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## **CLARIFYING THE ENTREPRENEURIAL ORIENTATION CONSTRUCT AND LINKING IT TO PERFORMANCE**

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The primary purpose of this article is to clarify the nature of the entrepreneurial orientation (EO) construct and to propose a contingency framework for investigating the relationship between EO and firm performance. We first explore and refine the dimensions of EO and discuss the usefulness of viewing a firm's EO as a multidimensional construct. Then, drawing on examples from the EO-related contingencies literature, we suggest alternative models (moderating effects, mediating effects, independent effects, interaction effects) for testing the EO-performance relationship.

For both start-up ventures and existing firms, entrepreneurship carried on in the pursuit of business opportunities spurs business expansion, technological progress, and wealth creation. Entrepreneurial activity represents one of the major engines of economic growth and today accounts for the majority of new business development and job creation in the United States (*Business Week*, 1993). As such, writers in both the scholarly literature (e.g., Covin & Slevin, 1991) and popular press (e.g., Peters & Waterman, 1982) have argued that entrepreneurship is an essential feature of high-performing firms.

Entrepreneurship scholars have developed numerous typologies to describe alternate perspectives of entrepreneurship (e.g., Cooper & Dunkelberg, 1986; Schollhammer, 1982; Webster, 1977). These classification systems typically depict differences in entrepreneurship as the result of various combinations of individual, organizational, or environmental factors that influence how and why entrepreneurship occurs as it does. Although these efforts have served to point out the various dimensions of the entrepreneurial process, they have not led to any widely held consensus regarding how to characterize entrepreneurship. This lack of consensus has impeded progress for researchers toward building and testing a broader theory of entrepreneurship, and has made it especially difficult

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for them to investigate the relationship of entrepreneurship to performance.

To address this problem, this article draws on prior theory and research to make a distinction between the concepts of entrepreneurship and "entrepreneurial orientation." The distinction is comparable to the one made in the strategic management literature between content and process (Bourgeois, 1980). The early strategy literature equated entrepreneurship with going into business, and the basic "entrepreneurial problem" (Miles & Snow, 1978) was to address the principal question of strategy content, that is, "What business shall we enter?" The answer to this question determined a firm's domain and guided its product-market relationships and resource deployments. As the field of strategic management developed, however, the emphasis shifted to entrepreneurial processes, that is, the methods, practices, and decision-making styles managers use to act entrepreneurially. These include such processes as experimenting with promising new technologies, being willing to seize new product-market opportunities, and having a predisposition to undertake risky ventures. The trend has been to use concepts from the strategy-making process literature to model firm-level entrepreneurship (Covin & Slevin, 1989, 1991; Miller, 1983). Five dimensions—autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness—have been useful for characterizing and distinguishing key entrepreneurial processes, that is, a firm's *entrepreneurial orientation (EO)*. They do not, however, represent entrepreneurship, which is defined here as *new entry*. That is, new entry explains *what* entrepreneurship consists of, and entrepreneurial orientation describes *how* new entry is undertaken.

The essential act of entrepreneurship is *new entry*. New entry can be accomplished by entering new or established markets with new or existing goods or services. New entry is the act of launching a new venture, either by a start-up firm, through an existing firm, or via "internal corporate venturing" (Burgelman, 1983). New entry is thus the central idea underlying the concept of entrepreneurship. Evidence of this is suggested by the large portion of research on entrepreneurship that is devoted to explaining the corollaries and consequences of new venture activity (e.g., Hisrich & Peters, 1989; MacMillan & Day, 1987; Sandberg & Hofer, 1987; Stuart & Abetti, 1987; Vesper, 1980, 1988; Webster, 1977). Although the concept of entrepreneurship as new entry is itself a topic brimming with issues and research questions, in this article we are chiefly concerned with EO, a corollary concept that emerged primarily from the strategic management literature.

An EO refers to the processes, practices, and decision-making activities that lead to new entry. It emerges from a strategic-choice perspective (Child, 1972), which asserts that new-entry opportunities can be successfully undertaken by "purposeful enactment" (Van de Ven & Poole, 1995). Thus, it involves the intentions and actions of key players functioning in

a dynamic generative process aimed at new-venture creation. The key dimensions that characterize an EO include a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities.

All of these factors—autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness—may be present when a firm engages in new entry. In contrast, successful new entry also may be achieved when only some of these factors are operating. That is, the extent to which each of these dimensions is useful for predicting the nature and success of a new undertaking may be contingent on external factors, such as the industry or business environment, or internal factors, such as the organization structure (in the case of an existing firm) or the characteristics of founders or top managers. Thus, although some prior research suggests that the dimensions of an EO covary (e.g., Covin & Slevin, 1989), we suggest that autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness may vary independently, depending on the environmental and organizational context. This is consistent with Gartner's (1985: 697) perspective regarding new venture formation:

The creation of a new venture is a multidimensional phenomenon; each variable describes only a single dimension of the phenomenon and cannot be taken alone . . . entrepreneurs and their firms vary widely; the actions they take or do not take and the environments they operate in and respond to are equally diverse—and all these elements form complex and unique combinations in the creation of each new venture.

In this article, therefore, we argue that (a) the relationship between EO and performance is context specific and (b) the dimensions of EO may vary independently of each other in a given context.

The purpose of this article is to provide an integrative framework for exploring the relationship between EO and performance by integrating prior theory and empirical findings into a researchable whole. To this end, we first endeavor to delineate and refine the dimensions of EO. Then, consistent with Stinchcombe's (1965) caveat regarding the importance of organizational and environmental factors to the success of new entrants, we propose a contingency framework. Accordingly, the two interrelated objectives of this article are (a) to clarify the nature of the entrepreneurial orientation construct and (b) to suggest a contingency approach to frame research questions and further researchers' understanding of EO-performance relationships.

Before moving on, we briefly address level-of-analysis considerations. The concept of *entrepreneurship* has been applied to many different levels, for example, individuals, groups, and "whole organizations." One of the reasons there has been little agreement on the nature of

entrepreneurship and how it contributes to performance is because the term is used in the context of various levels of analysis. Entrepreneurship often is thought to be within the purview of individuals only, because it is frequently associated with the introduction of a revolutionary invention (Kilby, 1971). It is also considered by some theorists to apply primarily to the domain of small businesses because they are responsible for the majority of economic growth and new-job creation via entry into untapped markets (Birch, 1979). Recently, there has also been an emphasis on corporate entrepreneurship as a means of growth and strategic renewal for existing larger firms (Guth & Ginsberg, 1990). Thus, it is important to consider the level of analysis that is used in discussing the EO construct.

New entry as the essential act of entrepreneurship is primarily a firm-level phenomenon. It is analogous to a business-level strategy undertaken by a nondiversified economic unit. Thus, *new entry* refers to actions that may be initiated by an individual, a small firm, or the strategic business unit of a large corporation. As such, this discussion of entrepreneurial orientation will focus at the firm/business-unit level. This firm-level approach is consistent with classical economics in which the individual entrepreneur is regarded as a firm. The small business firm is simply an extension of the individual who is in charge. Applying EO to the nondiversified business unit is also consistent with Schumpeter (1942), who shifted attention away from the individual entrepreneur by arguing that entrepreneurship eventually would be dominated by firms that were capable of devoting more resources to innovation. Addressing EO at the firm level corresponds to the model used in recent work by Covin and Slevin (1991), who emphasized the role of entrepreneurship as firm behavior. In the examples that follow, we have used both small corporations and strategic business units (SBUs) to illustrate EO concepts.

The remainder of this article is divided into four sections. First, we explore the relevant theoretical and empirical literature that relates to the dimensions of an entrepreneurial orientation. Second, we discuss key contingencies that often are associated with the EO-performance relationship. Third, alternate contingency models will be suggested for investigating the performance implications of EO relationships. For illustrative purposes, several examples of contingent relationships suggested by the literature are proposed in this section. In the final section, we suggest avenues for further theory development and empirical research, and we discuss how our proposed framework may be useful in explaining differences in entrepreneurial behavior and performance across firms.

### DIMENSIONS OF AN ENTREPRENEURIAL ORIENTATION

Prior researchers have suggested that there is a set of organizational processes from which strategic decisions evolve (Hart, 1992; Rajagopalan, Rasheed, & Datta, 1993). These take the form of patterns or modes that can be characterized and identified across organizations (Hart, 1992). The

dimensions of a firm's strategy-making processes may be viewed as encompassing the entire range of organizational activities that involve planning, decision making, and strategic management. Such processes also encompass many aspects of the organization's culture, shared value system, and corporate vision (Hart, 1992; Pascale, 1985). In attempting to identify the variables that are relevant to organizational modes and models of strategic decision processes, many researchers have focused on delineating the dimensions of strategy making. For example, Miller and Friesen (1978) identified 11 strategy-making process dimensions, including adaptiveness, analysis, integration, risk taking, and product-market innovation. In his study of structural influences on decision-making processes, Fredrickson (1986) proposed dimensions such as proactiveness, rationality, comprehensiveness, risk taking, and assertiveness. Hart's (1992) integrative framework for strategy-making processes combined various dimensions into five "distinctive modes of strategy making": command, symbolic, rational, transactive, and generative. Miles and Snow (1978) considered multidimensional aspects of organizational processes to formulate a typology that includes prospectors, defenders, analyzers, and reactors.

