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Building Organizational Capabilities for Managing Economic Crisis: The Role of Market Orientation and Strategic Flexibility

Firms around the world often must manage and survive economic crises. Recent cases in Asia, Eastern Europe, and South America bear testimony to this point. As economic weak spots are integrated into the global economy, it is timely to develop an understanding of organizational capabilities that can help firms manage their way through such crises. The authors investigate the role of market orientation and strategic flexibility in helping Thai firms manage the recent Asian crisis. The results demonstrate the contingent nature of the influence of market orientation and strategic flexibility on firm performance after a crisis has occurred. As hypothesized, market orientation has an adverse effect on firm performance after a crisis. This effect is moderated by demand and technological uncertainty and is enhanced by competitive intensity. In contrast, strategic flexibility has a positive influence on firm performance after a crisis, which is enhanced by competitive intensity and moderated by demand and technological uncertainty. It seems that market orientation and strategic flexibility complement each other in their efficacy to help firms manage varying environmental conditions.

Organizations frequently must cope with anomalous events, referred to as crises, that create high levels of uncertainty and are potential threats to the viability of an organization. The past decade, for example, has witnessed tremendous economic upheavals that have manifested in economic crises, such as the crashes of the Mexican peso, the Russian ruble, and the Brazilian real. Organizational crises have been extensively researched from divergent perspectives, including those of psychology (Halpern 1989), social polity (Weick 1988), and technological structure (Pauchant and Douville 1994). We add to this body of research by studying the relevance of market orientation and strategic flexibility in determining firm performance in developing economies and during periods of economic crisis; we investigate these relationships in the context of the recent Asian economic crisis.

Literature on the Asian crisis (see Champion 1999; Goad 1999) emphasizes, in general, the need to "better manage" but does not underscore the specifics of this better management. We adopt a resource-based perspective to identify organizational capabilities that would help firms manage their way out of an economic crisis (see Barney 1991; Dickson 1992; Hunt and Morgan 1995). Resources embody "stocks of knowledge, physical assets, human capital, and other tangible and intangible factors that a business owns or controls, which enable a firm to produce, efficiently and/or effectively, market offerings that have value for some market segments" (Capron and Hulland 1999, p. 42). In turn, the firm uses the capabilities developed by resource utilization to manage its environment and perform (Day 1994). Two such capabilities are market orientation and strategic flexibility.

Central to the development of high-caliber marketing practice is the construct of market orientation (Day 1994; Kohli and Jaworski 1990). Being market oriented implies delivering products and services valued by consumers, usually accomplished through (1) ongoing monitoring of market conditions and (2) adaptation of organizational responses (Narver and Slater 1990; Shapiro 1988). Top management plays a critical role in fostering market orientation (Webster 1992), and market orientation influences organizational performance, commitment, and motivation (Jaworski and Kohli 1993). Given the importance of market orientation, it comes as no surprise that this construct has received scrutiny from marketing scholars.

The past decade has witnessed an increase of interest in strategic flexibility, which bestows on a firm the ability to respond promptly to market opportunities and changing technologies (Sanchez 1995). Technological advances in diverse fields such as communication and transportation have endowed organizations with the ability to carry out real-time market research, reduce new product development time and costs, offer a wider product line, mass customize products, and upgrade products at a faster pace than ever before (Kotha 1995). Again, the development of capabilities to be flexible rests on the mandate of top management, helps firms manage environmental uncertainty, and tends to enhance firm performance (Evans 1991).

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However, there are at least two limitations of current research on both market orientation and strategic flexibility that preclude researchers from claiming their centrality to the field of marketing. First, researchers primarily have examined the two constructs in the context of organizations in either the United States or Western Europe. As the number of emerging economies in Asia, Eastern Europe, and South America grows, generalizability of market orientation and strategic flexibility rests on the constructs' applicability to the developing world. Our research takes a step in this direction by examining the performance consequences of these constructs for firms in Thailand. Second, research on market orientation and strategic flexibility has concentrated on the normal course of a firm's business and as a result has ignored the constructs' impact on the firm's ability to manage crises. Because of increasing globalization and the emergence of the network economy (Achrol and Kotler 1999), sooner or later economic crises are going to have a direct or indirect effect on almost every firm. Thus, it is essential to develop an understanding of organizational capabilities that will help firms manage an economic crisis. Our research examines the role of market orientation and strategic flexibility in helping Thai firms manage the recent Asian economic crisis. By studying both market orientation and strategic flexibility, we hope to shed light on the resource allocation decision between these two organizational capabilities. The practical implications from our theoretical model and its empirical examination should provide managers with concrete lessons for devising strategies in crisis situations.

Conceptual Background and Research Hypotheses

In this section, we review literature on (1) economic crises, (2) market orientation, and (3) strategic flexibility to develop our hypotheses. The literature on economic crises helps us crystallize the challenges that organizations face in managing the critical event of an economic crisis. In contrast, literature on market orientation and strategic flexibility provides a means for these organizations to manage this critical event.

Economic Crisis

A crisis represents "a low probability, high impact situation that is perceived by critical stakeholders to threaten the viability of the organization" (Pearson and Clair 1998, p. 66). The significant impact of crises, which may be manifested in the firm's demise, makes it critical for managers to understand and effectively manage these events. Crises come in many forms, including natural disasters such as earthquakes and meteor showers, technological disasters such as the fervor regarding the Y2K computer bug, firm-level crises such as labor strikes, and economic crises such as the one in Asia in 1997. Our research focuses on economic crises and firm-level strategies for managing them (henceforth, we use "crisis" to refer to "economic crisis").

Economic crises are inexorably linked to the concept of business cycles (sometimes referred to as crisis cycles; Mattick 1981), which have continued to befuddle scholars since the beginning of the nineteenth century. Macroeconomics giants, including Keynes (1936), Mathews (1959), and Schumpeter (1939), expended considerable effort to understand these elusive cycles and the ensuing crises. Indeed, the primary criticism of capitalism in Marx's *Das Kapital* and by subsequent proponents of Marxist thinking (see Mandel 1980) is centered on the contraction phase of business cycles.

Even though much research has been carried out to understand the advent of business cycles and the ensuing periods of expansion and contraction, they remain an enigma (Sharma 1999). The complications stem from the existence of many different cycles, including those with 50–60-year waves, 15–25-year waves, 6–10-year waves, and 40–60-month waves (Mullineux 1984). After adding these cycles, economists must take general trends (for example, an upward trend for a growing economy), along with interdependencies among national economies (which may have different general trends and/or cyclical waves) and external shocks (such as natural disasters), into consideration to get a measure of the complexity involved in predicting and understanding business cycles. However, not all periods of contraction (or troughs in a cycle) are classified as crises. Crises refer to contractions in which real output decreases, not to periods of slow growth. Therefore, it comes as no surprise that it is difficult to predict and gauge the influence of these economic crises.

