Chu, & Weitz, 1987; Galbraith, 1974; Payne, 1976).

IPT therefore suggests that certain branding strategies are likely to be more effective than others depending on the purchase conditions (Tybout, Calder, & Sternthal, 1981). It suggests that as purchase risk increases, the buying center’s brand sensitivity will likely decrease because buyers engaged in objective decision making are likely to seek, uncover and emphasize non-brand information to evaluate the competing offers. However, because decision makers have limited information processing capabilities, their brand sensitivity may increase as a mechanism to reduce risk when the purchase risk progresses to higher levels. We depict this IPT-based conceptualization of the objective and subjective decision-making perspectives of the organizational buying process graphically in Fig. 1, which suggests that the purchase risk–brand sensitivity relationship follows a U-shaped path.

Consistent with the objective decision-making perspective, we propose that low-risk buying situations induce high levels of brand sensitivity. Brand sensitivity should be high when a buying team perceives low levels of risk because the buying center members have little motivation to engage in diligent consideration. In such situations, there is little incentive to engage in a search process that goes beyond the most recognized brand names. Buying center members rely on brands to identify products and differentiate between them; rather than working as cues to reduce the members’ risk perceptions, brands serve as cues for choice simplification (Kotler & Pfoertsch, 2006). As risk perceptions move from low to moderate levels, buyers are likely to undertake a more cognitive, objective approach to their decision making, increase their information search efforts, and consider more tangible factors, such as product specifications and functionality, logistics and distribution, support services (e.g., training, maintenance, call center support), and price (Mudambi, 2002). The result of this more objective, information-driven search

process should be a negative relationship between risk and brand sensitivity as risk progresses from low to moderate levels.

Consistent with the subjective, brand-driven decision-making perspective, we expect that the purchase risk–brand sensitivity relationship will not continue its negative trend as risk rises from moderate to high levels. Research suggests that when the risk of a purchase failure is severe and product service and support are likely to be required over time, buying centers tend to consider brand attributes as important decision criteria (Mudambi, 2002). Moreover, IPT suggests that in high-risk purchase situations, a focus on objective attributes or criteria represents a relatively inefficient means of risk reduction because buyers likely face an overwhelming amount of information and must evaluate conflicting factors. Organizational buyers therefore rely on judgment, experience, decision shortcuts (e.g., brand information and company reputation) and other subjective factors to reduce their risk perceptions (Anderson, Chu, & Weitz, 1987; Dean & Sharfman, 1993; Payne, 1976). In these scenarios, buying team members should become brand sensitive as a means of legitimizing their buying decisions as well as reducing both organizational and individual psychosocial risk (Kotler & Pfoertsch, 2006).

Hypothesis 1. The relationship between purchase risk and a buying center’s brand sensitivity is U-shaped. The association between purchase risk and a buying center’s brand sensitivity is negative as purchase risk increases from low to moderate levels and positive as purchase risk increases from moderate to high levels.

Before proceeding to discuss Hypothesis 2, it is important to underscore that, despite its importance, the proposed relationship has not been previously examined in the literature. Table 1 summarizes the results of relevant empirical studies that have considered nonlinear relationships between risk and information processing. As is apparent, none of these studies offer evidence that adequately bridges the predictions proffered by the perspective that favors objective decision making or the perspective that favors subjective, brand-driven decision making. Of the four summarized articles, only Heilman, Bowman, and Wright (2000) consider information use, risk perceptions and brand phenomena concurrently. Their focus, however, is on the role of brands as consumers evolve from novices to experienced shoppers. Thus, our study is the first to empirically examine the purchase risk–brand sensitivity relationship in either a consumer or a business market context.

2.5. The moderating role of competitive intensity

The proliferation of similar products and services and the increased complexity of deciding between them have increased the importance of brands in some B2B markets (Kotler & Pfoertsch, 2006). We expect that competitive intensity—defined here as the number of brands vying for business in a particular category (Lehmann & Pan, 1994)—is a likely moderator of the U-shaped relationship between purchase risk and brand sensitivity. Specifically, we propose that organizational buyers in highly competitive environments are more likely to rely on brand information as a mechanism for simplifying buying processes than buyers in markets characterized by lower levels of competitive intensity (Zablah, Brown, & Donthu, 2010). Our expectation is based on the notion that brands take on added importance as a cue for discriminating between providers in crowded markets. Thus, we expect that the negative (linear) relationship between brand sensitivity and risk is likely to be stronger (weaker) in environments characterized by low (high) levels of competitive intensity. In contrast, we anticipate that the positive (quadratic) relationship between brand sensitivity and risk is likely to be stronger (weaker) in environments characterized by low (high) levels of competitive intensity. Under such conditions, the marginal value of brands as a decision-making aid is enhanced, whereas in highly competitive environments, brand sensitivity tends to be uniformly

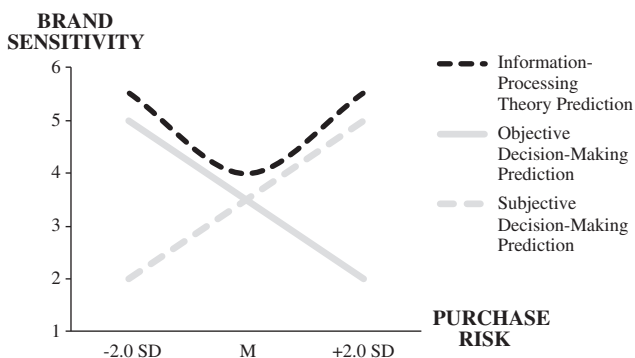


Fig. 1. Complementary perspectives on the risk–brand sensitivity relationship.