In a similar vein, we believe there is a fundamental set of strategy-making process (SMP) dimensions that underlies nearly all entrepreneurial processes. The study of a firm's entrepreneurial orientation is analogous to Stevenson and Jarillo's (1990) concept of *entrepreneurial management*, in that it reflects the organizational processes, methods, and styles that firms use to act entrepreneurially. With regard to the specific dimensions of EO, Miller (1983) has provided a useful starting point. He suggested that an entrepreneurial firm is one that "engages in product market innovation, undertakes somewhat risky ventures, and is *first* to come up with 'proactive' innovations, beating competitors to the punch" (1983: 771). Accordingly, he used the dimensions of "innovativeness," "risk taking," and "proactiveness" to characterize and test entrepreneurship. Numerous researchers have adopted an approach based on Miller's (1983) original conceptualization (e.g., Covin & Slevin, 1989; Ginsberg, 1985; Morris & Paul, 1987; Naman & Slevin, 1993; Schafer, 1990). For example, Covin and Slevin (1989) investigated the performance of entrepreneurial firms in hostile and benign environments. In their study of 161 small manufacturers, "entrepreneurial strategic posture" was measured using a scale that ranked firms as entrepreneurial if they were innovative, risk taking, and proactive.

Two other dimensions are important aspects of an entrepreneurial orientation. The first is competitive aggressiveness, which captures the distinct idea of "beating competitors to the punch," suggested by Miller's (1983) definition of an entrepreneurial firm. It refers to the type of intensity and head-to-head posturing that new entrants often need to compete with existing rivals. Competitive aggressiveness was highly correlated with entrepreneurship across all levels of risk in a study that used published

risk rankings to compare firms in low- and high-risk environments in Eastern Europe, the Commonwealth of Independent States, and the United States (Dean, Thibodeaux, Beyerlein, Ebrahimi, & Molina, 1993).

Another key component of an EO is a tendency toward independent and autonomous action. Start-up firms must exercise intentionality to carry forward the specific actions required to launch new ventures (Bird, 1988; Katz & Gartner, 1988). Layers of bureaucracy and organizational tradition rarely contribute to new-entry activities in existing firms (Kanter, 1983). Instead, it requires the exercise of autonomy by strong leaders, unfettered teams or creative individuals who are disengaged from organizational constraints to lead to new entry. This was the conclusion of Burgelman (1983: 241), who found that, in the case of internal corporate venturing, "the motor of corporate entrepreneurship resides in the autonomous strategic initiative of individuals at the operational levels in the organization."

The next five subsections clarify the dimensions of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness and offer suggestions for how these dimensions might be studied further. Although we view each of these dimensions as salient to an EO, our discussion also reflects the argument that they may vary independently in a given context.

### Autonomy

The history of entrepreneurship is filled with stories of self-determined pioneers who had a unique, new idea—a better idea—and made a business out of it. Entrepreneurship has flourished because independently minded people elected to leave secure positions in order to promote novel ideas or venture into new markets, rather than allow organizational superiors and processes to inhibit them. Within organizations as well, it is the freedom granted to individuals and teams who can exercise their creativity and champion promising ideas that is needed for entrepreneurship to occur. Thus, an important impetus for new-entry activity is the independent spirit necessary to further new ventures. As such, the concept of *autonomy* is a key dimension of an entrepreneurial orientation.

Autonomy refers to the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion. In general, it means the ability and will to be self-directed in the pursuit of opportunities. In an organizational context, it refers to action taken free of stifling organizational constraints. Thus, even though factors such as resource availability, actions by competitive rivals, or internal organizational considerations may change the course of new-venture initiatives, these are not sufficient to extinguish the autonomous entrepreneurial processes that lead to new entry: Throughout the process, the organizational player remains free to act independently, to make key decisions, and to proceed.

Discussions of entrepreneurial activity in the strategy-making pro-



cess literature often emphasize the role of autonomous behavior, but in two distinct contexts. Mintzberg (1973) and Mintzberg and Waters (1985) described an entrepreneurial strategy-making mode, in which decisive and risky actions are taken by a strong leader. This is similar to Hart's (1992) command mode and Bourgeois and Brodwin's (1984) commander model, both of which suggest entrepreneurial behavior that is characterized by centralized vision and strong leadership. This type of autonomy, which may be regarded as autocratic (Shrivastava & Grant, 1985), is common in smaller, owner/manager firms where "the force for pattern or consistency in action is individual vision, the central actor's concept of his or her organization's place in its world. This is coupled with an ability to impose that vision on the organization through his or her personal control of its actions (Mintzberg & Waters, 1985: 260, emphasis added).

In contrast, Hart's (1992) integrative framework included a generative mode, wherein strategy making occurs from the entrepreneurial activities of organizational members' generating ideas that are passed on to higher levels of management. Similarly, Bourgeois and Brodwin (1984) described a Crescive model, wherein strategy is initiated within the organization via individual entrepreneurship. These models suggest that the impetus for new ventures often occurs at lower levels in an organization (Bower, 1970) and reflect the importance of autonomy to organization members who might be found in an internal corporate venture setting. In both cases, the freedom to act independently is a crucial dimension of EO.

As the previous discussion suggests, evidence of autonomy in firms may vary as a function of size, management style, or ownership. For example, in a firm in which the primary decision maker is the owner/manager, autonomy is implied by the rights of ownership. However, the extent to which autonomy is exercised in this case may depend on the level of centralization or the extent of delegation, and this may be related to organizational size. In studies of small firms, researchers have examined the nature and extent of autonomous behavior by investigating how centralized the leadership is and how often managers delegate authority and rely on technical expertise. Miller (1983) found that the most entrepreneurial firms had the most autonomous leaders. That is, in small simple firms, high levels of entrepreneurial activity were associated with chief executives who maintained strong central authority and also acted as the firm's knowledge leader by being aware of emerging technologies and markets. In a study of decision making by 32 Indian firms, Shrivastava and Grant (1985) found a similar strong reliance on *managerial autocracy* among 10 of the firms in which a single key manager was the primary decision making agent. Of these 10 firms, 8 were classified as "entrepreneurial."

To promote *intrapreneurship* (Pinchot, 1985), many large firms have engaged in changes in organizational structure such as flattening hierarchies and delegating authority to operating units. These moves are intended to foster autonomy, but the process of organizational autonomy

requires more than a design change. Firms must actually grant autonomy and encourage organizational players to exercise it (Quinn, 1979). In some firms, the process involves champions who promote entrepreneurial activity by shielding the new venture innovators from organizational norms or resource constraints that might cause the new enterprise to be rejected. Thus, the exercise of organizational autonomy is often characterized by a two-stage process involving a project *definition* that is carried out by autonomous organizational members and a project *impetus* that is carried out by champions who sustain the autonomous efforts (Bower, 1970). Burgelman (1983) found, for example, that initial internal corporate-venturing efforts were conducted by corporate R&D departments operating outside the confines of the current corporate strategy. Hart (1991) studied the autonomous processes of organizational actors by asking managers the extent to which entrepreneurial efforts based on employee initiative emerges upward from lower levels to help shape the firm's strategic direction.

Burgelman (1983) also found that product champions formed the critical link between project definition and impetus processes. Their role consisted of procuring resources and creating market interest in the new project. Thus, in an organizational setting, it is often the champions that play the most entrepreneurial roles by scavenging for resources, going outside the usual lines of authority, and promoting risk taking on behalf of new ideas and promising breakthroughs (Kanter, 1983; Peters & Waterman, 1982). Shane (1994a) found that experienced organizational champions favored efforts to create autonomy via actions such as bending the rules and bypassing procedures and budgets. These examples may provide useful clues for operationalizing autonomy in future studies.

### **Innovativeness**

Schumpeter (1934, 1942) was among the first to emphasize the role of innovation in the entrepreneurial process. Schumpeter (1942) outlined an economic process of "creative destruction," by which wealth was created when existing market structures were disrupted by the introduction of new goods or services that shifted resources away from existing firms and caused new firms to grow. The key to this cycle of activity was entrepreneurship: the competitive entry of innovative "new combinations" that propelled the dynamic evolution of the economy (Schumpeter, 1934). Thus "innovativeness" became an important factor used to characterize entrepreneurship.

Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes. Although innovations can vary in their degree of "radicalness" (Hage, 1980), innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state of the art (Kimberly, 1981). There are numerous methods by which to classify inno-



vations (see Downs & Mohr, 1976), but perhaps the most useful distinction is between product-market innovation and technological innovation. Until recently, most research has focused on technological innovativeness, which consists primarily of product and process development, engineering, research, and an emphasis on technical expertise and industry knowledge (Cooper, 1971; Maidique & Patch, 1982). Product-market innovativeness suggests an emphasis on product design, market research, and advertising and promotion (Miller & Friesen, 1978; Scherer, 1980). Even this broad categorization may be hard to distinguish; however, because innovativeness frequently represents considerable overlap and blending of product-market and technological innovation, as in the case of technologically sophisticated new products designed to meet specific market demand. In either case, innovativeness is an important component of an EO, because it reflects an important means by which firms pursue new opportunities.

Evidence of firm innovativeness may take several forms. In the broadest sense, innovativeness may occur along a continuum from a simple willingness to either try a new product line or experiment with a new advertising venue, to a passionate commitment to master the latest in new products or technological advances. To capture this range of activity, numerous methods have been employed to measure innovativeness.

For example, in a study of innovative responses to changes in the environment, Karagozoglu and Brown (1988) asked managers from 56 firms about their willingness to discard old beliefs and explore new alternatives and the way in which they valued and rewarded experimentation. The level of expenditures and number of resources dedicated to research and development also represent a firm's involvement in innovation activities. In terms of human resources, Hage (1980) argued that the more professionals and specialists in a firm, such as engineers and scientists, the higher the level of innovation. Miller and Friesen (1982) examined the "technocratization" of firms and found that higher levels of innovativeness were associated with greater reliance on technically trained specialists. Miller (1987, 1988) used R&D costs as a percentage of sales to measure financial resources devoted to innovation. Thus, even though these factors may vary by industry, a simple count of financial or human resources committed to innovation activities may be useful for operationalizing innovativeness. For product-market innovativeness, Miller (1987, 1988) asked members of firms to indicate the percentage of total sales spent specifically on the costs of initiating and implementing product-market innovations. Another frequently used marketing-related method for assessing innovation is to investigate the number of new product or service introductions and the frequency of changes in services or product lines (Covin & Slevin, 1989; Miller & Friesen, 1982).

Regarding technological innovativeness, the emphasis shifts to achieving competencies in the latest technologies and production methods and the development of advanced manufacturing processes.

This important aspect of innovativeness is lacking in most of the studies based on Miller's (1983) concept of innovativeness, which focused exclusively on the product-market aspect of innovation activities. Subsequent researchers have endeavored to capture this additional aspect of innovativeness, for example, Zahra and Covin (1993: 452), who focused on "technology policy," that is, the firm's commitment to "acquiring, developing, and deploying technology." In this context, firms were asked to rate the extent to which they emphasize technological development and seek to build a reputation for trying new methods and technologies. Another approach that extended efforts to measure innovativeness was used by Saleh and Wang (1993), who, in a study that compared highly innovative firms to low innovators, supplemented the Miller-based approach with questions about efforts to synthesize disparate efforts across functional lines and flexibility in adapting new processes.

### Risk Taking

The early entrepreneurship literature equated the idea of entrepreneurship with working for oneself (i.e., seeking self-employment rather than working for someone else for wages) (Cantillon, 1734; Shane, 1994b). Along with this type of work came the idea of assuming personal risk. Cantillon (1734), who was the first to formally use the term *entrepreneurship*, argued that the principal factor that separated entrepreneurs from hired employees was the uncertainty and riskiness of self-employment. Thus, the concept of *risk taking* is a quality that is frequently used to describe entrepreneurship.

Risk has various meanings, depending on the context in which it is applied. In the context of strategy, Baird and Thomas identified three types of strategic risk: (a) "venturing into the unknown," (b) "committing a relatively large portion of assets," and (c) "borrowing heavily" (1985: 231–232). The first of these definitions conveys a sense of uncertainty and may apply generally to some types of risk often discussed in the entrepreneurship literature, such as personal risk, social risk, or psychological risk (Gasse, 1982). As a term in financial analysis, *risk* is used in the context of the familiar risk-return trade-off, where it refers specifically to the probability of a loss or negative outcome. This is essentially the definition that Miller and Friesen adopted when they defined *risk taking* as "the degree to which managers are willing to make large and risky resource commitments—i.e., those which have a reasonable chance of costly failures" (1978: 923). Both the notion of high leverage from borrowing and heavy commitment of resources is consonant with this definition of risk taking. Thus, firms with an entrepreneurial orientation are often typified by risk-taking behavior, such as incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace.

It can be argued that all business endeavors involve some degree of risk, such that it is not meaningful to think in terms of "absolutely no risk."

Thus, the range of risk-taking behavior extends from some nominal level—"safe" risks, such as depositing money in a bank, investing in T-Bills, or restocking the shelves—to highly risky actions, such as borrowing heavily, investing in unexplored technologies, or bringing new products into new markets. Beyond this general point of agreement, however, methods of accounting for and measuring risk vary widely. Brockhaus, for example, focused on *risk propensity*, which he defined as "perceived probability of receiving the rewards" associated with the successful outcome of a risky situation (1980: 513). He used an early version of Kogan and Wallach's (1964) choice dilemmas questionnaire that assessed risk preferences by presenting respondents with 12 hypothetical situations and asking them to "choose between a safe alternative and a more attractive but risky one" (Brockhaus, 1980: 514). Sitkin and Pablo (1992), however, in their model of risk behavior, distinguished between risk perceptions, risk preferences, and risk propensity. Their use of the term *risk propensity* "is consistent with Brockhaus's (1980) conceptualization of the term, but it does not conform either to his formal definition (which includes preferences) or to his empirical operationalization (which measures perceptions, rather than propensities or preferences)" (Sitkin & Pablo, 1992: 12–13). Instead, they regard risk propensity as a mediator between risk preferences and risk behavior, arguing that "the general desire to avoid or pursue risks (i.e., risk preferences) does not determine specific risk behaviors, but rather it affects the general likelihood of a person's behaving in more or less risky ways (i.e., risk propensity)" (1992: 15). Other factors also may be important to predicting risk taking, such as how the risk problem is framed (Kahneman & Tversky, 1979), results of past risk taking (Thaler & Johnson, 1990), and the ability to perform under risky conditions (Slovic, Fischhoff, & Lichtenstein, 1980).

These attempts to more clearly understand risk taking stem, in part, from researchers not being able to find consistent patterns when investigating risk taking associated with entrepreneurship. Numerous investigators have reported inconsistencies in the risk-taking propensity of individuals who engage in new entry (e.g., Brockhaus, 1982) and equivocal relationships between risk taking and performance (e.g., Begley & Boyd, 1987). Particularly salient to this study is that most studies of entrepreneurially related risk taking investigate individuals rather than firms. This brings up another type of problem with measuring risk, namely that a risk-averse individual, or one who prefers to study an opportunity thoroughly before embarking on it, may not advocate risk avoidance by the whole firm. That is, an individual aversion to a specific new-venture opportunity may be overcome by either careful study and investigation or confidence in a good idea. The result may be that, at the level of the firm, risks are taken that would not be taken by a firm member.

Effectively operationalizing firm-level risk taking, therefore, remains an area for future development. Presently, however, there is a well accepted and widely used scale based on Miller's (1983) approach to EO,

which measures risk taking at the firm level by asking managers about the firm's proclivity to engage in risky projects and managers' preferences for bold versus cautious acts to achieve firm objectives. Venkatraman (1989a) used a similar approach, asking managers the extent to which they followed tried-and-true paths or tended to support only projects in which the expected returns were certain.

### Proactiveness

Economics scholars since Schumpeter have emphasized the importance of initiative in the entrepreneurial process. Penrose (1959) argued that entrepreneurial managers are important to the growth of firms because they provide the vision and imagination necessary to engage in opportunistic expansion. Lieberman and Montgomery (1988) emphasized the importance of first-mover advantage as the best strategy for capitalizing on a market opportunity. By exploiting asymmetries in the marketplace, the first mover can capture unusually high profits and get a head start on establishing brand recognition. Thus, taking initiative by anticipating and pursuing new opportunities and by participating in emerging markets also has become associated with entrepreneurship. This fourth characteristic of entrepreneurship is often referred to as *proactiveness*.

