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# The contingent value of marketing strategy innovativeness for product development performance in Chinese new technology ventures

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**Abstract**

This study extends research on entrepreneurial behavior by investigating the relationship between the marketing strategy innovativeness (MSI) and new product performance in technology-based new ventures in China. Specifically, premised on contingent resource-based view we argue that MSI is a firm capability that must be bundled with external managerial relationships and be deployed in the appropriate environment to ensure its success. We found that the team's extra industry relationships and market dynamism enhanced the impact of MSI on new product performance. In contrast, top management team's intraindustry relationships, financial relationships, and technology dynamism hindered the impact of MSI on new product performance.
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## 1. Introduction

The vast majority of research on organizational innovation adopts a resource-based perspective that predicts positive returns to organizational resources and capabilities. This work has been restricted, however, to the narrow context of product innovation. Although product innovation enhances firm performance only when it is successfully commercialized, prior research tends to pay little attention to accompanying marketing innovations (Shervani & Zerrillo, 1997). The current study concerns a neglected, yet potentially positive entrepreneurial strategic activity — marketing strategy innovativeness (MSI) — which refers to the degree to which the marketing strategy which accompanies a new product differs from competing strategies and conventional practices (Andrews & Smith, 1996; Hambrick, Cho, & Chen, 1996; Menon, Bharadwaj, Adidam, & Edisonet, 1999; Sethi et al., 2001). Examples of MSI practices include the use of new packaging, new distribution methods and channels, new advertising media and content, ingenious pricing and payment methods. MSI ensures the new product enjoys a unique competitive position because it is radical, departs from the status quo, is proactive, unconventional and unpredictable (Andrews & Smith 1996; Hambrick et al., 1996; Menon et al., 1999). Thus, MSI is likely to strengthen the position of the new product in the marketplace above and beyond the value conveyed by its physical characteristics (Andrews & Smith, 1996).

MSI is classed as capability because it is the outcome of a firm's specialized knowledge, unique understanding of the environment and idiosyncratic processes (Eisenhardt & Martin, 2000).[2] As Verona (1999: 139) posits, the ability to creatively and imaginatively make strategic decisions regarding a product's development and its marketing are rent-generating routines that enhance performance. MSI may enhance product development performance by creating uncertainties for competitors through

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[2] MSI can conceivably be also an input to new knowledge generation. For example, firms can learn from innovative pricing or advertising strategies and exploit this new knowledge across different product innovation projects. In this paper we do not pursue this direction; we rely on one cornerstone of the knowledge-based perspective (Grant, 1996) and conceptualize MSI as a higher order capability which is built on specialized knowledge owned by individuals within the firm.

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variation in the bases of competition (Eisenhardt & Tabrizi, 1995). Capturing the contribution of MSI at the product development level is also consistent with the idea that resources' contribution to performance should be investigated by disaggregating firm performance into processes which are less distal from the focal resources (Ray, Barney, & Muhanna, 2004).

However, Eisenhardt and Martin (2000: 1110) suggest that despite their value, capabilities are substitutable because there are multiple paths through which firms can acquire the same dynamic capabilities independent of other firms. Hence, capabilities may be necessary, but not sufficient, sources of *sustained* competitive advantage. This implies that a focal capability needs to be made inimitable through combination with other organizational skills and capabilities and deployment in the appropriate environment (Eisenhardt & Martin, 2000). As Barney (1991) argues, even though a firm's capability may be valuable, rare and inimitable, its ability to provide sustainable competitive advantage often lies in its configuration with complementary internal and external resources. Teece, Pisano, and Shuen (1997: 515) also argue that performance outcomes of a firm's capability depend on its management ability to deploy the capability in an appropriate environment. Finally, Porter (1991: 108) warns against internal focus on resources because the competitive value of resources can be enhanced or eliminated by changes in technology, competitor behavior or buyer needs.

Drawing on this contingent resource-based view of the firm,[3] we advance and test the idea that, particularly in new ventures in an emerging economic environment, the impact of MSI on new product performance is conditional upon its top management team's external relationships and environmental conditions. New ventures tend to have higher failure rates than established firms. Stinchcombe (1965) provided several reasons for this liability of newness. They have limited resources, lack of information processing structures, and stable links with clients, supporters and customers. Given their liabilities of newness, new ventures need to be creative and learn new roles and tasks and this may conflict with constraints on their resources. Moreover, as a form of first-moving, MSI is inherently risky (Ketchen, Snow, & Hoover, 2004). First, it takes time and resources (i.e., increased salesforce efforts) to educate customers to the new marketing strategy features; further, MSI can expose new ventures to strong and unpredicted reactions by incumbents; lastly, MSI can be imitated by competitors, who can capitalize on the early errors made by the new venture. These contrasting arguments reinforce the need to understand under which circumstances (i.e., on which internal and external contingencies) MSI will contribute to new product performance.

In contrast to developed market economies, the complexity and dynamism of the transitional environment in China means that firms must confront the challenges of new (often dysfunctional) competition and also collapsing capabilities (Li & Atuahene-Gima, 2001, 2002). Thus, scholars suggest that success in China market requires significant exploration involving experimentation and innovation (Luo, 2002; Luo & Park, 2001, p. 145). We contend that to sustain the viability of their innovative marketing strategies in China, new venture managers may need to leverage their external relationships. Research suggests that external relationships are particularly important sources of valuable resources and information that can augment firm performance in transitional economies like China (Park & Luo, 2001; Peng & Luo, 2000). Because of their liabilities of newness, we posit that a venture's top management team's external social capital (i.e., the ability to mobilize financial resources, information and support through external relationships with managers inside and outside the industry, and with officials of government and financial institutions) may determine the degree of success of MSI. In support of this idea, Lee, Lee, and Pennings (2001) found that external relationships with venture capitalists and universities enhanced the performance effects of the entrepreneurial orientation and technology capabilities of new ventures, respectively. Further, considering that the value of a firm's capabilities and resources is context specific (Eisenhradt & Martin, 2000; Porter, 1991; Teece et al., 1997), we propose that technology and market uncertainty will play an important role in the effectiveness of MSI.

This study contributes to the literature in three important areas. First it contributes to the abovementioned debate on the inherent value of MSI and its relationship with performance. For example, prior research has assumed a positive relationship between MSI and new product performance (Andrews & Smith, 1996). However, such an assumption tends to ignore the transaction costs associated with MSI and, more generally, overlooks the potential problems associated with the deviation from industry practices. Hence, determining *when* MSI will increase new product performance offers a direct test of the contingency view of internal firm capabilities espoused in resource-based theory (Barney, 1991; Teece et al., 1997). Second, despite recent theoretical developments (Blyler & Coff, 2003), few empirical studies model the firm's social capital as a potential complement of internal capabilities; this study extends our understanding by for the first time examining managerial relationships both inside and outside the industry, as called for by Peng and Luo (2000). Finally, this study extends and lends support to recent work that integrates resource-based and social capital theories as an explanation for new venture performance in the Chinese context (Lee et al., 2001).