Table 1
Relevant articles that consider nonlinear relationships between risk and information processing.

Authors	Study Focus	Context	Consider Risk-Brand Relationship?	Empirical Approach	Key Insights
Payne (1976)	Investigates consumer information processing strategies.	Consumer	No	Experiment	Nonlinear decision rules suggest individuals seek to reduce information processing demands. Information processing leading to choice will vary as a function of task complexity, particularly depending on the number of alternatives available.
Keller and Staelin (1987)	Explores effects of available information in the environment on consumers' ability to accurately identify the best alternative in a choice set.	Consumer	No	Part-Worth Utilities Model	The functional relationship between information quantity and decision effectiveness is an inverted U-shape. As complexity increases, individuals exert additional effort and become more effective initially until a point is reached where effectiveness begins to deteriorate.
Maltz and Kohli (1996)	Addresses characteristics of effective market intelligence dissemination processes in organizations.	Organization	No	Survey	Under information overload conditions, people may process information superficially or only process certain parts. Suggest an inverted U-shape relationship between dissemination formality/frequency and perceived intelligence quality. The increased frequency and formality of information dissemination may not improve the perceived quality of the information.
Heilman et al. (2000)	Tests theory that brand choices made by consumers new to a market are driven by competing forces: a desire to collect information about alternatives and an aversion to trying risky ones.	Consumer	Yes	Logit Model	Relationship between information search and purchase experience is an inverted U-shape. There is a decreasing relationship between product experience and the perceived risks associated with "underdog" brands. Consumers have low probability of choosing an "underdog" brand in stage 1; probability of choosing an "underdog" brand increases with increased information search in stage 2; with experience and a reduction in information search, consumers only buy the brands they prefer in stage 3.

higher among buyers as a mechanism for dealing with a crowded field of sellers or providers.

Hypothesis 2. The U-shaped relationship between purchase risk and a buying center's brand sensitivity will be less pronounced (i.e., flatter) when competitive intensity is high and will be more pronounced (i.e., more concave) when competitive intensity is low.

3. Overview of studies

To test the research hypotheses, we conducted two separate studies. The first study, undertaken only as a preliminary test of [Hypothesis 1](#), took the form of a scenario-based field study in which participants were asked to respond to survey questions after evaluating a purchase scenario. This research design was considered to be most appropriate for the initial study because it ensured sufficient variance in the independent variable (i.e., purchase risk) and therefore maximized the likelihood that we could isolate the proposed U-shaped relationship. Following the success of study 1, we performed a survey-based field study wherein respondents were asked to recall an organizational purchase in which they were involved. While this approach provided us with less control over the amount of variance in the independent variable, it allowed respondents to consider purchase situations in which competitive intensity naturally varies (something that could not be easily accomplished in study 1) and thereby enabled us to test [Hypothesis 2](#). Thus, study 2 serves as a replication and extension of study 1.

3.1. Study 1: scenario-based field study

3.1.1. Method

Consistent with prior research (e.g., [Hawes & Barnhouse, 1987](#); [Henthorne & LaTour, 1992](#); [Mitchell, Moutinho, & Lewis, 2003](#); [Puto, Patton, & King, 1985](#)), respondents were asked to consider one of four

hypothetical, modified rebuy purchase scenarios. Modified rebuy situations were selected because they provide a combination of risk and buyer autonomy ([Hawes & Barnhouse, 1987](#); [Zablah, Brown, & Donthu, 2010](#)). As part of the scenario, respondents were instructed to perform the following acts: (1) evaluate the purchase of an industrial high-speed pump; and (2) adopt a group-buying mindset when answering survey questions (i.e., they were instructed to answer several questions as though they were representatives of a buying team). This latter instruction was intended to maximize the likelihood that their responses reflect group influences on the decision-making process.

The scenarios manipulated purchase risk by varying the levels of purchase importance and complexity as well as the level of product tangibility in the descriptions of the high-speed pump purchase situation. As previously noted, these purchase variables are important determinants of a buying center's decision-making process ([Johnston & Bonoma, 1981](#)) and should thus influence both purchase risk and brand sensitivity. The intent of the scenarios was to maximize both the amount of variability in the purchase risk variable and the realism of the description. To confirm their adequacy, we pretested the scenarios with a sample of managers and executives who were either involved in procurement decisions or were decision makers and/or influencers in purchasing raw materials/components for their respective companies. The pretest results suggest that the scenarios successfully manipulate risk and achieve a relatively high degree of realism; overall, the respondents rate all scenarios as moderately realistic on a 1 to 7 scale, and none of the scenarios differ significantly from the others in terms of their degrees of realism.