The term *proactiveness* is defined in *Webster's Ninth New Collegiate Dictionary* (1991: 937) as "acting in anticipation of future problems, needs, or changes." As such, proactiveness may be crucial to an entrepreneurial orientation because it suggests a forward-looking perspective that is accompanied by innovative or new-venturing activity. In an early formulation, Miller and Friesen argued that the proactiveness of a firm's decisions is determined by answering the question, "Does it *shape* the environment (high score) by introducing new products, technologies, administrative techniques, or does it merely react?" (1978: 923). Later, proactiveness was used to depict a firm that was the quickest to innovate and first to introduce new products or services. This is suggested by Miller's description of an entrepreneurial firm as one that is "first to come up with 'proactive' innovations" (1983: 771). Although the idea of acting in anticipation of future demand is an important component of entrepreneurship, the idea of being first to market is somewhat narrowly construed. A firm can be novel, forward thinking, and fast without always being first. Miller and Camp (1985), for example, in their study of 84 SBUs, found that the second firm to enter a new market was as pioneering as the first entrant and just as likely to achieve success via proactiveness. Therefore, consistent with Miller and Friesen's (1978) earlier definition, we agree with Venkatraman, who suggested that proactiveness refers to processes aimed at anticipating and acting on future needs by "seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle" (1989a: 949). Thus, a proactive firm is a leader rather than a

follower, because it has the will and foresight to seize new opportunities, even if it is not always the first to do so.

In addition to the previous definition of proactiveness, there also has been a tendency in the entrepreneurship literature to equate proactiveness with competitive aggressiveness. The terms are often used interchangeably, for example, in the case in which Covin and Slevin (1989) explained that their model of entrepreneurial strategic posture consists of innovativeness, proactiveness, and risk taking which they defined as "characterized by frequent and extensive technological and product innovation, an aggressive competitive orientation, and a strong risk-taking propensity by top management" (1989: 79, emphasis added).

Although closely related to competitive aggressiveness, we feel there is an important distinction between it and proactiveness that needs to be clarified. Proactiveness refers to how a firm relates to *market opportunities* in the process of new entry. It does so by seizing initiative and acting opportunistically in order to "shape the environment," that is, to influence trends and, perhaps, even create demand. Competitive aggressiveness, in contrast, refers to how firms relate to *competitors*, that is, how firms respond to trends and demand that already exist in the marketplace. The two ideas are similar, because, as Porter (1985) suggested, the market is the playing field for competitors. But proactiveness has more to do with *meeting* demand, whereas competitive aggressiveness is about *competing* for demand. Combining these distinct concepts inappropriately may explain why Stuart and Abetti (1987) found that a variable labeled "strategic aggressiveness," in which they joined the notions of "first-to-market" with a "highly offensive" posture, was not useful as a predictor of new-entrant success.

To further clarify these concepts, it may be useful to consider the proactiveness continuum. We suggest that the conceptual opposite of proactiveness is *passiveness* (rather than reactivity), that is, indifference or an inability to seize opportunities or lead in the marketplace. Reactiveness, in contrast, suggests a response to competitors. This approach is consistent with Chen and Hambrick, who stated that "a firm should be both proactive and responsive in its environment in terms of technology and innovation, competition, customers, and so forth. Proactiveness involves taking the initiative in an effort to shape the environment to one's own advantage; responsiveness involves being adaptive to competitors' challenges" (1995: 457). An EO, therefore, involves both proactiveness in pursuing opportunities and the will to respond aggressively to competitors. Thus Amdahl, when it learned that IBM had introduced a new product just as they were about to proactively enter the large CPU market with a lighter, faster machine, responded by returning to investors to secure an additional \$16 million to further upgrade their product line prior to entry (Cooper, Willard, & Woo, 1986).

Previous researchers have operationalized firm-level proactiveness



by asking managers about the firm's tendency to lead rather than follow in the development of new procedures and technologies and the introduction of new products or services (e.g., Covin & Slevin, 1989; Miller, 1983). In Venkatraman's STROBE formulation (1989a), he emphasized the scanning aspect of proactiveness as it relates to opportunity seeking and specifically queried managers if they had "strategically eliminated" operations in later stages of their firm-life cycles.

Because proactiveness suggests an emphasis on initiating activities, it is closely related to innovativeness and is likely to covary with it, as in the case of new-product introductions. Morris and Paul (1987), when they conducted a factor analysis on a 12-item innovativeness, risk-taking, proactiveness scale, on the one hand found two main factors, one that captured both innovativeness and proactiveness and another representing risk taking. On the other hand, the products and services that firms proactively bring to the market also may be imitative or reflect low innovativeness. This may be the case, for example, when a firm enters a foreign market with products that are tried-and-true in domestic markets, but uniquely meet unfilled demand in an untapped market.

The proactiveness dimension of EO most closely resembles the ideas suggested by Miles and Snow's (1978) prospector type, about which they stated,

the Prospector's prime capability is that of finding and exploiting new products and market opportunities. . . . Prospectors are frequently the creators of change in their respective industries. Change is one of the major tools used by the Prospector to gain an edge over competitors. (1978: 551-553)

Summaries of studies that report on efforts to measure the Miles and Snow typology (e.g., Zahra & Pearce, 1990) and recent efforts by scholars to improve prospector measurement techniques (e.g., Conant, Mokwa, & Varadarajan, 1990) also may provide useful clues for measuring proactiveness.

### **Competitive Aggressiveness**

Stinchcombe (1965) suggested that young firms are particularly susceptible to the "liability of newness" and, therefore, must take steps to establish legitimacy and power relative to suppliers, customers, and other competitors. Because new ventures are much more likely to fail than established businesses, many scholars have argued that an aggressive stance and intense competition are critical to the survival and success of new entrants (e.g., MacMillan, 1982; Porter, 1985). Thus, competitive aggressiveness is a fifth dimension of entrepreneurship that is frequently mentioned in the literature.

*Competitive aggressiveness* refers to a firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace. As suggested previously, competitive aggressiveness is characterized by re-



sponsiveness, which may take the form of head-to-head confrontation, for example, when a firm enters a market that another competitor has identified, or reactive, for example, when a firm lowers prices in response to a competitive challenge. Competitive aggressiveness also reflects a willingness to be unconventional rather than rely on traditional methods of competing. Examples of this and other forms of competitive aggressiveness available to new entrants include adopting unconventional tactics to challenge industry leaders (Cooper et al., 1986), analyzing and targeting a competitor's weaknesses (Macmillan & Jones, 1984) and focusing on high value-added products while carefully monitoring discretionary expenses (Woo & Cooper, 1981). Similarly, Porter (1985) recommended three approaches for aggressively pursuing existing firms: "doing things differently," that is, reconfiguration; changing the context, that is, redefining the product or service and its market channels or scope; and outspending the industry leader. Thus, competitive aggressiveness, which refers to firm responsiveness directed toward achieving competitive advantage, is an important component of an EO. The importance of this variable as a dimension of EO was highlighted in a study of the entrepreneurial processes of U.S. firms in global markets, in which Dean (1993) found that competitive aggressiveness explained considerably more variance (37%) in corporate entrepreneurship than did any other strategy or structural variable analyzed. Evidence of competitive aggressiveness may take several forms. Covin and Covin (1990: 48), for example, asked managers if they adopted a "very competitive 'undo-the-competitors' posture" or preferred to "live-and-let-live." Activities aimed at overcoming rivals may include, for example, setting ambitious market-share goals and taking bold steps to achieve them, such as cutting prices and sacrificing profits (Venkatraman, 1989a) or spending aggressively compared to competitors on marketing, product service and quality, or manufacturing capacity (MacMillan & Day, 1987). The breadth and speed of new entry also may indicate an aggressive posture. A "fast-followers" approach often is used by firms to aggressively bring new products to market. This approach is accomplished by speeding up the product-development cycle time. Miller and Camp found that the most successful aggressive firms were those that did not shy away from broadly defined markets "in terms of the number, sizes, and types of their customers, as well as the breadth of their product line" (1985: 99). Scales developed by Ginsberg (1985) and Khandwalla (1977) also were used to focus on the aggressiveness of competitive processes used by managers to pursue rivals. Based on a review of the literature and our analysis of an entrepreneurial orientation, we suggest

*Proposition 1: Autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness are salient dimensions of an entrepreneurial orientation.*

#### **Independence of the Five Dimensions**

Although innovativeness, risk taking, and proactiveness are important dimensions that entrepreneurial firms may exhibit, Miller's (1983)

original conceptualization using these three dimensions—which Covin and Slevin (1989) have labeled “a basic, unidimensional strategic orientation” (1989: 79)—implies that only firms that exhibit high levels of all three dimensions should be regarded as entrepreneurial. This approach may be too narrowly construed for explaining some types of entrepreneurial behavior. Research (e.g., Brockhaus, 1980) suggests that entrepreneurs may be very cautious and risk averse under certain conditions. Other research suggests that entrepreneurial firms may benefit more from imitation than from high levels of innovativeness (Nelson & Winter, 1982). In addition, the development of numerous typologies of entrepreneurial behavior suggests that an EO can be best characterized by several dimensions in various combinations. For example, Schollhammer (1982) described five different types of entrepreneurship: acquisitive, administrative, opportunistic, incubative, and imitative. Firms employing the acquisitive type of entrepreneurship achieve new entry into markets by purchasing existing firms. This approach requires little or no innovativeness and, if the acquired firm is an established business, may involve relatively low risk. Cooper and Dunkelberg (1986) suggested that various paths to business ownership constitute different degrees of entrepreneurship. They agreed that starting a business requires initiative, creativity, and personal risk taking, but entrepreneurial owners who obtain their position by promotion or inheritance generally are not required to be innovative or to assume a substantial degree of personal risk. Webster (1977) used a mathematical calculation of the perceived payoff per principal, that is, the expected financial return to new venture participants, for classifying different types of entrepreneurial ventures. This approach makes little reference to the creativity or proactiveness that may be required by entrepreneurial firms and instead focuses primarily on risk.