Furthermore, there is little consensus as to the reasons for the manifestation of economic crises. Whereas the Great Depression of the 1930s was characterized as a Keynesian crisis (i.e., chronic insufficiency of demand) and the oil shock of 1970s was attributed to an external shock, the Brazilian crisis of the 1980s was blamed on governmental failures (excessive and distorted growth of the state), and the recent Asian crisis was considered a culmination of antiquated banking practices and idiosyncratic cultural elements, such as lack of transparency (Aggarwal 1999; Alon and Kellerman 1999; Pereira 1996). However, crises are characterized by the co-movement of many macroeconomic indicators, including decreases in real output (measured by real gross domestic product [GDP]), high levels of inflation and unemployment, and an unstable currency.

The organizational crisis literature focuses on myriad factors that influence strategies for crisis management, including the psyche of managers, the nature of crisis-triggering events, organizational structures and processes, and environmental variables (Pearson and Clair 1998). Research on the organizational response, however, has primarily focused on industrial crises (Smith 1990). Industrial crises, such as those related to negative consequences of product consumption (e.g., the silicon breast implants of Dow Corning) and industrial accidents (e.g., the 1984 Union Carbide gas leak incident in Bhopal, India), usually influence a single firm at a time. Unlike industrial crises, which influence a firm or an industry, economic crises affect a country (e.g., Mexico in 1994) or a region (e.g., Asia in 1997). Furthermore, industrial crises usually involve a struggle for legitimacy, in which organizational moral and ethical standards are subject to public scrutiny (Pauchant and Dou-

ville 1994). In contrast, economic crises alter demand patterns, thereby testing organizational marketing skills (Block 1979). In addition, organizational research has not examined the significance of market orientation and strategic flexibility, both of which are considered important organizational capabilities and critical for competing effectively in the marketplace. Research on organizational crises (D'Aveni and MacMillan 1990) shows that surviving firms, in comparison with failing firms, focus on both external and internal environments, which is a critical feature of market orientation (Kohli and Jaworski 1990), and the attainment of a balance between the two environments, which is an important aspect of strategic flexibility (Volberda 1996).

Scholars assert that the environmental context interacts with organizational capabilities to influence firm performance (Houston 1986; Lusch and Laczniak 1987). Research on market orientation has examined the interactional effects of the facets of the environment and market orientation on firm performance (e.g., Jaworski and Kohli 1993; Slater and Narver 1994). In an ordinary course of events (without a crisis), firms develop capabilities to manage their environment. Organizational investments in these capabilities should reflect the firm's environmental needs (Clark, Varadarajan, and Pride 1994). In environments characterized by high uncertainty, for example, a firm will face many diverse situations and should invest more in being flexible (Harrigan 1985).

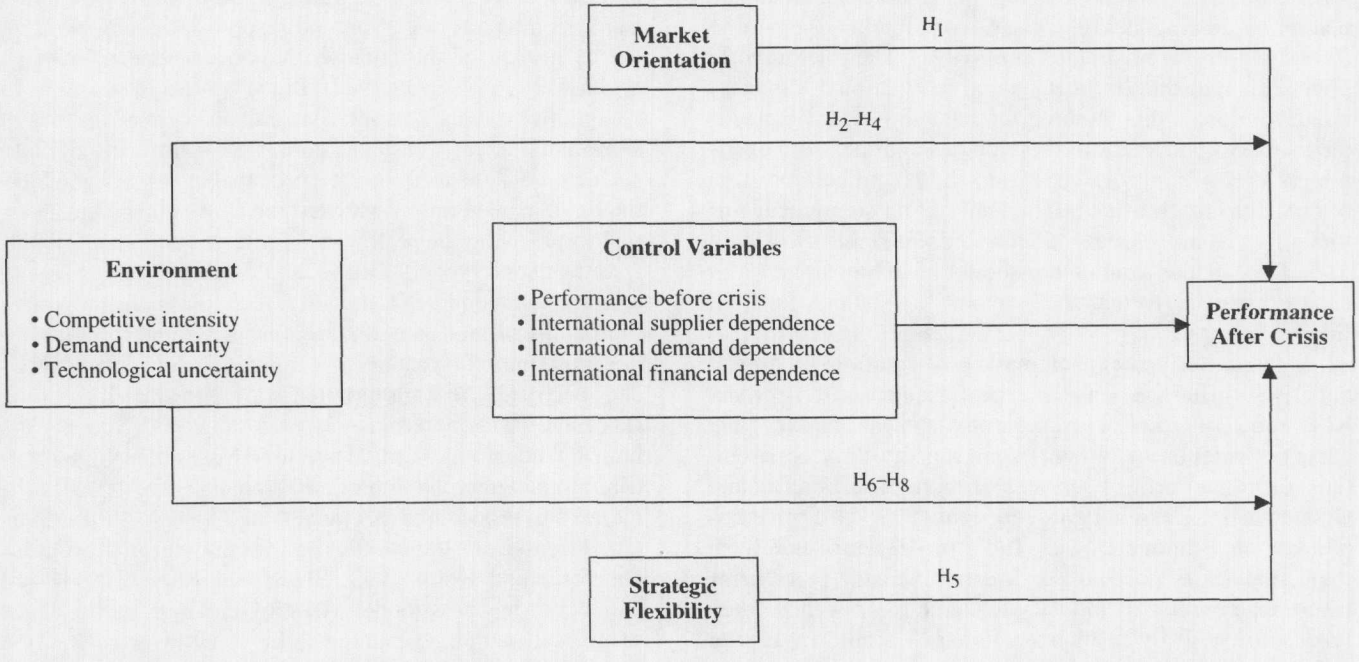
Thus, a firm develops its capabilities to maximize performance (we refer to this as performance before crisis) during the normal course of its activities. The firm uses these capabilities to manage crises (i.e., performance after the crisis has occurred, henceforth referred to as performance after crisis). Therefore, drawing from contemporary research on market orientation, we examine three facets of the environment: competitive intensity, demand uncertainty, and technological uncertainty (Kohli and Jaworski 1990). These three facets provide a comprehensive theorizing of organizational environments (Clark, Varadarajan, and Pride 1994).