The respondents for study 1 are high-level, U.S.-based business managers drawn from a well-respected online business panel, ResearchNow. We limited the sample to managers and executives who indicated that they were highly involved in the day-to-day

Table 2
Study 1: construct measurement properties.

Construct	Mean	S.D.	AVE	LSV	1	2	3	4	5	6
1. Brand Sensitivity	4.80	1.36	74%	7%	0.89					
2. Purchase Risk	4.33	1.36	72%	29%	0.29	0.91				
3. Purchase Importance	5.21	1.23	63%	28%	0.12	0.35	0.87			
4. Purchase Complexity	4.85	1.61	76%	40%	0.20	0.50	0.50	0.92		
5. Product Tangibility	3.87	1.68	64%	40%	0.05	−0.30	−0.20	−0.58	0.93	
6. Individual Risk Propensity	4.92	.16	54%	5%	0.17	0.17	0.10	0.06	0.03	0.78

Notes: S.D. = standard deviation. AVE = average variance extracted. LSV = largest shared variance. Entries below the diagonal of the correlation matrix are construct correlations. Composite reliabilities are shown in bold on the correlation matrix diagonal. Correlations greater than or equal to |.14| are statistically significant ($p < .05$, two-tailed). $n = 206$.

purchasing activities of their firms. A total of 206 respondents were recruited to participate in the study, and we randomly assigned each respondent to evaluate one of the four scenarios. Over half of the respondents were female (56.8%), with a modal age of 45–54 years. In addition, the vast majority (69%) of respondents indicated that they were college graduates (bachelors and post-graduate), with respondents holding titles such as senior purchasing manager (32%) and manager/associate director (31.3%).

3.1.2. Measurement model

We used a 4-item scale in an effort to capture the multidimensionality of purchase risk (Mudambi, 2002). The items used for this study were designed to capture performance risk, functionality risk, financial risk, social risk, and overall risk. The brand sensitivity concept was developed in a consumer context (Kapferer & Laurent, 1988) but has since been adapted to an organizational context in extant research (Hutton, 1997; Zablah, Brown, & Donthu, 2010). We operationalize brand sensitivity using a 3-item modified Likert-scale that asks respondents to indicate the extent to which product brand name would permeate the organizational buying decision (i.e., the extent to which the brand name would matter in the particular purchase decision).

In addition to purchase risk and brand sensitivity, we assess the adequacy of measures for individual risk propensity⁴ and the three variables (i.e., purchase importance, purchase complexity and product tangibility) that we systematically varied to construct the study's scenarios. The measures of these constructs help us control for any potential direct effects that they may have on brand sensitivity. Specifically, we control for the effects of individual risk propensity to exclude the potential confounding effects of this individual difference variable on the group-based decision-making processes. In addition, we deem it important to control for the effects of purchase importance, purchase complexity, and product tangibility, because purchase risk is unlikely to fully mediate the effects of these variables on brand sensitivity such that a failure to control for their effects may lead to an erroneous statistical conclusion regarding the focal relationship. We list the items used to measure all six constructs and their original sources in the Appendix A.

To assess the measures of the six constructs in the study, we employ two separate confirmatory factor analyses (CFA) because separate CFAs enable us to preserve an adequate parameter to observation ratio. CFA 1 studies brand sensitivity and individual risk propensity, and CFA 2 analyzes purchase risk, purchase importance, purchase complexity and product tangibility. The fit indices for both CFAs suggest that the measurement models provide a good fit to the data (Hu & Bentler, 1999; CFA 1: $\chi^2 = 9.26$, 8 degrees of freedom [d.f.], $p = .32$; comparative fit index [CFI] = 1.00; standardized root mean squared residual [SRMR] = .04; CFA 2: $\chi^2 = 372.2$, 146 d.f., $p < .01$; CFI = .96; SRMR = .07). The good fit of the measurement models and our detailed evaluation of the CFA model's residuals support the

fundamental assumptions of unidimensional measurement (Anderson & Gerbing, 1988).

Additional evidence derived from the CFAs suggests that the resulting measures are reliable and valid (see Table 2). The scales' high composite reliabilities (ranging from .78 to .93) and average variances extracted (AVE: ranging from 54% to 76%) support the reliability of the measures (Fornell & Larcker, 1981; Gerbing & Anderson, 1988). In addition, we find evidence of the measures' convergent validity, as the factor loadings are significant and the scales exhibit high levels of internal consistency (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). Moreover, the measures achieve discriminant validity, as the following findings indicate: (1) the AVE of each construct is substantially greater than the largest shared variance (i.e., squared, error-corrected correlation) between any of the constructs in the model (Fornell & Larcker, 1981), and (2) constraining the construct correlations to unity in the CFA models leads to a significant ($p < .01$) and substantial decline in fit for each of the pairs of constructs evaluated.