## 2. Conceptual model and hypotheses

### *2.1. Resource-based theory and MSI in technology-based new ventures in China*

According to the resource-based theory, performance differences across firms are the result of variance in their resources and

[3] It is important to specify that by mentioning RBV we do not refer to the neoclassic equilibrium-oriented stance (e.g., Barney, 1991; Peteraf, 1993). Rather, our approach is more consistent with a dynamic capabilities (DC) approach, which focuses on resource bundling, innovation and path-dependency (Teece et al., 1997). Despite this fact, we prefer using the expression "contingent resource-based view of the firm" to stress the point that resources' contribution to competitive advantage is dependent on internal factors (i.e., complementary resources) and external factors (environmental dynamics). We acknowledge one of the IMM reviewers for suggesting this point.

capabilities that are rare, valuable and inimitable (Barney, 1991). This theory implies that to outwit competitors, new ventures need to develop distinct and innovative strategies and processes. Ensley, Pearson, and Amasone (2002: 367) contend that, because of their liability of newness, "the task of the new venture TMT [top management team] is largely one of creativity and learning, where the ability to produce novel and integrated solutions is an important attribute" for high performance. New ventures are at a competitive disadvantage against large and established firms in their traditional domains because of lack of resources, immature organizational processes and limited operational experience (Lee et al., 2001: 617). Hence, reliance on traditional products, marketing methods, and organizational processes is bound to lead to failure.

The survival of new ventures depends largely on the introduction of new and differentiated products, processes and marketing innovations. Such innovations may be rare and valuable capabilities because the knowledge needed to develop and successfully implement them involves socially complex learning and relational skills in strategy making that are unique to the firm (Eisenhradt & Martin, 2000). For example, MSI involves the interaction of a group of individuals with different expertise and sources of knowledge, the use of integrative procedures to coordinate and combine their skills, knowledge and abilities, and idiosyncratic reward, training and control systems. In addition, such a process involves firm's initiatives based on managerial discretion formed on the basis of understanding of the environment. Decision-makers attend to the environment, interpret the conditions and assign meaning to the actions they take in idiosyncratic ways (Verona, 1999). Furthermore, MSI is path dependent. It results from the idiosyncratic culture, experience, and history of the firm and from functional, educational, and tenure backgrounds of the decision-makers (Andrews & Smith, 1996; Hambrick et al., 1996). The availability of a group of executives with the requisite characteristics to develop innovative strategic actions is highly constrained: it can neither be easily developed within the firm nor acquired from outside (Eisenhardt & Martin, 2000). Following these arguments, the central premise of this study is that MSI is a key capability of a new venture.

New ventures must develop innovative strategies but the possession of an innovative strategy does not assure commercial success of a product. Rather, consistent with the contingent resource-based view of the firm, the productive capacity of MSI is determined by its congruency with other organizational capabilities and the environmental conditions. In particular, effective implementation of MSI and its effects on performance cannot be assumed by new ventures in a transitional economy, such as China. Market reforms in China have led to the entry of a great number of foreign firms increasing the competitive pressures for local firms. This has led to increased control of marketing resources, such as outdoor advertising space, by foreign firms and increased marketing costs (EIU, 2002). Also, Chinese consumers tend to perceive that foreign brands are of higher quality, reliability, and are more sophisticated than locally produced products (Li and Atuahene-Gima, 2002). Further, given the transitional nature of the economy, the Chinese government plays an important role in regulating firms' marketing activities. For example, the pricing, packaging, distribution, and advertising of products are increasingly being controlled by central and local governments with the objective of preventing activities or messages that contradict or divulge state policies and secrets or may be harmful to the dignity of the Chinese (People's Daily, 2002); though public regulations on marketing strategy domains (e.g., packaging, advertising) exist in developed market economies as well, the degree of control put forth by Chinese authorities is tighter and highly discretional and therefore represents an additional constraint to the implementation of innovative marketing strategies in the Chinese context.

We believe that although these environmental conditions make it imperative for new ventures to develop innovative strategies, they nevertheless pose significant obstacles in the implementation phase. Chinese new ventures also face significant external obstacles in obtaining the resources that may be required to implement an innovative strategy. China's transitional economy is characterized by weak capital market structures, institutional instability and lack of coherent business laws. In comparison with well-established firms, new ventures have less legitimacy in terms of relationships with suppliers, customers, and government institutions. Under these circumstances, new ventures have greater external difficulties in raising resources, licenses and approvals for their activities (Li & Atuahene-Gima, 2001), and face increased uncertainty and costs in consummating market exchanges (Xin & Pearce, 1996). Following the contingent resource-based view, we argue that to harness the advantages of MSI, Chinese new ventures must overcome these obstacles by relying on the external relationships of their top management (Lee et al., 2001) and by deploying their resources in an appropriate technology and market environment (Teece et al., 1997).

### *2.2. Moderating role of top management team external relationships*

External relationships are capabilities that are difficult to duplicate by competitors because they are socially complex. Hence, they constitute effective sources of information and resources for new ventures that augment their meager resources in implementing strategic innovations (Lee et al., 2001). Thus, external relationships contribute to the effectiveness of organizational action by reducing transaction costs within and between firms, notably information search and decision-making costs. The idea that external relationships may provide valuable sources of information and influence for organizations has been particularly important in work on transitional economies such as China. Researchers have argued that *guanxi* relations in China provide vital sources of information and influence that can be used to promote company performance (Park & Luo, 2001; Peng & Luo, 2000). Pervasive uncertainties and high levels of risk associated with businesses in transitional economies can be buffered by external relationships that can provide access to technical and managerial expertise that may not readily be available through labor markets. Moderating roles of this type

are commonly performed by impersonal agents in more highly developed markets; however, transitional economies typically lack the necessary social and institutional infrastructure for that type of exchange and companies must rely on informal channels (Li & Atuahene-Gima, 2001). Park and Luo (2001) found that Chinese firms pursuing creative strategies sought more resources from external sources to mitigate the costs and risks associated with such strategies. This research suggests a moderating role for such relationships in the use of innovative strategies.

Prior research suggests two main types of external relationships: (1) those with managers of other firms, and (2) those with officials of government and financial institutions (Peng & Luo, 2000). Relations with managers can be further categorized into two: relationships with managers *outside* the firm's industry (extraindustry relationships) and those with managers *within* the same industry (intraindustry relationships) (Geletkanycz & Hambrick, 1997). Our focus on these external relationships is not to deny the importance of other specific managerial relationships such as those with customers and employees. Rather, our focus responds to Peng and Luo's (2000: 498) call for the need to probe deeper into types of managerial relationships in China and also recognizes the critical importance of government and financial relationships for new ventures in China (Park & Luo, 2001; Peng & Luo, 2000).