It is important to emphasize that an economic crisis does not influence all firms in a similar manner. If a firm has foreign customers, for example, it may benefit from a crisis. However, if the firm has foreign suppliers, it might suffer and may need to look for alternative sources of supply. Likewise, as a crisis influences the currency exchange rates, the nature of a firm's debt becomes important. In a similar vein, a firm's performance before crisis should affect its performance after crisis (Kuran 1988). Therefore, we cannot apply the macroenvironmental phenomenon of an economic crisis homogeneously at the firm level. To conceptualize crises at the firm level, we control for a firm's performance before crisis and reliance on international suppliers, international demand, and international financial institutions. By controlling the organizational context, we customize a crisis for a firm and thereby conceptualize it at the firm level. We present our theoretical model in Figure 1, which summarizes the hypotheses pertaining to market orientation and strategic flexibility. Next, we develop these hypotheses.

Market Orientation

Market orientation represents the implementation of the marketing concept, an important cornerstone of the marketing discipline (Barksdale and Darden 1971; Felton 1959; McNamara 1972). A "market oriented organization is one whose actions are consistent with the marketing concept"

FIGURE 1
Conceptual Model



(Kohli and Jaworski 1990, p. 1). Contemporary research on market orientation focuses on (1) its definition and conceptualization (Jaworski and Kohli 1993; Narver and Slater 1990), (2) its antecedents and consequences (Jaworski and Kohli 1993; Slater and Narver 1994), (3) its influence on employee attitudes (Siguaw, Brown, and Widing 1994), and (4) its measurement (Deshpandé and Farley 1998; Kohli, Jaworski, and Kumar 1993).

Following the work of Jaworski and Kohli (1993; Kohli and Jaworski 1990; Kohli, Jaworski, and Kumar 1993), we conceptualize market orientation in terms of the activities of information generation, information dissemination, response design, and response implementation. Information generation captures the organizational emphasis on gathering information on current and future customer needs, information dissemination is the degree of sharing of information across departments, and response design (the use of market intelligence in planning) and implementation (execution of the plans) assess organization-wide responsiveness.

A standard argument in the market orientation literature suggests that market-oriented firms are in a better position to satisfy the needs of their customers (Narver and Slater 1990). Empirical research in the U.S. context supports this assertion (e.g., Jaworski and Kohli 1993; Lusch and Laczniak 1987; Slater and Narver 1994). Therefore, researchers expect market orientation to be manifested in enhanced firm performance (i.e., under the normal course of events), at least in the U.S. context.

According to Hofstede's (1980) cultural dimensions, Thailand is similar to its Asian neighbors and clearly different from Western countries, where most market orientation research has been undertaken. Yet a recent empirical study of Thai managers' attitudes toward market orientation supports the centrality of this construct for Thai firms (Powpaka 1998). Managers of Thai firms and those in other Asian countries have adopted U.S. business practices in recent years. The widespread acknowledgment of U.S. business school models is homogenizing managerial thinking and market-based practices (e.g., the use of a market orientation) across nations (see Doremus et al. 1998). The role of world bodies, such as the World Bank and International Monetary Fund, reinforces this thinking, because the United States is the primary contributor to these bodies and therefore exerts a high level of control over them. The preeminent position of U.S. consulting firms in Thailand further strengthens this line of reasoning (see Mertens and Hayashibara 1998). Therefore, market orientation should have a positive influence on firm performance in noncrisis situations for Thai firms.

Meanwhile, we expect market orientation to have a negative influence on firm performance after crisis. Research on market orientation also shows that excessive customer orientation, an important aspect of market orientation, can be harmful for organizations (see Bennett and Cooper 1979; Frosch 1996; Macdonald 1995). For example, Christensen and Bower (1996, p. 198) conclude from their analysis of the hard disk drive industry that "firms lose their position of industry leadership ... because they listen too carefully to their customers." Similarly, Hamel and Prahalad (1994, p. 99) view this customer orientation as the "tyranny of the served market" and think of customers as "notoriously lacking in foresight." In defense of market orientation, Slater and Narver (1998, p. 1003; also see Connor 1999; Slater and Narver 1999) point out that in comparison with customer-oriented firms, market-oriented firms "scan the market broadly, have a longer term focus, and are more likely to be generative learners." In a similar vein, Jaworski, Kohli, and Sahay (2000) theorize market orientation as both market driven and market driving. The focus of market orientation is on both expressed and latent customer needs, unlike customer orientation, which focuses only on expressed customer needs (Slater and Narver 1998). Market orientation also stresses learning from and monitoring competitors' capabilities and plans, as opposed to customer orientation, which neglects competitors.

Market orientation is indeed a learning process in which organizations learn from all aspects of their environment, including customers and competitors, and take both short- and long-term organizational goals into consideration (Kohli and Jaworski 1990). Market orientation captures organizational learning from the environment, and organizations derive benefits from this learning (Slater and Narver 1995). However, we do not expect this learning to be useful in crisis situations for at least two reasons. First, because crises are unique, low-probability situations, firms do not encounter them frequently and therefore cannot learn about them in advance. Second, learning from nonunique crisis situations is less likely to prove useful because firms rarely encounter these situations, do not have ample opportunity to use their learning about crises, and therefore should be less motivated to learn.

Crises also "defy interpretations and impose severe demands on sensemaking" (Weick 1988, p. 305). It is possible that even an organizational capability as powerful as market orientation may not be able to capture the rare circumstances that organizations can face in a crisis. Highly attuned market orientation would cause firms to lock into a standard mode of cognition and response, thereby building inertia instead of the creative thinking needed to manage crises (Day 1994; Scott 1987). In the context of reactions to competitive threats, Chandrashekaran and colleagues (1999) show that it is fairly easy and common for firms to steer into such inertia. At least three factors contribute to creating inertia. First, managerial bias toward the status quo creates inertia by enhancing the preferences for tested and institutionalized business models (Ritov and Baron 1992). Second, research on bounded rationality recognizes the cognitive limitations of managers and organizations and the difficulties those limitations create in evaluating new business models, specifically in high-turbulence situations such as crises (Dickson 1992). Third, sunk cost fallacy, driven by the human tendency to be more averse to losses than gains, contributes toward creating barriers to change time-tested techniques and procedures (Kahneman and Lavallo 1993). Market orientation contributes to organizational success (Jaworski and Kohli 1993; Slater and Narver 1994) and entrenches business models, thereby creating inertia. Thus, we expect market orientation to have an adverse effect on firm performance in the face of a crisis.

H_1: The greater a firm's market orientation, the lower will be the level of firm performance after crisis.

Interactions Between Market Orientation and Facets of the Environment

Competitive intensity. Competitive intensity, the degree of competition that a firm faces, has been purported to moderate the influence of market orientation on firm performance. As competitive intensity increases, so does a firm's need to be market oriented (Houston 1986). Therefore, in highly competitive environments, greater emphasis on market orientation is required for better performance (Kohli and Jaworski 1990).