3.1.3. Variance in purchase risk

As indicated in the Appendix A, we measure purchase risk by using a 4-item, seven-point, Likert-type scale. Responses across the 4-item scale range from a minimum of 1 to a maximum of 7. Mean responses reach the midpoint of the scale ($\bar{x} = 4.33$), with a significant amount of variation around the midpoint ($\sigma = 1.85$). These results suggest that the scenarios successfully generate the purchase risk variance needed for an appropriate test of the purchase risk-brand sensitivity relationship.

3.1.4. Test of Hypothesis 1

We begin by inspecting the proposed relationship between brand sensitivity and purchase risk visually (i.e., through the use of plots) to identify the functional form that best captures the relationship in the data. Our visual inspection generally confirms the presence of a U-shaped relationship between purchase risk and brand sensitivity. In addition, this process suggests that brand sensitivity levels off at the highest levels of purchase risk. Therefore, we conclude that a cubic model seems most appropriate for representing the functional form of the relationship.

To formally test the hypothesis, we subject the variables of interest to a regression analysis in SPSS 19.0. The results (see Table 3) provide strong support for the proposed U-shaped relationship between overall purchase risk and brand sensitivity; we depict this relationship graphically in Fig. 2. In particular, as overall purchase risk increases from low to moderate levels, brand sensitivity decreases (negative linear term; $\beta = -2.25$, $p < .05$), and after bottoming out, brand sensitivity increases again (positive quadratic term; $\beta = .63$, $p < .05$). Moreover, the results reveal that brand sensitivity does not increase linearly when risk rises from moderate to high levels but levels off at the very highest levels of purchase risk (negative cubic term; $\beta = -.05$, $p < .05$). Overall, the results are consistent with Hypothesis 1, as they confirm the presence of a U-shaped relationship between purchase risk and brand sensitivity. In addition, as Table 3 reveals,

⁴ Risk propensity is an individual difference variable that captures a buyer's level of cross-situational risk tolerance.

Table 3
Study 1: results of the regression analyses.

Dependent Variable→	Brand Sensitivity		Brand Importance	
	B (S.E.)	Avg. B (S.E.)	B (S.E.)	Avg. B (S.E.)
<i>Risk Trend</i>				
Purchase Risk	−2.25** (1.08)	−2.37** (1.12)	−21.71** (9.00)	−23.35** (9.68)
Purchase Risk Squared	.63** (.29)	.67** (.30)	5.28** (2.40)	5.66** (2.60)
Purchase Risk Cubed	−.05** (.02)	−.05** (.02)	−.39** (.20)	−.42** (.21)
<i>Control Variables</i>				
Purchase Importance	−.06 (.09)	−.05 (.10)	−2.47*** (.75)	−2.48*** (.80)
Purchase Complexity	.24*** (.08)	.22** (.09)	1.07 (.69)	1.13 (.74)
Product Tangibility	.22*** (.07)	.22*** (.07)	.08 (.57)	.11 (.61)
Individual Risk Propensity	.14 (.08)	.14 (.09)	1.21 (.67)	1.26 (.72)
Adjusted R ² =	.15		.08	

Notes: n = 206. All parameter estimates (B) are presented in unstandardized form. S.E. = standard error of the estimate. Avg. B = average unstandardized effect of the predictor variable across 10 different sub-samples, each of which was composed of about 90% of randomly selected cases from the overall sample. The average unstandardized effects (i.e., Avg. B) were estimated to gauge the stability of the parameter estimates given the potential for unstable estimates due to multicollinearity in models involving nonlinear terms (see Echambadi et al., 2006; Echambadi & Hess, 2007). Given the high levels of correspondence between the unstandardized and average parameter estimates, we conclude that parameter instability due to multicollinearity is not a concern.

** p < .05, two-tailed.

*** p < .01, two-tailed.

purchase complexity relates positively to brand sensitivity ($\beta = .24$, $p < .01$), as does product tangibility ($\beta = .22$, $p < .01$). However, purchase importance ($\beta = -.06$, $p > .05$) and individual risk propensity ($\beta = .14$, $p > .05$) appear unrelated to brand sensitivity.