### 2.3. Intra and extraindustry relationships

Extraindustry relationships refer to the degree to which the top management team has built connections with managers of firms *outside* its own industry, defined as the high-technology industry in which the new venture operates. Intraindustry relationships refer to the degree to which the top management team has built connections with executives of other firms operating *within the same* industry as its own firm. The recent contribution by Blyler and Coff (2003) has strongly advocated the central role of social capital in enabling dynamic capabilities. However, different aspects of managers' connections to social networks may have opposite effects on the content of strategy formulation. Geletkancyz and Hambrick (1997) argued that while intraindustry relationships promote conformity to industry norms and recipes, extraindustry relationships provide a broader range of information and evoke strategies that deviate from prevailing practices. Their research highlights an important connection between inter-firm relationships and internal processes of information acquisition and learning in strategic decision-making.

Extraindustry relationships serve as conduits for new information and insights into the environment. Because managers outside the focal new venture's industry operate in different competitive and resource environments they possess different experiences and mental models, and have access to new ideas about different strategies. These relationships inform the managers of the focal venture about potential new strategies, and allow greater speed, flexibility and efficiency in strategy implementation. Hence, extraindustry relationships are likely to reduce the high cost and potential errors associated with the collection and use of new information in an immature social interaction context of a new venture. By eliminating these transaction costs, extraindustry relationships increase the types of new information and insights such that top managers are able to spot implementation problems in MSI they otherwise would have missed.

Intraindustry relationships, in contrast, help firms to acquire deeper knowledge and understanding of the competitors' strategies. While knowledge of competitors may encourage new ideas, such knowledge may actually harm the implementation of an innovative strategy in marketing. The logic is that managers in the same industry are exposed to familiar opportunities and threats, and routines with which to handle them. Hence, the top management team of the focal new venture is less likely to discover novel insights and ideas for *implementing* an innovative strategy in marketing. Intraindustry relationships provide mental models that are a misfit with the focal venture's MSI and therefore may jeopardize its effective implementation.

**H1a.** When extraindustry relationships are high, MSI has a positive effect on new product performance.

**H1b.** When intraindustry relationships are high, MSI has a negative effect on new product performance.

### 2.4. Government and financial relationships

We define government and financial relationships as the degree to which the top management team considers relationships with officials of government and financial institutions important to the success of their venture and commits effort and resources into building them (Li & Atuahene-Gima, 2001; Peng & Luo, 2000). The effort and commitment that go into building and maintaining these relationships reflect the intensity of interaction between the top management team and these external sources of information and other resources (Xin & Pearce, 1996; Zhao & Aram, 1995). As mentioned earlier, central and local governments find it necessary to control marketing activities in China. Marketing controls and regulations increase the uncertainties and costs associated with implementing an innovative strategy. Further, in a credit-rationed transitional economy, problems due to limited financial resources that plague new ventures are exacerbated (Li & Atuahene-Gima, 2002). Moreover, as noted by Blyler and Coff (2003), because high-tech new ventures generate a lot of appealing business opportunities for investors, managers' external contacts may have much the same importance as sound business plans to attract resources. Building deeper personal connections with officials of government and financial institutions provides the best means of obtaining financial resources, information, approvals, licenses, and other resources that may be instrumental in ensuring the success of an innovative strategy in China (Li and Atuahene-Gima, 2001; Xin and Pearce, 1996). Hence,

**H2a.** When government relationships are high, MSI has a positive effect new product performance.

**H2b.** When financial relationships are high, MSI has a positive effect on new product performance.

### 2.5. Moderating role of environmental dynamism

In addition to external relationships, an important moderating factor is the environment in which MSI is deployed. Resource-based theory contends that environmental factors can neutralize or dissipate a resource's comparative advantage (Porter, 1991; Teece et al., 1997). Milliken (1987) cautions that different environmental conditions may pose different threats and opportunities for firm in implementing strategies and that a broad conceptualization of environmental dynamism is certain to mask important insights. In this study, we examine the different moderating effects of technology and market dynamism.

Technology dynamism refers to the perceived speed in the change of technological development in the firm's industry (Jaworski & Kohli, 1993). In a dynamic technology environment, product development cycles are shorter and there are increased new products introductions by competitors. These conditions make information obsolete very quickly thereby increasing the firms' search and coordination costs in strategy making. Identifying the potential effects of technological changes on customer needs and behavior and translating them into specific actions are complex and challenging for the firm. This is because technology dynamism imposes severe limitations on organizational resources and processes. In support of this argument, recent research suggests that technology dynamism leads to a lack of synergy between the resource requirements of projects and the organizational resources and skills available to project teams. Thus, in technologically dynamic environment, the project team lacks information about the application of technology to current development projects and the potential effect of technological changes (Song & Montoya-Weiss, 2001: 66). Pavitt (1998) also notes that firms often cannot match their coordination and control systems to new technological challenges. Thus, technology dynamism is usually thought of as competence-destroying (Tushman & Nelson, 1990).

Against this backdrop, we argue that MSI in a technology dynamic environment may lead to premature commitment to product benefit claims, distribution and other marketing positions, which may turn out to be costly for performance as the technology environment changes. In other words, managers have a poor sense of what strategic actions would work against emerging new products in a rapidly shifting technology landscape and why. Further, unlike established firms, these costs and uncertainties associated with implementing an innovative strategy in dynamic technology environment are exacerbated for new ventures. Their lack of adequate resources and processes for effective information acquisition and use suggests that MSI would have detrimental effects on new product performance in such an environment.

**H3a.** When technology dynamism is high, MSI has a negative effect on new product performance.

Market dynamism refers to the perceived speed of change in product preferences, customer demand and emergence of new customer segments in the industry (Jaworski & Kohli, 1993). This description suggests demand growth and munificence. Such an environment provides new informational opportunities to clarify the benefits and value of a new product against competing products. Research suggests that established firms have considerable problems responding to new market opportunities because of the overriding urge to cater for the needs of their existing customers. Consequently, they fail to see the potential benefits of the market changes (Christensen & Bower, 1996). Further, the need to maintain relationships with distribution channels and suppliers may prevent the established firm from pursuing new market opportunities. This argument suggests that under high market dynamism new ventures have greater flexibility to allocate resources for implementing new ideas and solutions in marketing because of the lack of established links with customers and suppliers.