Firms in highly competitive environments focus considerable attention on competitors. In these markets, firms often assume that competitors' actions are optimal and mimic them (Day and Nedungadi 1994; Day and Wensley 1988). Such mimicking should not pay off in a crisis situation, because the idiosyncratic challenges of a crisis should also befuddle competitors. In addition, a crisis represents an anomaly and has the potential to change the very basis of competition. Firms that get locked into precrisis assumptions of competition are likely to be at a disadvantage. Arthur (1989), for example, discusses the way small, chance events result in nonoptimal decisions (e.g., the "QWERTY" typewriter keyboard) and have a lingering, long-term influence on organizational activities. Likewise, DiMaggio and Powell (1983) note how the pressures of professionalization are manifested in similar thinking across firms, which leads to institutionalized business models. Similarly, firms in highly competitive environments focus more on learning about competitors, which is a key aspect of market orientation (Han, Kim, and Srivastava 1998), and over time this learning becomes institutionalized. Organizations that are market oriented are more likely to be locked into institutionalized thinking about competitive behaviors. This type of thinking becomes a greater burden as competitive intensity increases, because the need for an appropriate response to competitors is greater in highly competitive environments (Jaworski and Kohli 1993). Thus, as competitive intensity increases, we expect the negative relationship between market orientation and firm performance to become stronger.

H_2: The greater the competitive intensity, the stronger will be the negative relationship between market orientation and firm performance after crisis.

Demand uncertainty. Demand uncertainty captures the variability in customer populations and preferences, which requires organizations to adapt their product offerings, plans, and strategies to the changing demand conditions. Market orientation helps firms track these changes in the consumer environment and should aid in managing this uncertainty. As the demand uncertainty increases, so does a firm's need to be market oriented. Therefore, researchers posit that the positive relationship between market orientation and firm performance should become stronger as demand uncertainty increases (Jaworski and Kohli 1993; Slater and Narver 1994).

In the long run, an economic crisis may change the nature of consumer demand. Usually, economic crises manifest themselves in high inflation and tend to make consumers more price-sensitive (Block 1979). As a result, consumers (1) resort to greater information search, (2) postpone their purchase decisions, or (3) switch brands. Congruently, a major decline in the sales of consumer durable products, such as automobiles and household appliances, occurred during the recent Asian economic crisis, perhaps because of postponement of purchase (Hla 1999) and/or high rates of brand switching (see Siam Commerce 2000). Similar consumer behaviors were reported in South Korea. Korean students, for example, switched from a U.S. educational institution to a Korean university for their undergraduate studies (Woodard 1998). In the short run, economic crises may cause consumers to move downward on the demand curve and buy at a lower price or to purchase less quantity at the same price. Research on consumer behavior shows that consumers learn from experience, and this learning affects their future behavior (Hoch and Deighton 1989). Therefore, in addition to the temporary effects of crises on consumer behavior, the changes in consumer behavior, such as increased price sensitivity of consumers, postponement of purchase decisions, increased consumer information search, and brand switching, can have far-reaching, long-term implications and perhaps even alter the nature of the demand.

Market-oriented firms in high–demand uncertainty environments are more accustomed to monitoring consumers and therefore, with their focus on the consumer, should be in a better position to make the adjustments necessary to tap into the new demand curves (Slater and Narver 1995). The nature of demand is inherently complex in high–demand uncertainty markets. A crisis is likely to complicate these markets further, because it will directly affect the demand pattern (e.g., a rise in inflation makes some consumers more price sensitive; they therefore resort to greater information search). The market orientation skills of a firm are critical and are subjected to a Herculean examination in crisis-torn, high–demand uncertainty markets. After an economic crisis, market orientation is even more important in markets characterized by high levels of demand uncertainty as opposed to low–demand uncertainty markets. Therefore, we expect demand uncertainty to moderate the negative effect of market orientation on firm performance after crisis.

H_3: The greater the demand uncertainty, the weaker will be the negative relationship between market orientation and firm performance after crisis.

Technological uncertainty. Both the pace and degree of innovations and changes in technology induce technological uncertainty. Often organizations use technological orientation as an alternative means to market orientation to build sustainable competitive advantage (Kohli and Jaworski 1990). Even though a balance between an emphasis on technological orientation and one on market orientation is possible, firms in high-technology markets tend to allocate greater resources to technology to manage the uncertainty created by technological changes (Glazer 1991; Slater and Narver 1994). Emphasis on technological orientation as a means of competing should reduce the importance of market orientation. The positive relationship between firm performance and market orientation should weaken as technological uncertainty increases (Jaworski and Kohli 1993).

The effect of an economic crisis on reducing consumers' buying power and altering the basic demand pattern makes market orientation even more critical for two reasons. First, consumers become more price sensitive, which thereby reduces the importance of relatively expensive, technologically advanced products (Bass 1995). Second, the increased price sensitivity makes organizational ability to satisfy consumer needs even more critical. Furthermore, firms in markets characterized by high technological uncertainty, compared with firms in markets characterized by low technological uncertainty, compete more on the basis of technology than on the basis of market orientation (Hayes and Wheelwright 1984). The increased importance of market orientation due to the crisis and the dearth of market orientation capabilities should make market orientation a valued capability. Therefore, we expect technological uncertainty to moderate the negative influence of market orientation on performance after crisis.

H_4: The greater the technological uncertainty, the weaker will be the negative relationship between market orientation and firm performance after crisis.

Strategic Flexibility

Strategic flexibility represents the organizational ability to manage economic and political risks by promptly responding in a proactive or reactive manner to market threats and opportunities, thereby making it possible for firms to resort to what Ansoff (1980) terms "surprise management." Usually built by means of a flexible resource pool and a diverse portfolio of strategic options, strategic flexibility enables firms to manage uncertain and "fast-occurring" markets effectively (Aaker and Mascarenhas 1984). Strategic flexibility is expected to increase the effectiveness of communications, plans, and strategies, which, coupled with adapted product offering and other aspects of marketing mix, should enhance firm performance (see Miles and Snow 1978).

It is best to consider strategic flexibility a polymorphous construct; that is, the exact meaning and conceptualization of strategic flexibility varies from one context to another (Evans 1991; Young-Ybarra and Wiersema 1999). To study strategies for exiting markets, for example, Harrigan (1980) theorizes strategic flexibility as a firm's ability to redeploy its assets without friction and discusses how this flexibility helps firms overcome exit barriers in declining industries. Similarly, Sanchez (1995) conceptualizes strategic flexibility in the context of product competition as comprising (1) the flexibility inherent in product-creating resources (resource flexibility) and (2) flexibility in using these available resources (coordination flexibility). Likewise, Evans (1991) proposes the offensive/defensive dichotomy for strategic flexibility, in which offensive strategic flexibility aims to create and seize an initiative and defensive strategic flexibility guards against unforeseen competitive moves and environmental eventualities.