3.2. Follow-up analyses

We performed four additional analyses to extend and corroborate the study's findings. First, in an attempt to triangulate the study's results, we also evaluated the relationship between purchase risk and brand importance; brand importance is a construct highly related, from a conceptual standpoint, to brand sensitivity. Consistent with Zablah, Brown, and Donthu (2010), we define *brand importance* as the relative importance assigned to brand names in organizational buying

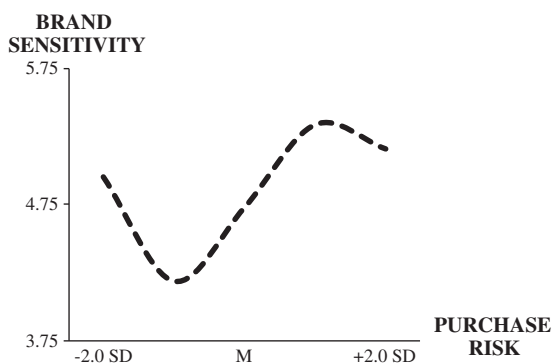


Fig. 2. Study 1: brand sensitivity as a function of purchase risk.

decisions. As we indicate in the Appendix A, brand importance was measured using a constant sum scale in which the respondents indicate how much emphasis brand information would receive in their product selection process relative to other factors such as support services, product functionality, logistics, price, and technology standards (Hutton, 1997). This approach offers the advantage of comparing the influence of brand name to that of other salient, more objective attributes in the decision-making process. In contrast to brand sensitivity, brand importance focuses on the relative importance assigned to brands in the ultimate purchase choice rather than the extent to which buying center members consider brands during their deliberation process. Consistent with these conceptual and measurement differences, we find that the Pearson product moment correlation between brand sensitivity and brand importance is $r_{xy} = .25$ ($p < .01$).

We evaluated the purchase risk-brand importance relationship with the same procedures used to evaluate the focal relationship. Overall, the results suggest that the purchase risk-brand importance relationship is also U-shaped. As overall purchase risk increases from low to moderate levels, brand importance decreases (negative linear term; $\beta = -21.71$, $p < .05$), bottoms out, and then modestly increases (positive quadratic term; $\beta = 5.28$, $p < .05$). Moreover, brand importance does not increase linearly when risk rises from moderate to high levels but actually levels off at the very highest levels of purchase risk (negative cubic term; $\beta = -.39$, $p < .05$).

Second, we tested whether the variables used for control purposes in our models (i.e., purchase importance, purchase complexity, product tangibility and individual risk propensity) were nonlinearly related to brand sensitivity. The results of these analyses indicate that none of the four variables are significantly related ($p > .05$) to brand sensitivity in a curvilinear fashion (i.e., quadratic and cubic-effects were non-significant).

Third, our measure of purchase risk is composed of four items, each of which taps a potentially different dimension of risk: performance risk, financial risk, social risk and overall risk. While this measure has been validated elsewhere and treated as a reflective construct in prior research (see Mudambi, 2002), we recognize that certain purchases may involve certain types of risks (e.g., financial risk) at the exclusion of other types of risk (e.g., social risk) and that brands may be a good vehicle for managing certain types of risks but not others. From an empirical standpoint, this observation suggests that the items that comprise our measure do not have to be highly correlated with each other (in the case of the first study, the mean inter-item correlation for the four items is .72, with a standard deviation of .07). Therefore, we ran the study analyses again using four separate, single item measures of purchase risk as the predictors in our model. The results for performance risk, financial risk, and social risk all reveal significant (positive) linear effects ($p < .01$) and non-significant ($p > .05$) quadratic and cubic effects. In contrast, the results for the single item overall purchase risk measure suggest significant ($p < .05$) linear, quadratic and cubic effects of said risk on brand sensitivity. This result indicates that, in this particular study, the overall (i.e., additive) risk of the purchase drives the U-shaped brand sensitivity trend rather than any particular manifestation (i.e., performance, financial or social risk) of the phenomenon.

Finally, we assessed the stability of our parameter estimates by retesting the model using 10 different subsamples, each of which was composed of about 90% of the randomly selected cases from the overall sample. The purpose of this analysis was to evaluate the stability of the parameter estimates considering the potential for unreliable or “shaky” estimates resulting from collinearity between the linear and nonlinear terms in the model (see Echambadi & Hess, 2007; Echambadi et al., 2006 for a description of this approach). As reported in Table 3, the high levels of correspondence between the full sample's parameter estimates and the average parameter estimates from the random subsamples suggest that parameter instability due to collinearity is not a concern.⁵

⁵ We thank the Editor for his direction regarding this particular issue.

3.3. Study 2: survey-based field study

3.3.1. Method

Business managers from the same online panel were invited to participate in study 2. Panelists were limited to mid-level or executive managers who either described their current functional role as procurement or were decision makers and/or influencers in purchasing raw materials/components at their respective companies. In contrast to study 1, which asked respondents to “react to” hypothetical purchase scenarios, study 2 asked respondents to think about an actual, specific work situation in which they were part of a buying team or committee responsible for selecting or recommending a particular product for their business. Respondents were then instructed to keep the purchase situation in mind and to report on the buying team's views when responding to survey questions (i.e., they were instructed to represent their buying team's viewpoints rather than offer their own personal opinions).