A dynamic market environment also allows managers a high degree of choice in the strategic options because of the variety and change it offers. According to Goll and Rasheed (1997: 585), an environment that allows variety of opportunities and change constitute a high discretion environment, characterized by munificence such as high demand growth rate and demand instability. In such an environment an innovative strategy can exploit environmental opportunities. This prediction is consistent with extant research findings that creative strategies lead to better performance in dynamic environments by increasing the uncertainty for competitors. Brown and Eisenhardt (1997) found that firms that create successful new products used a variety of experimental probes to create options for the future. Similarly, Eisenhardt and Tabrizi (1995) found that an experiential approach to product development, which relied on improvisational tactics involving elements of surprise and unpredictability, enhanced performance when deployed in fast-changing environments. Hence,

**H3b.** When market dynamism is high, MSI has a positive effect on new product performance.

## 3. Research methods

### 3.1. Sample and data collection

We drew a random sample of 500 new ventures (eight years old or younger) from the tenant list of firms in a high technology zone in Shenzhen, perhaps the most developed high-technology district in China. Randomization was obtained by selecting every third firm from the tenant list. Of the 249 firms who agreed to participate, we obtained data from 177 firms for an effective participation rate of 35%. The sample had an average of 5.58 founding team members (maximum = 13, minimum 2). The average age of firms was 5.67 years (s.d. = 2.61 years). On average the sample firms had 322 employees with average sales of 66 million USD. Of the responding firms, 52% were from the electronic information industry (e.g., information technology,

telecommunications, electronics, computer manufacturing and software development), and 48% in non-electronic information industries (pharmaceutical, biotechnology; new materials, aerospace, scientific instruments, and medical equipment). We compared participating firms with a sample of the 251 non-participating firms for which data for venture age, number of founders, number of employees, and sales were available. We found no significant differences.

Using the traditional back-translation process, the questionnaire was originally prepared in English and then translated into Chinese by two management researchers competent in both languages. To ensure validity, two doctoral students then back translated the Chinese version into English. The questionnaire was then pilot-tested through in-depth group interviews with 16 founding team members of 5 new ventures to determine the face validity and relevance of the measures in the Chinese context. From the feedback we made several changes in the instrument to improve its clarity and to ensure effective communication with the respondents.

We conducted the field data collection over a six-month period in 2000. We collected the data by using an on-site structured interview, whereby a trained interviewer scheduled appointments, presented the key informants with the survey questionnaire, answered general questions and collected the completed questionnaire. In most emerging economies the lack of reliable archival data and inadequate postal systems make on-site data collection the key to the right respondents, correct use and understanding of terms, and to better response rates (see Li & Atuahene-Gima 2001). We identified and interviewed top management team members who were directly involved in formulating and implementing the marketing strategy for the focal new product. We also offered respondents a "don't know" option during the data collection to ensure that they would not feel pressured to answer each and every question. We assured respondents of anonymity and confidentiality to ensure candid and reliable responses (Xin & Pearce, 1996).

We obtained a single group consensus rating for each questionnaire item from 2 or 3 respondents because this approach reflects the consensus approach to decision making in Chinese firms. In a study of product development in China, Calantone, Schmidt, and Song (1996: 346) observed that Chinese team leaders "frequently asked opinions of the team members during the interviews and insisted on arriving at a consensus answer to each of the measurement items." Our observations during the instrument pretest confirmed this tendency among the study sample. Hence, we capture top management team level data without aggregation.

In addition to reflecting consensus decision-making central to Chinese culture, this approach had other advantages for the current study. First, given the complexity of strategic decision-making, having multiple knowledgeable respondents discuss and answer the questionnaire guards against attribution bias and memory lapses about the events associated with the project, and should therefore yield more valid data than single respondent ratings. Second, although time consuming, the consensus approach ensured greater cooperation and interest from the sample, thus increasing the participation rate of ventures in the study. We learnt that asking multiple respondents to complete the same questionnaire separately was problematic because they viewed such a procedure as implying a lack of trust in their individual responses. Finally, the procedure allowed the respondents to deliberate on the issues and ask for clarifications from the interviewer, in order to ensure a better understanding of the study. These features guard against retrospective bias.

One issue commonly raised concerning survey methodology is common method variance. Several features of this study were designed to guard against this potential bias. First, we followed the recommendation of Podsakoff and Organ (1986) and measured each construct by multiple items to capture the construct domain more accurately and to avoid possible common method bias caused by single-item measurement scheme. All the hypotheses tested in this study involve interaction effects. Strategy scholars (e.g., Brockner, Siegel, Daly, Tyler & Martinet, 1997; Doty, Glick, & Huber, 1993) and methodologists (e.g., Aiken & West, 1991; Evans, 1985) have observed that the complex data relationships shown by predicted interaction effects are not explained by common method bias because respondents cannot guess a researcher's interaction hypotheses to respond in a socially desirable manner. For example, Doty et al. (1993: 1240) suggest that given complex hypotheses, it is highly unlikely that respondents could somehow structure their responses to performance questions to reflect previous responses to multiple items that measured independent variables. In the current study, this would have required the informant to perform the almost impossible task of understanding the full details of the contingency resource-based perspective developed here (and the mathematical formulations that the interaction hypotheses entail) and answer accordingly.

### 3.2. Measures of study constructs

#### 3.2.1. New product performance

It is generally accepted that the measurement of performance of an organization or strategy can be accomplished in two ways. First, performance may be gauged by subjective reports of knowledgeable informants. Second, objective performance data can be collected via secondary, archival sources or by asking knowledgeable respondents to report absolute values of performance when secondary data are unavailable (Brush & Venderwerf, 1992; Chakravarthy, 1986; Chandler & Hanks 1993; Venkatraman & Ramanujam, 1986). In the current study, we could not locate secondary archival sources of product level performance. Hence, like previous research in new venture setting (e.g., Autio, Sapienza, & Almeidaet, 2000), we were obliged to rely on management reports of absolute performance values.

Growth is a key performance outcome for new ventures because it indicates the market acceptance of the ventures products (Brush & Venderwerf, 1992; Chandler & Hanks, 1993). Following previous research (e.g., Autio et al., 2000; Li & Atuahene-Gima, 2002), we asked the respondents to report

the percentage growth of the new product in terms of market share, sales, and profit for up to three years. We used data up to three years to smooth out the effects of peculiar conditions that can affect performance in a particular year. Moreover, because we do not take a bottom line performance indicator, we reduce the concern that rent-appropriation may veil increased performance (Blyler & Coff, 2003). In fact, the extent to which managers appropriate the superior value generated by their external relationship, for example by asking excess compensation to remain in the company, does not affect our growth-based measure of new product success. We calculated the average of the three items as our measure of new product performance (mean=18.89%, s.d.=35.2%; minimum=−23.17%; maximum=31.60%).

### 3.2.2. Marketing strategy innovativeness (MSI)

A marketing strategy was defined to respondents as the set of marketing activities which complement the development of a new product (e.g., determination of marketing objectives, selection of target market segments, pricing, packaging, promotion, distribution, and advertising), by involving resource commitments and decisions that are difficult to reverse in the short term (Hambrick et al., 1996). We measured MSI ($\alpha$=.74) with six items asking the respondents to indicate the degree to which the content of the marketing strategy for the new product was new and different from others developed in the past, contained some new aspects compared to previous strategies, broke the rules of the game in the industry, challenged existing ideas in the industry, and was daring, bold and risky. For this and all other constructs measured with multiple indicators we averaged the indicators to develop measures for analysis. This scale was adapted from Menon et al. (1999).