In the case of economic crises, the appropriate form of strategic flexibility is reactive. Because the extent, nature, and timing of a crisis are difficult to predict, proactive offensive action to manage the crisis is unlikely, but reactive strategic flexibility capability should be useful. Organizations develop reactive strategic flexibility (henceforth, we use the term "strategic flexibility" to refer to "reactive strategic flexibility") by building excess and liquid resources (Cyert and March 1963) and creating the capacity to be agile and versatile (Evans 1991). One way for a company to build excess resources is to hedge its options, which is related to organizational slack (the buffer for managing environmental uncertainty) and should mitigate the loss potential of a crisis (Eppink 1978). Liquid assets involve minimal switching costs to convert them to alternative forms and are reflected in the overall organizational emphasis on managing political, economic, and financial risks (Jones and Ostroy 1984). To achieve agility and versatility, organizations instill capabilities for responding to diverse scenarios. Such capabilities are built by placing emphasis on the management of environmental diversity and variability (Evans 1991).

Similar to most resource allocation decisions, opportunity costs are associated with the resources used in building strategic flexibility. Organizations building these resources foreclose other opportunities and means of making profits, such as deriving benefits from scale economies. Therefore, in the normal course of events, when a firm does not need to respond reactively to environmental eventualities, we expect strategic flexibility to have an adverse influence on firm performance (Levitt 1983; McKee, Varadarajan, and Pride 1989).

However, when the benefits of adapting outweigh the gains from standardized strategy, as in crisis situations, strategic flexibility capabilities are likely to be useful. Crises offer greater contingencies and uncertainties to organizations by altering most aspects of competition. A firm's ability to alter and adapt its programs and strategies is likely to come in handy. (Indeed, the economists who study organizational management of business cycles have laid the foundation for work on strategic flexibility; see Hart 1937; Kindleberger 1937; Stigler 1939.) Therefore, we expect strategic flexibility to be manifested in enhanced firm performance after crisis:

H_5: The greater a firm's strategic flexibility, the higher will be the level of firm performance after crisis.

Interactions Between Strategic Flexibility and Facets of the Environment

Competitive intensity. Competitive intensity, the degree of competition a firm faces, requires firms to take a flexible approach so that they can adapt and improvise to put their best foot forward (Moorman and Miner 1998). In conditions of low competitive intensity, investments in flexible resources and strategic options are not useful, because an organization is less likely to face circumstances that require the use of these resources. In contrast, in highly competitive environments, strategic flexibility is a valuable asset (Aaker and Mascarenhas 1984).

A crisis represents an anomaly and has the potential to change the very basis of competition. Firms that have the flexibility to respond to new competitive behaviors are at a definite advantage; they can easily redeploy critical resources and use the diversity of strategic options available to them to compete effectively. Thus, as competitive intensity increases, we hypothesize that the positive relationship between strategic flexibility and firm performance after crisis should be strengthened.

H_6: The greater the competitive intensity, the stronger will be the positive relationship between strategic flexibility and firm performance after crisis.

Demand uncertainty. Demand uncertainty creates difficulty in assimilating information and devising strategic plans. Managing uncertain environments requires concerted deployment of resources devoted to the product-market operations and response to demand idiosyncrasies. Strategic flexibility, by definition, emphasizes answering to the unique needs of consumers, business partners, and institutional constituents (Allen and Pantzalis 1996). Because firms are more likely to face challenging and unique situations in uncertain markets than in stable markets, strategic flexibility should be more useful in these uncertain markets.

Nonetheless, an economic crisis alters the demand characteristics. A firm may be unaware of the new nature of demand or may never have faced the new demand conditions. Even a flexible portfolio of options is unlikely to contain a remedy for the crisis, because it is a low-probability anomaly (Bowman and Hurry 1993). As a result, firms must learn (as manifested in market orientation), not just respond in a flexible manner with an existing toolkit. Therefore, we expect demand uncertainty to moderate the influence of strategic flexibility on firm performance.

H_7: The greater the demand uncertainty, the weaker will be the positive relationship between strategic flexibility and firm performance after crisis.

Technological uncertainty. Variability in technology stemming from innovations contributes to technological uncertainty. Strategic flexibility involves capability building to respond quickly to changing market conditions. Such capability building usually involves investing in diverse resources and possessing a wide array of strategic options (Bowman and Hurry 1993). Because technologically uncertain markets are likely to offer a greater number and range of threats and opportunities for firms to adapt and improvise, we expect strategic flexibility to be of higher importance in markets characterized by high levels of technological uncertainty than in low–technological uncertainty markets.

In contrast, an economic crisis diminishes the importance of technologically advanced products and increases the importance of demand management. Even a flexible portfolio of options is unlikely to be useful in crisis, because the prime need of that moment is to learn and not just respond in a flexible manner. Therefore, we expect technological uncertainty to moderate the positive influence of strategic flexibility on firm performance after crisis.

H_8: The greater the technological uncertainty, the weaker will be the positive relationship between strategic flexibility and firm performance after crisis.

Research Context

Thailand: The Center of the Economic Crisis

The Asian economic collapse began in Thailand in July 1997 with a sudden fall of the Thai baht, which could no longer be pegged to a basket of major currencies. The government spent all its reserves to try to keep the baht close to the pegged rate, but without success. In a few months, the baht devalued from approximately 25 baht per U.S. dollar to more than 50 baht. Quickly, the crisis spread to other Asian and then Latin American countries and has had lingering global effects. Therefore, we believe that Thailand is an appropriate context in which to study this crisis. Our data collection exercise was carried out from November 1998 to March 1999, which coincides with signals related to the bottom of the crisis and the recovery of the Thai economy. Since then, the baht has revalued to a floating rate of approximately 35 baht per U.S. dollar, and the short-term interest rates (20%–25% at the height of the crisis) began to decline to approximately 12% in June 1999. Economists have declared Thailand and Korea as frontrunners in managing their way out of the crisis (Aghevli 1999).

Generalizability of Context

We argue that Thailand provides an appropriate context for testing the generalizability of our research on market orientation and strategic flexibility. It is a non-Western nation with a clearly different set of cultural values in comparison with the United States and Western European countries, where most of the research on market orientation and strategic flexibility has been carried out (Hofstede 1980; McGill 1995). Thai managers and business owners are representative of a non-U.S. sample for Asia, because many are Chinese in origin and thereby similar to their counterparts in other Southeast Asian countries (Powpaka 1998). Thailand has also been the regional headquarters of many multinational companies in Southeast Asia, and Thai managers have been employed to run subsidiaries throughout the region.