The previous examples suggest that an attempt to limit entrepreneurial behavior to only those cases in which high levels of all EO dimensions are evident falls short of explaining many types of entrepreneurship. Although we argue here that all five dimensions are central to understanding the entrepreneurial process, they may occur in different combinations, depending on the type of entrepreneurial opportunity a firm pursues. Sony and Matsushita provide an example of how two competitors can differ along dimensions of entrepreneurial orientation. On the one hand, Sony, well known for its entrepreneurial spirit and R&D skills, aggressively pursues first-mover advantages from new-product innovation. Matsushita, on the other hand, takes a very different competitive posture. Its nickname in Japanese is “Maneshita denki,” which roughly translates to “electronics that have been copied.” Matsushita typically lets Sony and others innovate, but then takes a leadership position based on its skills in manufacturing and marketing (Lieberman & Montgomery, 1988). Thus, Matsushita draws on the innovativeness of others to position itself to be ready to enter a market once rapid growth begins. Although few observers would argue that Sony has a strong EO, we suggest that

Matsushita also has a strong EO. That is, it incurs risks through capital investment in plant and equipment, is proactive by entering markets early in the product life cycle, and displays intense competitive aggressiveness through its strategies that are intended to build strong market share. Therefore,

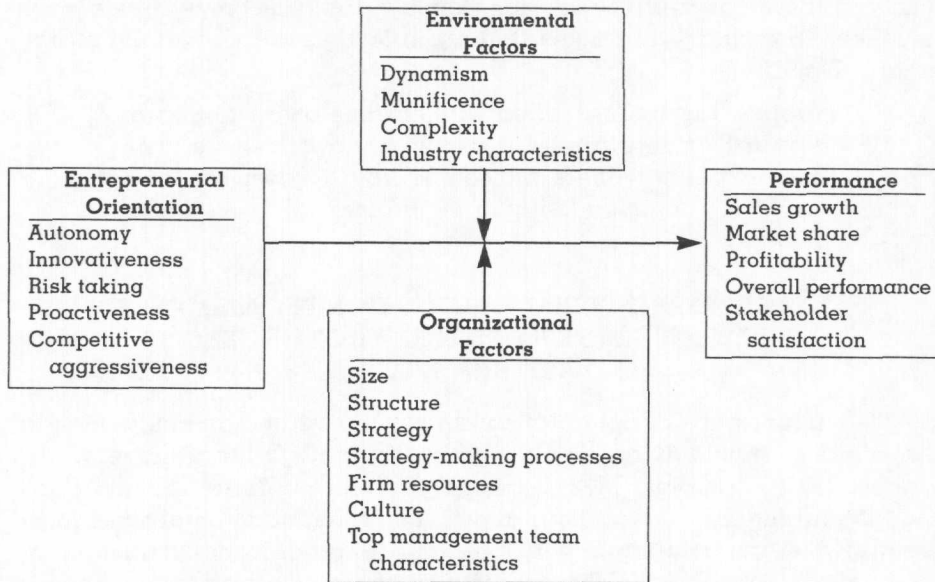
*Proposition 2: The salient dimensions of an entrepreneurial orientation—autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness—may vary independently of each other in a given context.*

### **THE ENTREPRENEURIAL ORIENTATION-PERFORMANCE RELATIONSHIP: EXPLORING KEY CONTINGENCIES AND ALTERNATE MODELS**

The importance of entrepreneurship to the strategic management of firms has been widely acknowledged in the strategy literature (e.g., Andrews, 1971; Chandler, 1962; Schendel & Hofer, 1979). Miles and Snow (1978) regarded the entrepreneurial problem as a fundamental issue faced by all firms, the solution to which defines an organization's domain, its product-market relationships, and its resource commitments. Those in strategic management are concerned with the performance implications of management processes, decisions, and actions at the level of the firm. Prior theory and research have suggested that an EO is a key ingredient for organizational success. There often appears to be a normative bias, however, toward the inherent value in entrepreneurship and an assumption that for new entry to result in high performance, firms must have a strong entrepreneurial orientation (Collins & Moore, 1970; Covin & Slevin, 1991; Peters & Waterman, 1982; Schollhammer, 1982; Zahra, 1993). This assumption remains largely untested, as suggested by Zahra, who found that there is "a paucity of empirical documentation of the effect of entrepreneurship on company financial performance" (1993: 11). To address this question, we provide Figure 1, an integrative framework for exploring the relationship between entrepreneurial orientation and performance.

Strategic management scholars are concerned with the relationship between key variables—(organizational structures and processes and characteristics of the business environment) and performance. In order to effectively model the EO-performance relationship, the role of contingent variables will be considered. Contingency theory suggests that congruence or fit among key variables, such as environment, structure, and strategy, is critical for obtaining optimal performance (Miller, 1988). Factors such as industry and environmental variables, or the structural and managerial characteristics of an existing firm, influence how an entrepreneurial orientation will be configured to achieve high performance. The contingency relationships that we propose also provide a context for addressing the extent to which dimensions of EO may, under certain

**FIGURE 1**  
**Conceptual Framework of Entrepreneurial Orientation**



conditions, vary independently rather than covary. Thus, the framework suggested by Figure 1 presents factors that may affect the relationship between an EO and performance.

To address these issues, we review EO-related contingencies that have been suggested in the literature. Then, we present alternative models to demonstrate how the role of contingency variables on the EO-performance relationship can be investigated.

### Identifying Key Contingencies

The entrepreneurship literature, in referring to the causes of entrepreneurship, often mentions factors such as managerial style, need for achievement, and other social or motivational factors. These may be important corollaries to an entrepreneurial orientation that help explain a firm's performance. Similarly, environmental factors, such as dynamism and munificence, or structural factors, such as the decentralization of decision making, may influence the performance of firms with an entrepreneurial orientation. In their model of entrepreneurship as firm behavior, Covin and Slevin (1991) discussed the relationship of strategy, structure, and environment to the EO dimensions of innovativeness, risk taking, and proactiveness. Using these three dimensions, several researchers have verified the importance of viewing the EO-performance relationship in a contingency framework (e.g., Covin & Slevin, 1989; Karagozlu & Brown, 1988; Zahra & Covin, 1995). In one of the few studies to test a three-way model of environment, structure and EO, Naman and

Slevin (1993) found support for a positive relationship between fit and performance for organic firms in a turbulent environment whose style was highly innovative, risk taking, and proactive. In other studies that tested the relationship between contingency variables and individual dimensions of EO, there was also a significant association with performance (e.g., Covin & Covin, 1990; Miller, 1983, 1988).

Contingency theories have been fundamental to furthering the development of the organizational sciences by recognizing the importance of the alignment or fit among key constructs of interest (Burns & Stalker, 1961; Lawrence & Lorsch, 1967; Schoonhoven, 1981; Venkatraman, 1989b). Given the centrality of the EO construct, we consider it necessary to investigate the role of environmental and organizational variables to further our understanding of how EO contributes to performance outcomes. Through such a perspective, we recognize the need to go beyond the investigation of bivariate correlations and examine contingency relationships. Furthermore, Rosenberg suggested that the introduction of a third variable into the analysis of a two-variable relationship (e.g., EO-performance) helps reduce the potential for misleading inferences and permits a "more precise and specific understanding" (1968: 100) of the original two-variable relationship.

Table 1 summarizes key contingencies that have been identified in prior research and that are associated with the EO-performance relationship.

### Measuring Firm Performance

In investigating the EO-performance relationship, it is essential to recognize the multidimensional nature of the performance construct (Cameron, 1978; Chakravarthy, 1986). That is, entrepreneurial activity or processes may, at times, lead to favorable outcomes on one performance dimension and unfavorable outcomes on a different performance dimension. For example, heavy investment in R&D and product innovation may enable a firm to successfully enter new product-market domains and consequently enhance sales growth in the long run. However, the requisite resource commitment may detract from short-run profitability. Thus, research that only considers a single dimension or a narrow range of the performance construct (e.g., multiple indicators of profitability) may result in misleading descriptive and normative theory building.