### 3.2.3. External relationships

Previous research suggests that exploring external relationships is a sensitive issue in China. Detailed questions could easily trigger nonresponses or unreliable responses (Peng & Luo, 2000). Research in China (Xin & Pearce, 1996; Zhao & Aram, 1995) found that resource commitment and effort devoted to external relationships are consonant with the importance that firms attach to them and serve as useful proxies for the frequency of interaction in those relationships. Hence, following Peng and Luo (2000), we constructed items that tap the venture's commitment of resources and effort to these relationships. We measured *extraindustry relationships* ($\alpha$=.60) using three items. We asked the respondents to indicate the extent to which, in the last three years, the top management team had put effort into building relationships with managers of firms *not* operating in their own industry, have built strong relationships with such managers and have consulted with executives who had experience in firms not operating in their own industry. We measured *intraindustry relationships* ($\alpha$=.75) with four items. We asked respondents to indicate the extent to which in the last three years, the top management team had maintained close contact, had social interactions with, had learnt a lot from, and had put a lot of effort and resources into building and maintaining relationships with top managers or founders of other firms in *their industry*. The measures of these two constructs build on descriptions by Geletkanycz and Hambrick (1997). We measured *government relationships* ($\alpha$=.78) with three items. Respondents indicated the degree to which government relationships were important to the firm, have been important to the firm's success, and the degree of effort and resources that has gone into building and maintaining them. *Financial relationships* ($\alpha$=.80) were measured by four items asking respondents to indicate the importance of relationships with officials of financial institutions to the success of their firms, and the degree of effort and resources put into cultivating them. This measurement strategy follows findings in the literature that the degree of importance that executives attach to government and financial relationships is consonant with the degree of their interactions (Zhao & Aram, 1995) and the amount of resources used to build the relationships (Xin & Pearce, 1996). Further, these measures follow advice to researchers to avoid more specific questions in measuring these relationships which are likely to trigger nonresponses (Peng & Luo, 2000).

### 3.2.4. Environmental dynamism

We measured *technology dynamism* ($\alpha$=.81) with four items. We asked respondents to indicate the perceived speed and magnitude of change and dynamism in technology, and the variety of new product introductions afforded by the changing technology in the industry. We measured *market dynamism* ($\alpha$=.62) with three items pertaining to the speed of change associated to customer demand and preferences, and entrance of new customers into the industry. The measures for these two constructs were adapted from Jaworski and Kohli (1993). They assume that industry conditions offer opportunities and threats to an innovation project. Hence, project teams need to attend to conditions in the entire industry to ensure successful project execution.

### 3.2.5. Control variables

In testing our hypotheses we controlled for several factors that may affect new product performance. *Team size* was measured by the number of people who founded the new venture and who play a significant role in strategy making in the venture. This variable may reflect the amount of cognitive resources available to the team and thus its information processing capabilities. The number of full-time employees measured *venture size*. Size is a useful proxy for resources available in the firm as well as the number of external ties and level of legitimacy possessed by the firm (Xin & Pearce, 1996, p. 1644). *Venture ownership* was controlled for because independent and corporate sponsored new ventures may differ in their strategy making processes and performance. We asked respondents to indicate the nature of the current ownership of the venture as either independently owned (coded as 0) or corporate sponsored (coded as 1). *Product quality* was controlled for because it is widely regarded as the most important factor affecting new product performance. We asked the respondents to assess the perceived quality of the new product relative to competing products, to previous products

and how customers perceived the quality and reliability of the product.

### 3.3. Validation of measures

We followed guidelines associated with retrospective data collection in order to ensure the accuracy and validity of the data. We restricted recall time to three years. We also provided rich explanation of the usefulness of the project for the respondents' organizations and offered an incentive (i.e., summary of the results) to foster a sense that they would benefit from involvement in the study. The measurement model was tested by two confirmatory factor analyses grouping closely related constructs. We chose this approach because all the measures of the variables could not be included in a single model without violating the generally accepted five-to-one ratio of sample size to parameter estimate. Second, Campbell and Fiske (1959) note that this type of grouping maximally similar

Table 1
Confirmatory factor analysis results of measures

| Construct and source | Operational measures of construct | Factor loading | *t*-value |
|---|---|---|---|
| Model 1 | Fit indices: $\chi^2$=188.60, *df*=126, *p*<.001; RMSEA=.04; GFI=.90; CFI=.94; NNFI=.94 | | |
| Marketing strategy innovativeness[a] (Menon et al., 1999) | Please indicate your degree of agreement with each of the following statements about the content of the marketing strategy for the new product. | | |
| | • Compared to previous marketing strategies, the strategy for the new product was daring, risky and bold. | .71 | 9.08 |
| | • The marketing strategy challenged existing ideas in the industry. | .65 | 8.86 |
| | • The marketing strategy was innovative. | .71 | 9.50 |
| | • The marketing strategy had some very new aspects compared with previous strategies in our venture. | .50 | 6.56 |
| | • The marketing strategy broke some of the rules of marketing products in our industry. | .62 | 8.32 |
| | • The marketing strategy was different from other marketing strategies we developed in the past. | .72 | 8.97 |
| Product quality[a] (new scale) | Indicate your degree of agreement with each of the following statements about the new product. | | |
| | • The quality of the new product compared well with competing products. | .77 | 11.27 |
| | • The quality of the new product was higher than competitor products. | .83 | 12.38 |
| | • The quality of the new product was better than other products of the firm. | .63 | 8.67 |
| | • The new product was perceived by customers as very reliable with respect to competing products. | .65 | 8.99 |
| | • Customers perceived the new product to be better than the competition. | .69 | 9.73 |
| Technology dynamism[a] (Jaworski & Kohli, 1993) | Indicate your degree of agreement with each of the following statements about the product technology environment in your industry over the last 3 years. | | |
| | • The technology in our industry is changing very rapidly. | .81 | 11.91 |
| | • Technological changes provide big opportunities in our industry. | .78 | 11.22 |
| | • A large number of new product ideas have been made possible through technological breakthroughs in our industry. | .67 | 9.29 |
| | • There have been major technological developments in our industry. | .65 | 8.79 |
| Market dynamism[a] (Jaworski & Kohli, 1993) | Indicate your degree of agreement with each of the following statements about the market environment in your industry over the last 3 years. | | |
| | • In our business, customer demand and product preferences change quite rapidly. | .62 | 7.70 |
| | • New customers tend to have product needs that are quite different from existing customers. | .85 | 10.41 |
| | • Our customers tend to look for new products all the time. | .54 | 6.74 |
| Model 2 | Fit indices: $\chi^2$=212.03, *df*=103, *p*<.001; RMSEA=.05; GFI=.89; CFI=.93; NNFI=.91 | | |
| Extraindustry relationships[b] (new scale) | To what extent do you agree with the following statements about your top management team over the past 3 years? | | |
| | • Our team has put a lot of effort into cultivating relationships with executives of firms outside our industry. | .70 | 9.23 |
| | • Our team has developed strong relationships with executives of firms outside our industry. | .84 | 11.18 |
| | • Our team has members who have experience in firms not operating in our industry. | .71 | 9.30 |
| Intraindustry relationships[b] (new scale) | To what extent do you agree with the following statements about your top management team over the past 3 years? | | |
| | • Our team has maintained close contact with top managers and founders of other firms in our industry. | .60 | 8.03 |
| | • Our team has social interactions with other founders of new ventures with knowledge of our industry. | .63 | 8.65 |
| | • Out team has put a lot of effort into building relationships with other executives knowledgeable in our industry. | .83 | 12.57 |
| | • Our team has learnt a lot from our interactions with executives in our industry. | .75 | 10.35 |
| Government relationships[b] (new scale) | To what extent do you agree with the following statements about your top management team over the past 3 years? | | |
| | • Our relationships with government officials have been important for our success. | .80 | 12.01 |
| | • We have invested a lot of resources into building relationships with government officials. | .84 | 12.89 |
| | • Personal relationships with government officials have been important to us. | .85 | 13.20 |
| Financial relationships[b] (new scale) | To what extent do you agree with the following statements about your top management team? | | |
| | • Our team has developed close connections with officials of financial institutions. | .76 | 11.68 |
| | • We put a lot of resources into cultivating relationships with executives of banks and other financial institutions. | .82 | 12.79 |
| | • Personal relationships with banks and other financial institutions are important to our team. | .67 | 9.99 |
| | • Team members will continue to invest in good personal relationships with officials of banks and financial institutions. | .75 | 11.51 |