We further established the generalizability of the Asian crisis and its impact on Thailand in two ways. First, we compared the influence of the Asian economic crisis on Thailand, South Korea, and Japan. Thailand saw a drop in GDP growth from 5.5% to –10%, whereas the drop was not so adverse for South Korea (from 5.8% to –6.8%) and Japan (from 2.9% to –5.2%). The three countries also witnessed negative growth rates, as pointed out in our definition of an economic crisis. The crisis resulted in rising consumer inflation and unemployment, along with currency devaluation in the three countries. The current account deficits also dramatically declined, which signals a substitution of foreign goods for those produced within the country. Second, we compared the influence of the Asian crisis with those for Mexico and Russia. In terms of real GDP growth, consumer price inflation, unemployment rates, and changes in currency exchange rates, the influence of the Asian crisis on Thailand was similar to economic crises in Mexico (1994) and Russia (1997).

Control Variables

We must control for both the historic levels of firm performance and international dependencies that may influence performance after crisis. Aptly described as the "tenacious past" by Kuran (1988) and "path dependence" by Arthur, Ermoliev, and Kaniovski (1987), higher performance before crisis generally should be manifested in higher performance after crisis. Furthermore, we viewed international depen-

dencies in terms of linkages with suppliers outside Thailand, the extent to which the product/service is exported, and dependence on international financial agencies. Reliance on suppliers from countries not affected by the Asian crisis is likely to have an adverse influence on performance after crisis, because raw materials and other products used in manufacturing become more costly. Demand dependence captures the extent to which a firm relies on international demand. An economic crisis usually results in currency devaluation that makes exported products cheaper. Demand dependence should therefore enhance performance after crisis. Finally, we controlled for financial dependence, which indicates the extent of reliance on borrowing in foreign currencies. The higher the reliance on international financial institutions, the more severe should be the adverse effects of a crisis.

Method

Sample and Data Collection Procedure

We focused on small and midsized Thai firms, which were relatively more vulnerable to the crisis because organizational slack (buffer) directly varies with firm size (see Clark, Varadarajan, and Pride 1994). Data were collected from these firms in three waves. First, consistent with recent research on Thai firms (Powpaka 1998), the data were collected during November 1998 from 49 middle managers and owners participating in an executive MBA program at a large university in northeastern Thailand. A subsequent group of respondents who participated in the program in March 1999 provided the second set of 61 responses. Third, during March 1999, a senior manager in a prominent Thai conglomerate in Bangkok agreed to the conglomerate's participation in the study. We distributed the survey to the 30 firms affiliated with the conglomerate and obtained 22 responses. Thus, we received 132 responses, of which 120 were complete and usable. Furthermore, we compared the three groups in terms of the number of employees before crisis (BEMP) and number of employees after crisis (AEMP) and found no differences. We also compared the change in the number of employees (CEMP = BEMP – AEMP) for the three groups and found that the mean number of employees increased for the three groups and that there were no statistical differences in the change in these means. Finally, we translated the questionnaire from the original English version to Thai and used the back-translation technique to ensure that the original meaning was maintained.

Measures

We operationalized market orientation with four subconstructs: information generation, information dissemination, response design, and response implementation. Specifically, we adopted Jaworski and Kohli's (1993) 31-item measure with 10 items for information generation and 7 items for each of the remaining three subconstructs. We carried out a measure purification exercise similar to that used by Kohli, Jaworski, and Kumar (1993, p. 475), who note that "As globalization issues assume the forefront of marketing practice, it is important to consider whether (1) the scale 'makes sense' in other languages and (2) subsequent measure assessment would produce similar results." However, after the development of this market orientation measure, advances in psychometric research on instrument development provided evidence of two potential issues with this measure. First, Bagozzi and Baumgartner (1994) recommend using 5 or fewer items to measure a unidimensional construct. Because all the subconstructs of market orientation have more than 5 items, it is possible that assessing the unidimensionality of these constructs will pose problems. Second, Herche and Engelland (1996) demonstrate that reverse-scored items need not be the opposite of positively worded items and therefore should be avoided. In the 31-item measure of market orientation, 10 items are reverse-scored. Therefore, cognizant that the market orientation measure may pose challenges, we sought to assess the psychometric properties of this measure as a peripheral objective in the Thai context.

We used four items to measure strategic flexibility. The first item captures the organizational objective of building excess resources by hedging (Eppink 1978) and likewise stresses sharing investments across business activities. Such investment sharing buffers an organization from external shocks, because the organization can find alternative uses for its resources. The next two items gauge organizational attempts to build agility and versatility by instilling capabilities to respond to disparate situations. Specifically, the second item appraises a firm's emphasis on deriving benefits from diversity in the environment, and the third item measures the importance the firm puts on benefiting from opportunities that arise from variability in the environment. These emphases on actively managing the diversity and variability help organizations become agile and versatile (Jones and Ostroy 1984). The final item appraises strategic flexibility in terms of a firm's strategic emphasis on managing macroenvironmental risk (i.e., political, economic, and financial risks). Firms placing such an emphasis attempt to gain a competitive edge by developing superior abilities in responding to environmental uncertainties. In operational terms, these firms may possess liquid resources or options to enhance the speed and extent of their maneuvering capabilities.

To measure the three components of the environment (i.e., competitive intensity, demand uncertainty, and technological uncertainty), we adopted items from Jaworski and Kohli's (1993) work. The four items for competitive intensity assessed the extent of competition in general, promotional wars, price competition, and new competitive moves. The four items for demand uncertainty measured the uncertainty created by variability in consumer demand, product and brand features, price/quality demanded by customers, and competitive moves. The three-item technological uncertainty scale appraised changes in technology, opportunities created by technology, and manifestation of new products as a result of technology.

We measured performance (both before and after crisis) by assessing satisfaction with respect to return-on-investment goals, sales goals, profit goals, and growth goals. We appraised international interdependencies with three three-item measures. The items for international supplier dependence measured relying on international suppliers, buying raw materials and other supporting materials from abroad,

and relying on multinational corporations for raw material. The scale for international demand dependence assessed selling products to foreign customers, relying on overseas demand, and being able to satisfy multinational and foreign customers. The measure for international financial dependence appraised financing from abroad, the criticality of funding from abroad, and financing from international monetary agencies.