Research testing the propositions such as those suggested in this article should include multiple performance measures. Such measures could include traditional accounting measures such as sales growth, market share, and profitability. In addition, indicators of "overall performance" would be useful in incorporating the firm's goals, objectives, and aspiration levels (Kirchhoff, 1978) as well as other elements of broader stakeholder satisfaction. Alternative measures of performance may compete, depending on the size and type of firm and its ownership. For example, new firms often are initiated because key players prefer to work



**TABLE 1**  
**Contingency Variables Related to the Entrepreneurial  
 Orientation-Performance Relationship**

<u>Organizational Factors</u>	<u>Environmental Factors</u>
<u>Structure</u>	<u>Environment</u>
Bahrami & Evans, 1987	Covin & Slevin, 1989
Covin & Slevin, 1988	Karagozoglu & Brown, 1988
Jennings & Lumpkin, 1989	Khandwalla, 1987
Miller, 1983, 1987	Miller, 1983
Naman & Slevin, 1993	Miller & Friesen, 1978
Sandberg & Hofer, 1987	Miller & Friesen, 1983
Slevin & Covin, 1990	Zahra, 1993
<u>Strategy</u>	Zahra & Covin, 1995
Gupta & Govindarajan, 1984	<u>Industry Characteristics</u>
Miller, 1988	Cooper, 1979
Naman & Slevin, 1993	Eisenhardt & Schoonhoven, 1990
Sandberg & Hofer, 1987	MacMillan & Day, 1987
Venkatraman, 1989a	Miller & Camp, 1985
Woo & Cooper, 1981	Porter, 1980
<u>Strategy-Making Processes</u>	Sandberg & Hofer, 1987
Burgelman, 1983	Stuart & Abetti, 1987
Jennings & Lumpkin, 1989	Tushman & Anderson, 1986
Miller & Friesen, 1982	
Schafer, 1990	
<u>Firm Resources</u>	
Birley, 1985	
Ostgaard & Birley, 1994	
Ramachandran & Ramnarayan, 1993	
Romanelli, 1987	
Stevenson & Gumpert, 1985	
<u>Culture</u>	
Burgelman, 1984	
Burgelman & Sayles, 1986	
Kanter, 1982, 1983	
Stevenson & Gumpert, 1985	
Stuart & Abetti, 1987	
<u>Top Management Team Characteristics</u>	
Begley & Boyd, 1987	
Cooper & Dunkelberg, 1986	
Eisenhardt & Schoonhoven, 1990	
MacMillan, Zemann, & Subbanarasimha, 1987	

for themselves rather than take direction from an organizational superior. This is consistent with a lifestyle approach (Birley, 1987), whereby effectiveness may be judged by the most basic type of financial criteria, such as monthly cash flow or mere survival. Thus, a small, privately owned firm may regard its continued existence as a satisfactory indicator of high performance, even though it cannot claim to have a strong return on assets or growth in market share. It also may make a conscious decision not to grow beyond a certain size, in order to maintain control of the business. Thus, factors such as overall satisfaction and nonfinancial goals of the owners may need to be weighted more heavily in evaluating performance, especially among privately held firms.

Other nonfinancial considerations may be important. Factors such as



reputation, public image and goodwill, and the commitment and satisfaction of employees may be important to new entrants. Similarly, Zahra (1993) has suggested that the importance of alternate financial and non-financial performance measures change at different points in the life of an organization or new venture. This last point is consistent with Quinn and Cameron's (1978) finding that the criteria of effectiveness shift as an organization evolves. Thus, those who investigate the effectiveness and efficiency of an entrepreneurial orientation need to be sensitive to these performance criteria.

### **Alternate Models Using Dimensions of an Entrepreneurial Orientation**

Venkatraman (1989b) and Boal and Bryson (1987) have proposed alternative models for investigating the impact of third variables as a means of exploring contingency relationships. We believe that the models in Figure 2—moderating effects, mediating effects, independent effects, and interaction effects—provide a useful framework for gaining additional insight into the EO-performance relationship. We first concentrate on examples of various "third variables" to illustrate how they might affect the EO-performance relationship. Next, we provide examples of contingent relationships that incorporate the multidimensional nature of the EO construct.

These four models have been used previously to provide theoretical insight into the planning-performance (Boal & Bryson, 1987), generic strategies-performance (Dess & Rasheed, 1992), and consensus-performance (Dess & Priem, 1995) relationships. We contend, therefore, that our understanding of the EO-performance link can be further enriched by testing alternate contingency models based on prior theory and research and the frameworks suggested by Venkatraman (1989b) and Boal and Bryson (1987). The alternative models presented here serve as examples of possible relationships and provide a framework for introducing propositions that we acknowledge are tentative. We have proposed models that illustrate frequently mentioned relationships in the literature. They are for illustrative purposes and provide a context in which to draw on real-world examples.

The moderating-effects model is shown in Figure 2a. In this model, the form or strength of the EO-performance relationship varies as a function of organizational structure. Burns and Stalker (1961) introduced the idea of organic versus mechanistic organizational structures. From their investigation of 20 Scottish and British industrial firms, they concluded that organizations are arrayed along a mechanistic-organic continuum, which, they argued, constituted "two formally contrasted forms of management system" (Burns & Stalker, 1961: 119). Organic organizations typically are decentralized and informal and have an emphasis on lateral interaction and an equal distribution of knowledge throughout the organizational network. Mechanistic organizations, in contrast, tend to be highly centralized and formal, and they are characterized by a high

**FIGURE 2**  
**Alternate Contingency Models of the Entrepreneurial**  
**Orientation-Performance Relationship**

Figure 2a—Moderating-Effects Model

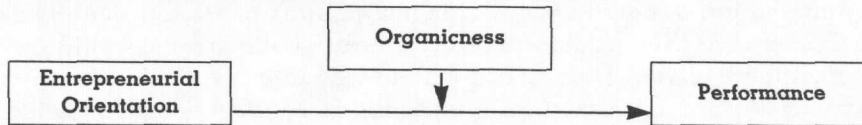


Figure 2b—Mediating-Effects Model

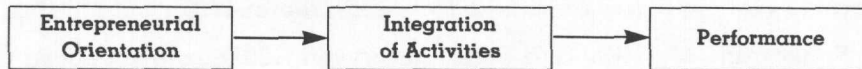


Figure 2c—Independent-Effects Model

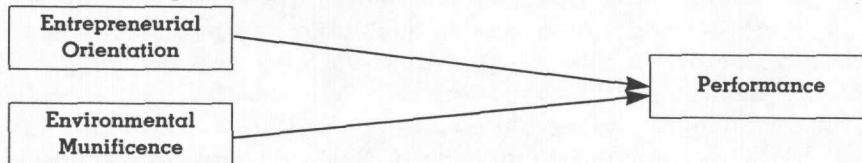
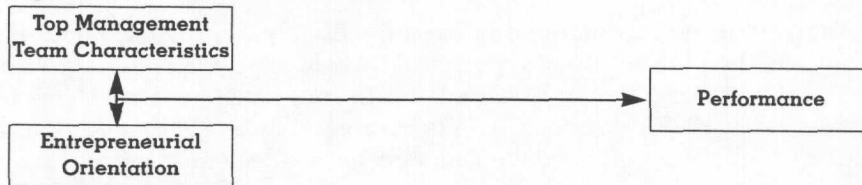


Figure 2d—Interaction-Effects Model



degree of vertical interaction and specialized differentiation between functions. Khandwalla (1977) argued that an EO needs to be associated with the flexibility inherent in organic organization structures. Similarly, Covin and Slevin (1991) suggested that an EO should be associated with low structural formalization, decentralization, and low complexity. Miller and Friesen (1982) compared the structural attributes of entrepreneurial versus conservative firms. In Covin and Slevin's (1988) analysis of 80 businesses, the "organicness" of the firms' structure was found to moderate the relationship between an entrepreneurial decision-making style and performance. The form of the moderating-effects model suggests that organization structure must be included in order to correctly specify the EO-performance relationship. Therefore,

*Proposition 3: The relationship between EO and firm performance will be moderated by the use of an organic structure. Firms with an entrepreneurial orientation that use an organic structure will have higher performance relative to those that do not use an organic structure.*

The mediating-effects model is illustrated in Figure 2b. In it, EO is considered an antecedent variable, firm performance is the outcome variable, and the integration of organizational activities is the mediating variable. In this example, we suggest that effective integrating activities and processes intervene in the relationship between EO and performance. Firms with a strong EO will aggressively enter new-product markets and incur greater risks. Such competitive moves will result in their having to cope with more complex and rapidly changing environments. To deal with such environmental demands, Lawrence and Lorsch (1967), Galbraith (1973), and others have argued that such resulting differentiation requires a greater use of integrating structure in order to attain superior performance. This is consistent with Ashby's (1956) law of requisite variety, wherein external complexity should be matched with a corresponding level of complexity in internal processes. Similarly, Kanter (1983) suggested that integrative thinking is vital when creating the type of team environment wherein innovative activities are encouraged and enriched. She argues that

such organizations reduce rancorous conflict and isolation between organizational units; create mechanisms for exchange of information and new ideas across organizational boundaries; ensure multiple perspectives are taken into account in decisions, and provide coherence and direction to the whole organization. (Kanter, 1983: 28)