The data collection effort yielded 238 questionnaires from managers who are actively involved in procurement activities within their companies. Of those questionnaires, 17 were discarded because of excessive missing data or obvious answer patterns. In addition, potential professional respondents were excluded from the sample by using mean survey completion times as an elimination criterion (respondents with completion times in excess of ± 1 standard deviation from the mean were excluded from the sample). This filtering process yielded 180 usable questionnaires. The resulting sample was composed of a slight male majority (52%), with a model age response of 35–44 years old. A majority of the respondents described themselves as white (73%) college graduates (79%). Respondents were drawn primarily from two industries: services (49%) and manufacturing (19%).

3.4. Measurement model

Purchase risk and brand sensitivity were measured using the same items employed in study 1 (adjusted for tense). The correlation (r_{xy}) between the brand sensitivity ($\bar{x} = 4.98$, $s.d. = 1.74$) and purchase risk ($\bar{x} = 3.74$, $s.d. = 1.54$) measures is $-.17$ ($p < .05$). As in study 1, the adequacy of the study's measures was evaluated via a CFA that was estimated using LISREL 8.80. The CFA fit indices suggest that the measurement model provides a very good fit to the data (Hu & Bentler, 1999; $\chi^2 = 20.7$, 13 degrees of freedom [d.f.], $p > .05$; comparative fit index [CFI] = .99; standardized root mean squared residual [SRMR] = .07). In addition, the scales' high composite reliabilities (brand sensitivity = .93; purchase risk = .87) and AVEs (brand sensitivity = 83%; purchase risk = 63%) indicate that the measures are reliable. Finally, the measures achieve discriminant validity, as the AVE of each construct is substantially greater than the shared variance between the constructs.

In addition, consistent with our definition of the construct, we measured competitive intensity using a single item, four-category scale, which the respondents used to indicate the number of major brands present in their supplier's environment ($\bar{x} = 2.89$, $s.d. = 1.04$). The correlation (r_{xy}) between the competitive intensity measure and the brand sensitivity and purchase risk measures is .39 ($p < .01$) and $-.24$ ($p < .01$), respectively. See the Appendix A for a list of the study's measures.

3.4.1. Test of Hypothesis 1 (Replication)

Much like study 1, the hypothesis was evaluated by first conducting a visual inspection of the relationship followed by a regression analysis in SPSS 19.0. As indicated in Table 4, the results of the analysis provide strong support for the presence of a U-shaped relationship between purchase risk and brand sensitivity. Once again, as purchase risk increases from low to moderate levels, brand sensitivity decreases (negative linear term; $\beta = -1.19$, $p < .01$),

bottoms out, and finally increases again (positive quadratic term; $\beta = .13$, $p < .01$).

3.4.2. Test of Hypothesis 2

As indicated in Table 4 and graphically illustrated in Fig. 3, the results of the analysis provide support for Hypothesis 2 (i.e., we find significant linear and quadratic interaction terms). More precisely, in low competitive intensity environments, the purchase risk-brand sensitivity relationship decreases very sharply as risk moves from low to moderate levels. In high competitive intensity environments, the negative relationship is much weaker and results in only a modest reduction in the levels of buyer brand sensitivity. In addition, as risk moves from moderate to high levels, the relationship between brand sensitivity and purchase risk becomes stronger in environments characterized by low levels of competitive intensity than in those characterized by high levels of competitive intensity. Stated differently, the purchase risk-brand sensitivity relationship is relatively flat when competitive intensity is high and decidedly concave when competitive intensity is low.

3.5. Follow-up analysis

We once again performed a series of follow-up analyses using the four separate, single-item measures of purchase risk as the predictors in our model (in the case of this second study, the mean inter-item correlation for the four measures is .61, with a standard deviation of .13). In contrast to the first study, the results for performance risk, financial risk and overall risk all reveal significant ($p < .05$) linear (negative) and quadratic (positive) effects, while the results for social risk only reveal a significant ($p < .01$) linear (negative) effect. This result thus indicates that the constituent elements of risk may relate differently to brand sensitivity, depending on the context. However, it is worth noting that across studies 1 and 2, using an additive measure of risk (which combines all of the dimensions of risk) or a single-item

Table 4
Study 2: results of regression analyses.

Predictor Variables	Hypothesis Tested			
	Hypothesis 1 (Replication)		Hypothesis 2 (Extension)	
	B (S.E.)	Avg. B (S.E.)	B (S.E.)	Avg. B (S.E.)
<i>Risk Trend</i>				
Purchase Risk	-1.27^{***} (.36)	-1.24^{***} (.38)	-3.96^{***} (1.15)	-4.09^{***} (1.21)
Purchase Risk Squared	$.15^{***}$ (.05)	$.14^{***}$ (.05)	$.43^{***}$ (.14)	0.45^{***} (.15)
<i>Interaction Effects</i>				
Competitive Intensity			-1.27 (.68)	-1.34 (.72)
Purchase Risk x Competitive Intensity			$.89^{**}$ (.36)	$.92^{**}$ (.38)
Purchase Risk Squared x Competitive Intensity			$-.10^{**}$ (.05)	$-.10^{**}$ (.05)
Adjusted $R^2 =$.07		.22	

Notes: $n = 180$. All parameter estimates (B) are presented in unstandardized form. S.E. = standard error of the estimate. Avg. B = average unstandardized effect of the predictor variable across 10 different sub-samples, each of which was composed of about 90% of randomly selected cases from the overall sample. The average unstandardized effects (i.e., Avg. B) were estimated to gauge the stability of the parameter estimates given the potential for unstable estimates due to multicollinearity in models involving nonlinear and product terms (see Echambadi et al., 2006; Echambadi & Hess, 2007). Given the high levels of correspondence between the unstandardized and average parameter estimates, we conclude that parameter instability due to multicollinearity is not a concern.