Measure Validation

We used confirmatory factor analysis to assess the convergent and discriminant validity for our measurement models (Gerbing and Anderson 1988). Specifically, we estimated four measurement models: the first for the three environmental variables (competitive intensity, demand uncertainty, and technological uncertainty), the second for the three control variables (supplier dependence, demand dependence, and financial dependence), the third for the two performance variables (performance before and after crisis) and strategic flexibility, and the fourth for market orientation. We summarize the results from these models in Table 1. Overall, the results demonstrate adequate levels of fit, and all factor loadings are greater than the .4 cutoff (Nunnally and Bernstein 1994). In addition, discriminant validity is established, in that all the ϕs are statistically different from 1 (Anderson and Gerbing 1982).

We also used low factor loadings, high standardized residuals, and high modification indices from our confirmatory factor analysis results to purify our measures. As we suspected, the majority of the problems pertaining to unidimensionality were related to either long scales (Bagozzi and Baumgartner 1994) or reverse-scored items (Herche and Engelland 1996). We encountered problems in the market orientation subconstructs, especially for response design, which had four of seven items reverse-coded. There is a need for a more reliable measure for market orientation. Finally, all reliabilities are greater than .7, with the exception of the response design subconstruct (Nunnally and Bernstein 1994). The descriptive statistics for the constructs, along with their correlations, appear in Table 2.

Results

In Table 3, we summarize the regression results. Typically, multiplying the appropriate independent variables creates indicators for the interaction terms. Because this approach is prone to collinearity (Jaccard, Turrisi, and Wan 1990), we took an instrumental variable approach to capture the interaction effects. Specifically, we ran a regression in which the product of the two variables in question was the dependent measure and the two variables used to obtain the product term were independent variables. We used the residual of this estimation as the instrument for the interaction hypothesis (for statistical details, see Hansen 1982; White 1983). Conceptually, these residuals are orthogonal to the two variables used to obtain them; in terms of hypothesis testing, they explain variance in addition to that explained by the main effects.

For the control variables, our assertions regarding path dependencies and international demand dependence were supported. Firms with high levels of performance before crisis tended to perform better after crisis (b = .319, $p < .01$), and international demand dependence leads to higher levels of performance after crisis as exports become cheaper in the world market (b = .214, $p < .01$). However, international supplier dependence (b = .029, $p < .67$) and international financial dependence (b = –.012, $p < .88$) do not seem to influence firm performance after crisis. Our informal discussions with the respondents reveal a possible explanation for these results. The suppliers for the firms in our sample

TABLE 1
Results from Confirmatory Factor Analysis Models

Measurement Model	Range of Standardized Factor Loadings	NNFI	CFI	SRMR	RMSEA	χ^2 (d.f., *p*-Value)
Environment[a]	.60–.92	.90	.93	.08	.09	81.2 (41, $p < .01$)
Dependence[b]	.68–.98	.94	.96	.06	.11	56.9 (24, $p < .01$)
Performance and strategic flexibility[c]	.41–.94	.95	.96	.04	.07	82.3 (51, $p < .01$)
Market orientation[d]	.43–.80	.81	.84	.10	.09	224.5 (113, $p < .01$)
Market orientation—second order[e]	.62–.85	.91	.97	.04	.14	6.7 (2, $p < .03$)

[a]The reliabilities for the environmental variables were competitive intensity = .92, demand uncertainty = .87, and technological uncertainty = .86.
[b]The reliabilities for the international dependence variables were supply dependence = .95, demand dependence = .91, and financial dependence = .95.
[c]The reliability for strategic flexibility was .77. The reliabilities for the performance variables were performance before crisis = .91 and performance after crisis = .95.
[d]The reliabilities for the facets of market orientation were information generation = .81, information dissemination = .85, response design = .61, and response implementation = .82. During the item-purification exercise, we deleted the following items from Jaworski and Kohli's (1993) scale: information generation: 4, 7, 8, 9, 10; information dissemination: 6, 7; response design: 1, 3, 5, 7; and response implementation: 2, 6, 7.
[e]Reliability for a second-order factor structure with an average of four subconstructs as items. We also calculated it using the method of linear combinations (see Nunnally and Bernstein 1994, pp. 266–73). Specifically, we calculated reliability as $\rho = 1 - (\Sigma\sigma_i^2 - \Sigma\sigma_i^2 r_{ii})/\sigma_Y^2$, where σ_i^2 is the variance for subconstruct i, r_{ii} is the reliability of subconstruct i, σ_Y^2 is the variance of the construct (i.e., market orientation in our case), and ρ is the reliability. This method gave us the reliability value of .91.
Notes: NNFI = nonnormed fit index, CFI = comparative fit index, SRMR = standardized root mean square error, RMSEA = root mean square error of approximation, and d.f. = degrees of freedom.

TABLE 2
Descriptive Statistics

	ISD	IDD	IFD	CI	DU	TU	MO	SF	PBC	PAC
International supplier dependence (ISD)		.37**	.40**	.17	.33**	.23*	.22*	.21*	−.01	.10
International demand dependence (IDD)			.55**	−.05	.13	.10	.21*	.12	.01	.33**
International financial dependence (IFD)				−.01	.14	−.06	.23*	.26**	−.12	.16
Competitive intensity (CI)					.54**	.41**	.33**	.30**	.03	−.07
Demand uncertainty (DU)						.44**	.48**	.41**	.11	.11
Technological uncertainty (TU)							.45**	.41**	.19*	−.04
Market orientation (MO)								.48**	−.07	.11
Strategic flexibility (SF)									−.06	−.06
Performance before crisis (PBC)										.20*
Performance after crisis (PAC)										
Mean	2.74	2.91	2.34	4.15	4.53	4.67	4.93	4.32	3.92	4.82
Standard deviation	1.64	1.96	1.51	1.48	1.30	1.35	0.99	1.11	1.51	1.14

*$p < .05$.
**$p < .01$.

often were from neighboring countries that were equally influenced by the crisis. In addition, the financial institutions provided the funds in local currencies, which thereby insulated the firms from the vagaries of international currency fluctuations. Although we had conjectured along these lines for international supplier dependence and international financial dependence, by measuring these variables we controlled for the biases that might have been induced had we not incorporated these variables in our analysis.

Does market orientation help in managing market crisis situations? Our results show that it does only in certain conditions. In general, market orientation has a negative influence on firm performance after crisis (H_1: b = −.734, $p < .05$), which is aggravated in conditions of high competitive intensity (H_2: b = −.230, $p < .01$). However, market orientation helps firms manage conditions of high demand uncertainty (H_3: b = .301, $p < .01$) and high technological uncertainty (H_4: b = .158, $p < .10$).