In addition, Miller suggested that such activities would include the "extensive use of structural integration devices such as committees and task forces" (1983: 773) and the effective use of rules, planning, and budgeting as well as integrating roles for project activity across functions (Galbraith & Kazanjian, 1986). Also, to integrate activities across business units within a corporation, Porter (1985) suggested the term *horizontal organization*, which consists of horizontal structures, horizontal systems, and horizontal human resource practices. DuPont's nonwovens unit provides an example of a "horizontal organization's" importance in spurring entrepreneurial activity (*DuPont Annual Report*, 1993). Members of this unit work in networks and teams to gain insights into potential products, and they get together with customers or partners to quickly develop them. Such flexibility enables the nonwovens unit to seek opportunities in a variety of products and markets. For example, this unit worked with DuPont's automotive unit to evaluate a Tyvek® car cover that was recently introduced in retail markets. The two units continue to work together to design an improved product as well as a cover for new cars en route to dealers. Thus,

*Proposition 4: The relationship between EO and firm performance will be mediated by the use of integrating activities. Firms with an entrepreneurial orientation*

*that use integrating activities will have higher performance compared to those that do not use integrating activities.*

An independent-effects model is illustrated in Figure 2c. In it, EO and environmental munificence are depicted as having independent effects on the dependent variable, firm performance. Environmental munificence may be defined as the profitability or growth rates of the industry in which a firm competes. This relationship is consistent with the traditional industrial organization paradigm (Porter, 1981), which posits that the industry within which a firm competes has a critical impact on its performance. Beard and Dess (1981), Rumelt (1982), and Lieberman and O'Connor (1972) found that a firm's industry context was a significant predictor of performance. We also argue that although EO may have an independent effect on performance, an EO will not interact with the environmental munificence-performance relationship. One may argue that firms or SBUs competing in munificent environments typically will generate additional slack because of relatively higher levels of profits. Such slack resources can be used to facilitate experimentation with new strategies and practices (Bourgeois, 1981), thus enhancing a firm's overall EO. However, we believe that such processes will not occur unless the firm has effective integrating mechanisms (Proposition 3) and/or an organic structure (Proposition 4) to facilitate such behavior. In other words, resources, in and of themselves, will not enhance a firm's EO. Therefore,

*Proposition 5: Both environmental munificence and EO will have an independent effect on organizational performance.*

An interaction-effects model is shown in Figure 2d. In it, characteristics of the top management team (TMT), such as tolerance for ambiguity or need for achievement, are believed to interact to influence firm performance. The interaction model is unique because there is no implication of a main effect on EO (as there is with the moderating-effects model discussed previously). In this case, only an interaction effect is proposed. Tolerance for ambiguity has been defined as "the tendency to perceive ambiguous situations as desirable" (Budner, 1962: 29). Favoring ambiguity such as this is likely to be congruent with the type of innovative, risk-taking behavior suggested by the EO construct. Need for achievement is a person's drive to accomplish difficult tasks and be successful (McClelland, 1961). This type of drive is consistent with the proactiveness and risk-taking characteristic of entrepreneurship. Prior studies by Miller and Droge (1986) and Miller and Toulouse (1986) found that need for achievement interacted with strategy making and organizational structure. It is important to point out that personality factors (such as tolerance for ambiguity and need for achievement) tend to be consistent over rather long periods of time (Conley, 1984). Behaviors may be reactive to or vary with EO, but personality will be less likely to exhibit such relationships.

We believe this distinction raises an interesting empirical question: To what extent would a "strong" EO affect various personality traits of incumbent managers?

*Proposition 6: Tolerance for ambiguity and EO will influence organizational performance through their interaction effect. Firms with an EO, in which managers have high tolerance for ambiguity, will have higher performance compared to firms with managers who have low tolerance for ambiguity.*

*Proposition 7: Need for achievement and EO will influence organizational performance through their interaction effect. Firms with an EO, in which managers have a high need for achievement, will have higher performance compared to firms in which managers have a low need for achievement.*

These four models should provide additional insight into the EO-performance relationship. The models also provide an overall framework for the testing of competing theories. For example, we have proposed that in Figure 2c, environmental munificence would have an independent effect on performance. However, Covin and Slevin (1989) suggested and found statistically significant empirical results for the role of environmental hostility, a similar concept, as a moderator in the EO-performance relationship. They defined hostile environments as "characterized by precarious industry settings, intense competition, harsh, overwhelming business climates, and the relative lack of exploitable opportunities" (1989: 75). One could argue that, in hostile environments, resources would be more constrained and would, in turn, lead to greater control, coordination, and interlocking of organizational behavior (Pfeffer & Leblebici, 1973). A smaller resource base also would impede experimentation with new strategies (Bourgeois, 1981) and direct efforts toward conserving limited resources (Chakravarthy, 1982; Richards, 1979). Under such conditions, entrepreneurial behavior would be stifled and, even if viable strategic alternatives were proposed, the allocation of sufficient resources to ensure their proper implementation would become problematic. Thus, the scarcity of resources would adversely affect the relationship between a firm's EO and performance. This example illustrates the need to test alternate models of the role of third variables.

### **Entrepreneurial Orientation as Multidimensional: How Relationships May Differ**

We have focused on alternate models for investigating the EO construct and its relationship to performance. However, consistent with Proposition 2, dimensions of EO may, in fact, vary independently. Accordingly, we provide two examples using Figure 2a to illustrate how rela-

tionships may differ when the multidimensional nature of EO is explicitly recognized.

*Example 1.* As was noted, theory and research suggest that an organic structure provides a desirable structural context for innovativeness (Covin & Slevin, 1991; Miller & Friesen, 1982). Thus, the innovativeness dimension of an EO is likely to be positively related to performance when the setting is organic. However, because structural "organicness" suggests decentralization and low formalization, traditional methods of organizational control are relaxed. Such an organizational environment may promote the autonomy and creativity required for innovative behavior. However, an organic structure may negatively moderate the competitive aggressiveness-performance relationship. That is, although an organic structure may contribute to an atmosphere of creativity, it also may detract from a firm's ability to focus intensely enough to effectively compete with industry rivals. With such a structure, it may be more difficult to coordinate and integrate primary and support activities in a firm's value chain (Porter, 1985). The resulting loose coupling (Weick, 1976), implicit in an organic structure, may be detrimental to expanding a firm's product-market domain. Such is the case with Dell Computer Company of Austin, Texas—a firm with 1994 sales of approximately \$3 billion. "Until very recently, Dell was a big and growing company with a corner grocery store style of management" (Mack, 1994: 46) without the structuring of activities required for a company that had grown so rapidly. Dell was unable to coordinate its design, manufacturing, sales, and procurement functions. Not surprisingly, Dell had problems controlling costs, a major shortcoming for a firm competing aggressively for market share in what has largely become a commodity business. To turn things around, Dell has hired several experienced managers to rationalize all aspects of its operations, including supplier reductions and improved inventory control. There has been one indication of Dell's successful turnaround: By January 30, 1994, Dell was enjoying a 43% jump in sales with a corresponding 27% drop in inventory compared to the previous year. Thus, to compete aggressively, Dell had to depart from its organic "grocery store" approach. Therefore,

*Proposition 8: "Organicness" will moderate the relationship between innovativeness and performance: Among firms with high innovativeness, greater "organicness" will be associated with higher performance.*

*Proposition 9: "Organicness" will moderate the relationship between competitive aggressiveness and performance: Among firms with strong competitive aggressiveness, greater "organicness" will be associated with lower performance.*

*Example 2.* Quick response has been increasingly recognized as an important form of competitive advantage (Bower & Hout, 1988; Stalk, 1988;



Thomas, 1991). A firm following a strategy of quick response may outperform rivals through a variety of competitive means, such as quickly adjusting to market conditions or fast delivery of products and services. The relationship between proactiveness and firm performance may be enhanced if a quick-response strategy enables the firm to successfully introduce new products or services. This strategy may help a firm become a first mover (Lieberman & Montgomery, 1988) and provide a source of sustainable competitive advantage (Barney, 1992) if imitation and substitution are difficult for competitors. On the one hand, the competitive advantage of late entrants may be compromised through the diffusion of new technologies throughout the industry. On the other hand, a quick-response strategy may negatively moderate the relationship between innovativeness and firm performance. That is, a strategy that emphasizes speed of response without giving attention to the developmental activities and cross-functional coordination (Devanna & Tichy, 1990) needed to effectively develop an innovative new product or service may cause performance to suffer. Further, a firm that responds too quickly to a new innovation may fail to integrate important feedback from the marketplace that would perhaps have helped it to respond with more effective innovative activities. Apple's Newton personal digital assistant (PDA) illustrates the "downside" of combining quick response and innovation (Robello, 1994). Apple's plan was to quickly ensnare market share by building customers' expectations as high as possible, thereby increasing customers' switching costs. However, the product that ex-CEO Sculley had hoped would correct a 1993 third-quarter loss of \$188 million did not deliver. Sales were only 1% of Apple's revenues, versus the hoped-for 25%. What went wrong? Most of the model's glitches were related to its lack of promised ability to decipher handwriting. Clearly, Apple could have benefited by closer coordination among its marketing, R&D, production, and engineering professionals. Therefore,