[a] Scale format=1 "Strongly disagree" 5 "Strongly agree".
[b] Scale format=1 "Not at all" 5 "To a great extent".

constructs provides a stringent test of discriminant validity. The fit indices presented in Table 1 indicate that the models fit the data well. Each of the construct indicators loads significantly on its intended factor, indicating convergent validity. We conducted a Chi-square difference test for all the constructs in pairs to see if they were distinct from each other. The process involved collapsing each pair of constructs into a single model and comparing its fit with that of a two-construct model. Each two-factor model had a better fit than the associated single-factor model, supporting the discriminant validity of the constructs (results available upon request).

## 4. Analysis and results

Table 2 provides the descriptive statistics and zero-order correlations for the variables. We used a hierarchical moderated regression analysis to test the hypotheses. We regressed new product performance on the control variables, independent variables, and the interactions in sequential steps. We mean centered the independent and moderator variables before creating the interaction terms (Aiken & West, 1991). None of the variables in the study had a variance inflation factor above 3.0 indicating that multicollinearity is not a problem.

The results in Table 3 (Model 3) show that the addition of the interaction variables adds 18% ($\Delta F=4.75$, $p<.001$) to the explained variance in new product performance. Extraindustry relationships strengthen the relationship between MSI and new product performance ($\beta=.30$, $p<.001$). This result supports H1a. Similarly, in support of H1b, the results show that intraindustry relationships weaken the relationship between MSI and new product performance ($\beta=-.14$, $p<.10$). Fig. 1a and b show plots of these interactions which provide support for the hypotheses.

H2a is not supported. We found evidence contrary to H2b predicting that financial relationships bolster the effect of MSI on new product performance ($\beta=-.31$, $p<.001$). The plot of this interaction shown in Fig. 1c provides support for this finding. The interaction of technology dynamism and MSI is negatively related to new product performance ($\beta=-.44$, $p<.001$), in support of H3a. We found support for H3b indicating that market dynamism ensures a positive relationship

Table 3
Results of hierarchical regression analysis of effect of marketing strategy innovativeness on new product performance[a]

| Independent variables | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| *Control variables* | β | β | β |
| Top management team size | −.17 | −.19* | −.17* |
| Venture size | .14 | .13 | −.02 |
| Venture ownership | −.05 | −.09 | −.03 |
| Product quality | .13 | .11 | .05 |
| *Main effects* | | | |
| Marketing strategy innovativeness | | −.20* | −.07 |
| Extraindustry relationships | | −.02 | −.04 |
| Intraindustry relationships | | .19* | .23* |
| Government relationships | | −.00 | −.02 |
| Financial relationships | | −.02 | −.05 |
| Technology dynamism | | .29** | .13 |
| Market dynamism | | −.28** | −.27* |
| *Interactions* | | | |
| Marketing strategy innovativeness | | | |
| ×Extraindustry relationships | | | .30*** |
| ×Intraindustry relationships | | | −.14+ |
| ×Government relationships | | | .10 |
| ×Financial relationships | | | −.31*** |
| ×Technology dynamism | | | −.44*** |
| ×Market dynamism | | | .25** |
| $R^2$ | .05 | .19 | .37 |
| Adjusted $R^2$ | .02 | .10 | .26 |
| $F$ | 1.46 | 2.10* | 3.34*** |
| $\Delta R^2$ | | .13 | .18 |
| Partial $F$ | | 2.39* | 4.75*** |
| $N$[b] | 113 | 113 | 113 |

We report standardized regression coefficients. We used two-tailed test of significance for controls and main effects and one-tailed test for the interaction effects.
+$p<.10$, *$p<.05$, **$p<.01$, ***$p<.001$.
[b] Reduced sample size is the result of list-wise deletion of missing values.

Table 2
Correlation matrix and descriptive statistics of measures

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. New product performance | 1 | | | | | | | | | | | |
| 2. Marketing strategy innovativeness | −.11 | 1 | | | | | | | | | | |
| 3. Extraindustry relationships | .02 | .04 | 1 | | | | | | | | | |
| 4. Intraindustry relationships | .18[a] | .14 | .29[b] | 1 | | | | | | | | |
| 5. Government relationships | .04 | .15[a] | .49[b] | .05 | 1 | | | | | | | |
| 6. Financial relationships | .08 | .16[a] | .47[b] | .23[b] | .54[b] | 1 | | | | | | |
| 7. Technology dynamism | .15 | .23[b] | .03 | .21[b] | .01 | .09 | 1 | | | | | |
| 8. Market dynamism | −.09 | .25[b] | −.01 | .05 | −.23[b] | −.13 | .51[b] | 1 | | | | |
| 9. Top management team size | −.12 | −.04 | .03 | .03 | .03 | .02 | .03 | .01 | 1 | | | |
| 10. Venture size | .06 | .13 | .00 | −.00 | .08 | .12 | −.00 | −.08 | −.11 | 1 | | |
| 11. Venture ownership | −.03 | .01 | −.13 | −.07 | .01 | −.12 | .03 | −.02 | −.05 | .03 | 1 | |
| 12. Product quality | .10 | .08 | −.05 | .27[b] | −.09 | .09 | .15[a] | .12 | .04 | −.04 | −.05 | 1 |
| Mean | 18.89 | 3.48 | 2.88 | 3.71 | 2.67 | 2.88 | 3.90 | 3.54 | 3.09 | 322.14 | | 4.03 |
| Standard deviation | 35.20 | .63 | .71 | .75 | .94 | .95 | .79 | .71 | .81 | 435.57 | | .67 |

[a] $p<.01$.
[b] $p<.001$.