** $p < .05$, two-tailed.

*** $p < .01$, two-tailed.

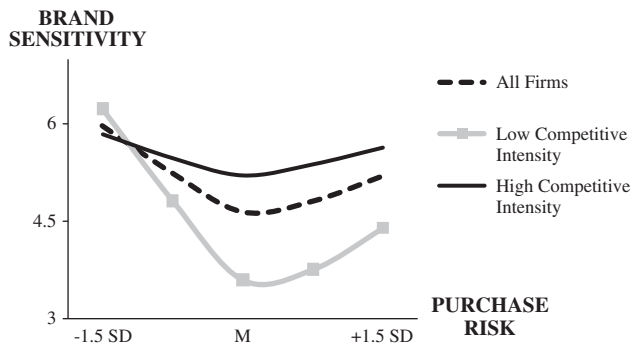


Fig. 3. Study 2: brand sensitivity as a function of purchase risk and competitive intensity.

measure of overall risk generally converges on the same result, namely, a U-shaped relationship between purchase risk and brand sensitivity. Finally, much like study 1, we assessed parameter stability by estimating average effects across 10 randomly drawn subsamples; the results suggest that the model's parameter estimates are very stable (refer to Table 4 for details).

4. Discussion, directions for future research and implications

Two complementary perspectives appear in prior literature pertaining to how organizational buyers make product choice decisions. Each suggests a very different role for brands in organizational buying contexts. The first, more dominant perspective argues that organizational buyers manage their increasing purchase risk by pursuing choice strategies based on the careful evaluation of objective criteria in which information search offers the primary mechanism for risk reduction. In contrast, brand-driven views of decision making suggest that organizational buyers resort to heuristic-based decision making in the face of high-risk purchase situations. The first perspective thus suggests a negative relationship between purchase risk and brand sensitivity, whereas the second perspective suggests a positive relationship. Our research bridges these two complementary perspectives and finds robust empirical support for a U-shaped relationship between purchase risk and brand sensitivity such that buying centers are more brand sensitive when risk is relatively low and relatively high. This finding is consistent with the notion that brands serve not only to minimize risk but also as a cue for choice simplification in low-risk situations, for which the motivation to engage in a deliberate search process may be lacking (Kotler & Pfoertsch, 2006).

In addition, the results reveal that under conditions of high competitive intensity, the purchase risk-brand sensitivity relationship is somewhat tenuous (i.e., flattened), but average levels of brand sensitivity are generally high. Thus, in highly competitive environments, brand sensitivity appears to be less influenced by the risk inherent in the purchase situation. The opposite is true in low competitive intensity environments, where lower average levels of brand sensitivity are the norm. In such environments, the U-shaped relationship is accentuated, such that purchase risk is a stronger determinant of brand sensitivity (when compared to high competitive intensity environments).

As part of our analysis, we considered whether the purchase risk-brand sensitivity relationship differed based on the specific type of risk (e.g., performance, financial or social) considered. The results of our two field studies differed in this regard. In the first study, the overall risk of the purchase situation declined and then increased as a function of risk. In the second study, performance, financial and overall risk all exhibited the proposed U-shaped relationship. These results suggest that different types of risks may be more relevant to

decision makers under different types of conditions; different types of risks may thus affect the relative importance of brands under different conditions. This discrepancy in our findings raises an interesting avenue for future research.

Future research should extend our current line of inquiry by employing a conceptualization of risk that explicitly accounts for two important dimensions of risk that are often entangled in risk measures: decision makers' judgment about the (1) likely severity of an adverse event and (2) likelihood that the adverse event will occur. Recent empirical work (e.g., Cox, Cox, & Mantel, 2010) suggests that the two constituent dimensions of risk may operate independently to affect product use behaviors in consumer markets. Investigating the separate effects of these two facets may offer important insights missed by global measures.

The findings from this study also have several important implications for managers. First, based on our interviews, it appears that practitioners view B2B brands as being most relevant and most likely to offer favorable returns in high-risk situations. Our study's results clearly demonstrate that this is not the total story; there is a definitive payoff for B2B brand-building in low-risk situations. Second, we find evidence in support of the "IBM effect" and argue that managers of strong brands should heighten rather than alleviate perceptions of risk. In one of our interviews, a manager suggested that salespeople should be trained to "create a state of unrest" to leverage brand assets in high-risk situations. In contrast, managers of weaker brands should seek not to minimize risk completely but rather to create environments of moderate risk.