*Proposition 10: A quick-response strategy will moderate the relationship between proactiveness and performance: Among firms that are highly proactive, a quick-response strategy will be associated with higher performance.*

*Proposition 11: A quick-response strategy will moderate the relationship between innovativeness and performance: Among firms that are highly innovative, a quick-response strategy will be associated with lower performance.*

### IMPLICATIONS FOR RESEARCH AND PRACTICE

The term *entrepreneurship* is used broadly and applied in many contexts. Researchers investigating entrepreneurship are still struggling, however, with issues such as "What makes a firm entrepreneurial?" "Can

any firm be entrepreneurial?" "What's the difference between entrepreneurship and effective strategic management?" and "When does a firm cease to be entrepreneurial?" Underlying these issues is the basic question, "What is entrepreneurship?" In the interest of addressing this question, our goal has been to illuminate one aspect of this broadly used term—the entrepreneurial orientation construct. By clarifying this concept, distinguishing it from the new entry aspects of entrepreneurship, and using a contingency framework to relate it to performance, we have endeavored to help guide further theory building in this important area. As such, we can begin to address other questions related to the nature of entrepreneurship.

For example, to the question, "What makes a firm entrepreneurial?" we would argue that any firm that engages in an effective combination of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness is entrepreneurial. Thus, an entrepreneurial orientation, as reflected in the organizational processes and decision-making style of a firm, can be a source of competitive advantage or strategic renewal, even for firms that are not involved in launching new ventures. In this respect, an effective EO may be an example of good strategic management. This difference, in fact, further highlights the importance of distinguishing between the EO aspect of entrepreneurship and new entry. New entry is the action that distinguishes entrepreneurial behavior from other types of business activity that might be undertaken to capitalize on an opportunity. For example, it might be good business to purchase a large supply of raw materials that suddenly becomes available at a deeply discounted price, or it may increase efficiency to reorganize a production capability by outsourcing key components of the process. These actions reflect insightful decision making and good management practices rather than entrepreneurship. Defining entrepreneurship as new entry, therefore, represents a somewhat narrower approach to conceptualizing the construct than suggested by Stevenson and Jarillo (1990), who defined it rather broadly as "the process of . . . pursuing opportunities" (1990: 23). In contrast, the idea of entrepreneurship as new entry is more encompassing than the approach taken by Gartner (1988: 26), who argued that "entrepreneurship is the creation of new organizations." We suggest that new entry may occur across a range of firms, from individuals to existing organizations, without necessarily creating a new organization.

The entrepreneurial orientation construct, we believe, represents the process aspect of entrepreneurship. Future researchers should consider the extent to which such entrepreneurial processes may predict the nature and success of pursuing opportunities via new entry. Additionally, the relationship of EO to other key predictor variables such as strategies and tactics, industry life cycle, and size are fertile areas for future research. An entrepreneurial orientation may be especially important for small new entrants that are struggling to develop a management team, to organize resources efficiently, and to develop a strategy. During start-up, an EO

may be the only thing a young firm has going for it until issues of survival can be satisfied.

Regarding the question, "When does a firm cease to be entrepreneurial?" we would argue again that a firm can choose to maintain an entrepreneurial orientation throughout its life. We also suggest, however, that when members of a firm become overly passive or decline to take risks or exercise creativity in order to capitalize on a market opportunity, they run the risk of losing the entrepreneurial edge. In contrast, the extent to which an EO will be effective in a given context may vary. Both Slevin and Covin (1990) and Miller (1983, 1988) suggested that firms can be too entrepreneurial; that is, they may take risks or incur R&D expenses that are not in accord with the market environment or circumstances in which they are competing. Thus, it is important to employ a contingency framework to evaluate what factors may influence the relationship of an EO to performance.

The idea that the dimensions of EO may vary independently is consistent with the work of prior entrepreneurship scholars, who have proposed different typologies to characterize entrepreneurship. Schollhammer (1982), for example, posited five different types of entrepreneurship: acquisitive, administrative, opportunistic, incubative, and imitative. Within each of these categories, the extent to which autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness can contribute positively to performance may vary. In the future, researchers should investigate how entrepreneurial processes influence performance in the different settings, such as those that Schollhammer suggests. Empirical research may reveal unique configurations of the dimensions of EO. For example, Baumol (1986) suggested that entrepreneurial activities fall into two primary categories: *initiating* and *imitative*. Future research may support the idea that the dimensions of EO fall into two broad categories that correspond to Baumol's two types where initiating entrepreneurship proceeds from high levels of innovativeness and proactiveness, whereas imitative new entry is successful because of an emphasis on competitive aggressiveness. Researchers should also investigate whether some dimensions of EO are always present, whereas others vary depending on the context. Future investigators may find, for example, that risk taking and autonomy are needed for all types of new entry, but that innovativeness, proactiveness, and competitive aggressiveness are present only under certain conditions. Additionally, these dimensions may combine to form unique entrepreneurial types. Zahra and Covin (1993), for example, used the concept of an aggressive technological posture, which combines notions of innovativeness and competitive aggressiveness.

Although we have argued in this article for the viability of investigating contingency relationships, we also believe that additional insights can be gained by exploring configurations among an EO and other key constructs. That is, an EO may be more strongly associated with

performance when it is combined with *both* the appropriate strategy and the proper environmental conditions. Such an assertion is consistent with Miller's (1988) and others' ideas that a configurational framework has promise for further developing normative and descriptive theory. Additionally, Lenz, in a study of savings and loan associations, concluded that "neither environment, strategy nor organizational structure is sufficient to explain differences in performance . . . organizational performance is determined, in part, by the particular coalignment administrators are able to achieve" (1980: 220-221). Previous research by the authors found that entrepreneurial strategy making, when matched with high environmental uncertainty and a low-cost strategy, was associated with high performance. This was contrary to our hypothesis (Dess, Lumpkin, & Covin, 1995). One might interpret such a finding as suggesting that even when competing on the basis of cost, it may be advisable to proactively scan the environment, take some risks, and innovate. Alternatively, perhaps entrepreneurial orientations are not necessarily inconsistent with overall cost-leadership strategies, unless each is pursued at the extreme. In retrospect, had we viewed the EO as multidimensional, the results and our interpretations may have provided additional insights. That is, risk taking and proactiveness may have been consistent with this configuration but not innovativeness (or other dimensions of EO).

In addition to exploring relationships among EO, strategy, environment, and organizational performance, researchers should investigate the processes through which entrepreneurial behavior enhances a firm's competitive position and performance. Such research should entail fine-grained (Harrigan, 1983) methodologies such as intensive field research and case studies. For example, Burgelman (1983) explored the implications of induced and autonomous entrepreneurial activities among six internal corporate-venturing projects and found that autonomous strategic activities often are initiated by individuals at the operational levels in the organization. Fine-grained methodologies also could provide insight into the role of culture and, in the context of the resource-based model of the firm, complex social processes (e.g., Barney, 1992) associated with the dimensions of an entrepreneurial orientation. Finally, such methodologies also could help to address a more basic question, that is, how to operationalize the various constructs suggested in this article. For example, there are numerous methods employed for measuring the construct "risk taking" (Baird & Thomas, 1985). What is the best method in the context of EO? Prior research suggests that entrepreneurs simply don't "see" the risks that others see, or, alternatively, they see nonentrepreneurial behavior as far more risky. In the future, researchers should help to empirically capture such a construct. The same issue is relevant for all the EO constructs addressed in this article.

### CONCLUSION

Exploring relationships between entrepreneurial behavior and performance is very timely, given the competitive conditions faced by firms

of all sizes in today's economy. Our goal has been to build on prior theory and research in order to (a) clarify the multidimensional nature of the EO construct and (b) suggest alternative contingency models that we believe will provide additional insight into the EO-performance relationship. We encourage research efforts directed at understanding the dimensionality of the EO construct and the role of contingency and configurational approaches in explaining its relationship to performance. Such efforts will contribute to further theoretical development in the field of entrepreneurship. Research to refine measures, explore the underlying processes associated with entrepreneurial activity, and recognize the multidimensional nature of entrepreneurial behavior also will enhance our understanding of EO and its relationship to organizational performance.

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