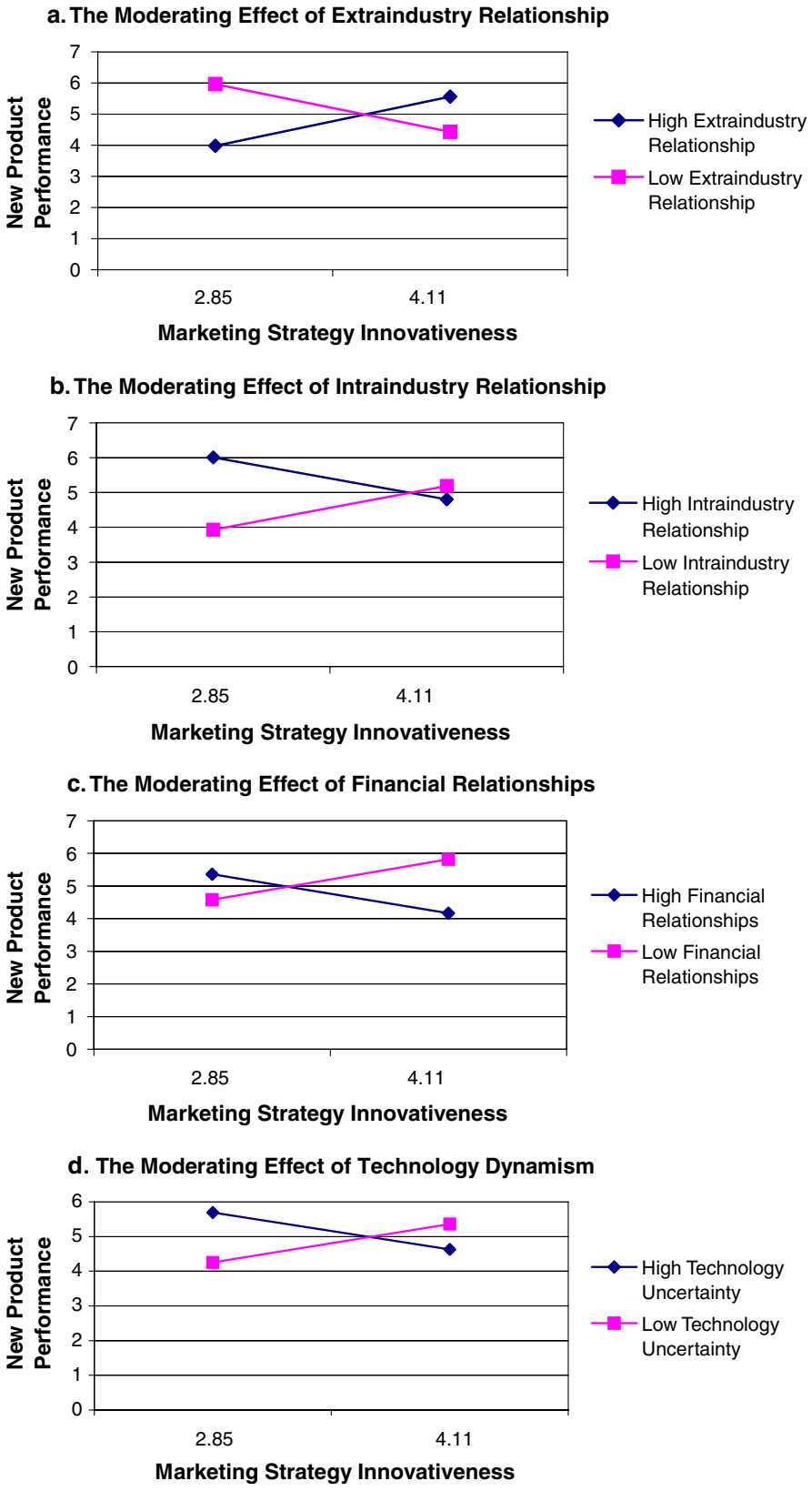


Fig. 1. Graphs of the moderating effects.

between an innovative marketing strategy and new product performance ($\beta$=.25, $p$<.01). Fig. 1d shows a negative relationship between technology dynamism and new product performance when technology dynamism is perceived as high. A similar plot showed the opposite relationship for market dynamism consistent with the hypotheses.

## 5. Discussion and implications

This study investigated the conditions under which MSI affects new product performance in technology-based new ventures in China. Prior literature in marketing has focused on the antecedents and consequences of creative marketing programs (Andrews & Smith, 1996; Menon et al., 1999). The market orientation literature also suggests that truly market oriented firms are innovative in their marketing strategies (Danneels, 2003; Slater & Narver, 1998, 1999). However, few if any studies have explicitly modeled the contingent outcomes of such marketing strategies in spite of its potential development and implementation costs and risks. In this contribution we focus on a previously neglected aspect, by showing the contingency factors affecting the relationship between MSI and new product performance. Premised on a contingent resource-based view of the firm, we argued that the relationship between MSI and new product performance depends on the external relationships of top management and environmental dynamism.

Our results show that, considered in isolation, MSI is negatively related to new product performance ($\beta = -.20$, $p < .05$): this finding confirms that overlooking the moderating effects of managers' extra and intraindustry relationships, technological and market dynamism would suggest misleading conclusions about the contribution of MSI to new product performance. By accounting for the moderating effects, in line with our model, we found evidence that the top management team's extraindustry relationships strengthen, whereas intraindustry relationships weaken, the relationship between MSI and new product performance. These findings suggest that new ventures benefit more from the former than the latter relationships in implementing MSI. New ideas from extraindustry relationships are likely to not only challenge the current beliefs of managers but also to inform them about new ways of implementing MSI. In contrast, intraindustry relationships offer little by way of novel insights in implementing new strategies. Indeed, as we argued, intraindustry relationships appear to generate mental models that may interfere with the implementation of MSI.

These findings are important because they provide further support for the view that different external managerial relationships have differential informational and knowledge acquisition benefits for new ventures in China (Peng & Luo, 2000). The findings also enrich the literature on external managerial ties in new ventures in two respects. First, unlike previous research that has often focused on external managerial ties as a unidimensional construct (Peng & Luo, 2000), we responded to the call by these scholars and operationalized two dimensions: extra and intraindustry relationships. By providing empirical evidence on their differential effects, we add a new dimension to the assessment of the value of managerial ties to strategic decision-making effectiveness in new ventures. Second, whereas prior studies have examined the direct effects of external managerial relationships on firm performance (e.g., Park & Luo, 2001; Peng & Luo, 2000), we add additional evidence that they contribute to high firm performance indirectly by enhancing the effectiveness of MSI.