Third, our findings offer some insights into appropriate product development and promotion policies for various products. Our research indicates that companies with strong brands should highlight the importance of the purchase and bundle their products and services to create perceptions of complexity, intangibility, and ultimately, risk—which can only be addressed by focusing on intangible features and benefits (Mudambi, 2002). In high-risk situations, weaker brands should promote more tangible product elements. They can accomplish this objective by unbundling their product/service offerings to focus prospects on more tangible, functional criteria. Doing so could potentially sway a buying center's risk perceptions from high to moderate when operational merit appears to be more relevant than brand reputation.

Finally, these findings suggest that the communication objectives of managers of strong brands should be the following: (1) to simplify the decision-making process by reinforcing brand awareness to ensure the inclusion of their brands in the consideration set of buyers in low-risk situations while also offering an unbundled, and therefore more tangible, product offering, and/or (2) to highlight the uncertainty and adverse consequences inherent to certain purchase situations while assuaging those same concerns with a customized, bundled solution, a long-term relationship, and secure brand reputations. Even managers of somewhat weak brands should build sufficient brand awareness to ensure that buying centers at least consider their products; these managers may subsequently attempt to influence perceptions of the purchase situation such that they move into the middle of the risk continuum.

This research effort represents a step toward a better understanding of the role of brands in organizational buying contexts. The studies' results suggest a complex relationship between purchase risk and brand sensitivity such that brand sensitivity is high when risk is very low or high.

Generally speaking, our research bridges complementary perspectives regarding the relative influence of objective and subjective factors on organizational buying decisions by suggesting that both play roles in decision making, contingent on buyers' information processing constraints and motivation to engage in diligent elaboration. By examining the role of brands in organizational buying contexts, this study also extends current perspectives on buying group dynamics and behavior.

Appendix A. Study 1 and Study 2 Measurement Items

BRAND SENSITIVITY (1 = strongly disagree, 7 = strongly agree; Hutton, 1997; Kapferer & Laurent, 1988; Zablah, Brown, & Donthu, 2010)

1. In this purchase, the brand name would be considered.
2. Before recommending this product, we would take the brand into account.
3. With this purchase, the brand name would be important to us.

BRAND IMPORTANCE (constant sum scale; item employed in bold; Hutton, 1997)

Please divide 100 points between the following attributes in terms of the relative importance they played in the product selection process. Note: Allocating a larger number of points to an attribute would indicate it is relatively more important than an attribute with a smaller number of points.

- Support services (e.g., pre-sale and post-sale services including training, maintenance, call center support).
- Functionality (e.g., precision, strength, durability, reliability).
- **Brand name (e.g., reputation, how well known the manufacturer is, how others view it in general terms, company history, associations, loyalty level).**
- Logistics and distribution (e.g., availability of product, ease of ordering, lead time, delivery reliability and convenience, capacity to handle the order).
- Price (e.g., quoted price, degree of discount, financial support services).
- Technology used (e.g., innovativeness, upgradeability, compatibility, ease of use, latest technology).

PURCHASE RISK (1 = very low, 7 = very high; Mudambi, 2002)

1. Risk due to the performance/functionality of the product.
2. Risk due to the potential of financial loss or high costs.
3. Risk due to the potential that the product would not meet the approval of management or members of your peer group.
4. Overall risk of the purchase.

PURCHASE IMPORTANCE (semantic differential scale; Cannon & Perreault, 1999)

Compared to other purchases your firm makes, this product is:

1. Important–unimportant.
2. Nonessential–essential.
3. High priority–low priority.
4. Insignificant–significant.

PURCHASE COMPLEXITY (semantic differential scale; Cannon & Perreault, 1999)

Compared to other purchases your firm makes, this product is:

1. Simple–complex.
2. Complicated–uncomplicated.
3. Technical–non-technical.
4. Easy to understand–difficult to understand.

PRODUCT TANGIBILITY (semantic differential scale; Laroche, Bergeron, & Goutaland, 2001)

1. This product is very tangible.
2. I would be able to test this product.
3. There is enough product information to get a clear idea of what it would do.
4. I have a clear picture of this product.
5. This product is very easy to understand.
6. This item is very concrete.
7. This item is very specific.

INDIVIDUAL RISK PROPENSITY (1 = strongly disagree, 7 = strongly agree; Donthu & Garcia, 1999; Donthu & Gilliland, 1996)

1. I would rather be safe than sorry.
2. I want to be sure before I purchase anything.
3. I avoid risky things.

COMPETITIVE INTENSITY

Which of the following best describes the supplier environment you've been recalling?

1. Has no major brands = 1
2. Has a small number of major brands = 2
3. Has an even mix of major brands and less well-known brands = 3
4. Has many major brands = 4

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