The lack of moderating effect of government relationships found in this study is consistent with similar findings in recent research on new ventures in Korea (see Lee et al., 2001) and in China (see Li & Atuahene-Gima, 2001). This finding appears to corroborate recent arguments that building government relationships may not be a performance enhancing strategy (see Li & Atuahene-Gima, 2001: 1131) and may not be a substitute for the inadequate institutional infrastructure in transitional economies as argued by Xin and Pearce (1996). This finding coupled with the negative moderating effect of financial relationships suggests that these two forms of external relationships appear to have few benefits for new ventures in implementing strategic innovations in a transitional environment. A plausible reason for this may be that because of their liability of newness, new ventures may experience what we term a "benefit lock out" with respect to government and financial relationships. New ventures compete with more established, resource-rich firms and those with institutional protection of government ownership for the benefits accruing from these relationships in an emerging economy (Xin & Pearce, 1996). Because of their large resources, reputation, experience, and the length of their relations, established firms are better positioned to take advantage of connections with government and financial institutions. Hence, it may be that the benefits options from these relationships are used up by these firms. As noted by Li and Atuahene-Gima (2002), Chinese new technology ventures face significant problems in raising capital and other financial resources from the banks and government agencies. Our findings suggest that these relationships may hurt rather than enhance the impact of creative strategy in marketing.

With respect to the environmental context, the interaction between MSI and technology dynamism hurts new product performance. This finding is consistent with the notion that technology dynamism may limit the effective implementation of creative strategies by increasing the costs and risks in information acquisition and use. In a technologically dynamic environment managers find it difficult to analyze and learn from the environment, suggesting greater implementation difficulties with new strategies. Coupled with the positive and significant moderating effect of market dynamism, this finding suggests that a broad conceptualization of environmental uncertainty hides significant insights (Milliken, 1987).

Overall, these results show that viewing external managerial ties as sources of valuable resources and information adds value to the literature on strategic decision-making because it explains and edicts both positive and negative consequences of a firm's internal capability (see Lee et al., 2001). The application of creativity is a useful element in all forms of organizational strategies and processes. Thus, the results of this study may also be relevant to strategic innovations more broadly. We argue that understanding the effect of strategic innovations in its various forms may be advanced by applying a contingency view of resource-based theory and considering social capital and environmental features as complementary assets. Future research should investigate if the ideas presented here can be expanded to creative strategies in functional areas other than marketing.

The results have implications for the management of new ventures. First, managers of these firms cannot assume that MSI has a positive or negative effect on performance in every circumstance. Although anecdotal reports suggest that MSI tends to enhance performance, these reports rarely identify the specific organizational and environmental conditions under which it is developed and implemented. Our results indicate that new ventures should be aware of the potential downsides of MSI. The results suggest that a more effective use of MSI requires the consideration of not only facilitating top management team social capital but also its deployment in the appropriate environmental conditions. Forging external relationships and finding the appropriate technology and market conditions conducive to MSI is therefore a key challenge for managers of new ventures in allocating resources.

### *5.1. Limitations and future research directions*

The generalizability of our findings is limited because our sample was small and drawn from new ventures in a single high technology development zone in China. Another potential limitation concerns the use of objective performance measures reported by informants rather than derived from archival data. However, previous research has shown that, where archival measures are unavailable, absolute performance measures reported by knowledgeable informants are credible alternatives (Autio et al., 2000; Brush & Venderwerf, 1992; Chandler & Hanks, 1993; Starbuck & Mezias, 1996). We relied on perceptual measures for external relationships because previous research has called for the use of such measures as objective measures of external relationships are too coarse to capture adequately their quality and intensity (Lee et al., 2001: 635).

Although common method bias may be a legitimate concern, we do not believe the problem is serious in the current study because of our use of objective measures of new product performance reported by key informants. Further, our hypotheses predicted and found significant interaction effects. Aiken and West (1991) argue that common method bias cannot produce these kinds of effects. Another reason for the absence of common-method bias is that such a bias statistically increases the shared variance among the independent variables which makes it difficult to find, unique, significant beta weights in a regression, thereby reducing the chances of detecting moderating effects (Evans, 1985). Finally, there is possible survivor bias since our sample contains only new ventures that have survived to be included in our sample. It is possible that we may have uncovered different relationships if failed ventures were included in the sample.

The study indicates other fruitful lines of future research. First, it raises interesting questions about how MSI is developed in the first place. For example, what team characteristics and social interactions influence the creation of a creative strategy? Up to this point we have assumed that the implementation of MSI involves socially complex relational and learning processes. However, we did not examine how these processes lead to the development of MSI in the first place. This issue should be examined in future research.

Second, though the focus of this study was on strategy innovativeness in the specific context marketing, strategy innovativeness could apply to other functional activities such as human resource management, manufacturing, accounting and others (Shervani & Zerrillo, 1997). Future research should examine how strategy innovativeness in these other functional activities affects performance.

Third, future research should explore other external relationships that may influence the effectiveness of MSI and other strategic innovations. Prior research has identified several dimensions of external relationships such as relationships with suppliers, customers and other firms. The moderating effects of these dimensions on the performance effects of the internal capabilities should be given attention by future research on new ventures.

Lastly, our study opens several paths for integrating research findings from new product development in Asia and in the Western Countries. Our main finding is that MSI has a negative direct effect on product innovation performance, which can be turned into positive by extraindustry relationship and deployment in turbulent market environments or further worsened by intraindustry relationships, relationships with financial institutions and deployment in technologically turbulent environments. Therefore, the overall effect of MSI on performance, when the moderators are accounted for, is subject to high variability. It depends, ultimately, on a complex nexus of relationships that expands well beyond the focal constructs. However, prior conceptual propositions developed in the Western context have suggested otherwise. Andrews and Smith (1996) studied the antecedents of marketing strategy creativity for mature products in a sample of US firms. Though their model does not include MSI consequences, they rely on the idea that MSI univocally contributes to higher product performance. The difference which emerges with our study suggests at least three possible explanations: (1) at the most basic level, the direct relationship between MSI and performance is simply more complex than hypothesized (but not fully tested) by marketing scholars in the Western context; (2) the relationship between MSI and performance is contingent on cultural differences (e.g., in the extent to which customers in different contexts are receptive toward rule-breaking marketing strategies); (3) the relationship between MSI and performance is contingent on product innovativeness: in this case, empirical studies of innovative and mature products in the US and mature products in Asia can complement our findings to shed more light in this eventuality. Further, the study by Menon et al. (1999) on a sample of *Fortune 1000* companies found that at the corporate level MSI is related to marketing strategy comprehensiveness, emphasis on market assets and capabilities, cross-functional integration and communication quality. As stated above, our contingency resource-based view model does not incorporate MSI antecedents. In this respect, the study by Menon et al. (1999) represent an ideal starting point for the extension of our model on the antecedents side, which will enhance the understanding of MSI in Chinese new ventures from both an academic and practitioner perspective and provide a basis for the comparison of Western and Asian results on the impact of strategy making on firm performance.

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