Unlike market orientation, strategic flexibility is useful when firms must navigate their way out of crises (H_5: b = .603, $p < .01$) and becomes even more important as competitive intensity increases (H_6: b = .186, $p < .05$). However, demand uncertainty (H_7: b = −.362, $p < .01$) and technological uncertainty (H_8: b = −.140, $p < .05$) moderate the positive influence of strategic flexibility on firm performance after crisis.

We estimated a model with performance before crisis as a dependent measure and market orientation, strategic flexibility, and their interactions with the facets of the environment as independent measures. We recognize that such a model is not theoretically sound, because we are trying to explain the 1996 performance with organizational variables measured in 1998. Nonetheless, we found that market orientation positively influences firm performance before crisis and that this effect is moderated by technological uncertainty. In addition, reactive strategic flexibility has an adverse effect on firm performance before crisis, which is moderated by demand uncertainty.

Discussion

Using the Asian economic crisis in Thailand as our research context, we studied the importance of market orientation and strategic flexibility in helping firms manage the chaos and challenges an economic crisis poses. Reasoning that crises "defy interpretations and impose severe demands on sensemaking" (Weick 1988, p. 305), we suggested that learning firms would be locked into set modes of cognition and response because crises are low-probability events and preclude creative sensemaking. The inertia created by market orientation often hampers learning pertaining to the changes in the environment after a crisis, thereby resulting in a negative link between market orientation and firm performance after crisis.

Our results indicate that market orientation is useful for managing crises only in conditions of high demand uncertainty or high technological uncertainty, and it might not be emphasized when competitive intensity is high. When firms have an emphasis on market orientation, they get locked into institutionalized thinking about competitors. However, pre-crisis assumptions of competitive behavior are no longer valid after a crisis, and as a result market orientation tends to hurt market-oriented firms. Conversely, an emphasis on market orientation enables firms to learn the new demand patterns quickly and effectively, because their primary focus in high–demand uncertainty environments is consumers (Day and Wensley 1988). An economic crisis shifts competition away from innovative new products, which tend to be expensive, and toward other market factors such as demand management. Again, market orientation comes in handy here.

In contrast, the tools and skills developed by posturing strategic flexibility are useful in crisis situations. Our results recommend flexibility in managing environments with high competitive intensity. However, flexibility is not a cure for environments with either high demand uncertainty or high technological uncertainty. Readers are advised to observe that in markets characterized by high competitive intensity, strategic flexibility should be emphasized and market orientation should be deemphasized. In markets with high demand uncertainty or high technological uncertainty, market orientation should be emphasized and strategic flexibility should not be stressed. The complementarity of market orientation and strategic flexibility in managing varying environmental con-

TABLE 3
Results from the Three-Stage Least Squares Model[a]

Independent Variable	Dependent Measure: Performance After Crisis
Constant	1.195 (1.604)
Performance before crisis	.319*** (.087)
International supplier dependence	.029 (.068)
International demand dependence	.214*** (.060)
International financial dependence	−.012 (.083)
Competitive intensity (CI)	−.211** (.116)
Demand uncertainty (DU)	.561*** (.153)
Technological uncertainty (TU)	−.050 (.138)
Market Orientation (MO)	
MO	−.734** (.356)
MO × CI	−.230*** (.090)
MO × DU	.301*** (.106)
MO × TU	.158* (.101)
Strategic Flexibility (SF)	
SF	.603*** (.220)
SF × CI	.186** (.087)
SF × DU	−.362*** (.094)
SF × TU	−.140** (.083)

*$p < .10$.
**$p < .05$.
***$p < .01$.
[a]Standard error is in parentheses (one-tail rests). $R^2 = .27$.

ditions suggests that top management should develop both of these capabilities in tandem. This complementarity is further reinforced by the finding that market orientation and strategic flexibility capabilities can be simultaneously pursued, as is indicated by the high correlation of .48 between the two constructs (see Table 2). Firms can simultaneously build these two capabilities and thereby, to an extent, make the resource allocation decision between these two capabilities moot.

Limitations

The main limitation of our research pertains to the nature of our sample. Two of the three sample sources are executive MBAs, which indicates that caution is necessary in drawing inferences. Firms that participate in executive MBA programs are likely to be somewhat different from firms that do not; they are more likely to succumb to the pressures of professionalization (DiMaggio and Powell 1983) and as a result are more likely to adopt the models propagated by business schools, such as the importance of market orientation.

Three more limitations require caution as we draw implications from and generalize our results. First, we are limited by our context, and replications with other economic crises are needed. Second, there is a need to develop a better measure of strategic flexibility that would give a better sampling of the domain of the construct. Third, similar to most survey research, our results suffer from survival bias. Firms that did not survive the crisis are missing from our sample.

Theoretical Contributions and Implications

We believe that our research makes important contributions to the literature on economic crisis, market orientation, and strategic flexibility. By using organization-level data with a large number of respondents, we move beyond the theoretical (see Pearson and Clair 1998) and case-based (Abolafia and Kilduff 1988) research that dominates the crisis literature. We also show that the organizational capability (market orientation or strategic flexibility) that would aid organizations in managing a crisis is contingent on the facets of the environment.

We also contribute to the literature on market orientation. Time and again, scholars have expressed the need to study market orientation in a non-U.S. context (e.g., Kohli, Jaworski, and Kumar 1993). We take an important step in this direction and highlight three issues. First, our research examines the psychometric properties of Kohli, Jaworski, and Kumar's (1993) MARKOR measure, and our results suggest further refinement of this measure. Second, we demonstrate that market orientation influences performance after crisis but find that it is only useful for managing economic crises in environments characterized by high levels of either demand or technological uncertainty. Third, we study the boundary conditions for the influence of market orientation. Several studies have shown that customer orientation can be detrimental (Christensen and Bower 1996). Slater and Narver (1998, 1999) rightly argue that market orientation goes beyond customer orientation and should help overcome the weakness inherent in customer orientation. In the case of economic crises, our research shows that market orientation does not help firms effectively manage all environmental conditions and demonstrates the need to refine the construct further. The emergence of the network economy is increasing the interconnectedness among countries (Achrol and Kotler 1999), and regional economic crises therefore may have riveting effects around the world. It therefore becomes important for organizations to build capabilities

to manage crises and for marketing researchers to be attuned to market orientation for crisis situations. We also demonstrate the importance of strategic flexibility in crisis situations, in that strategic flexibility helps firms manage crises in markets characterized by either high levels of competitive intensity or low levels of demand uncertainty and technological uncertainty.

In addition to demonstrating the limitations of a market orientation in crisis situations, our research hints at the manner in which this important construct could be refined. Market orientation primarily reflects a firm's learning about its environment; that is, a firm learns from its environment and learns to manage its environment. However, a firm may face a situation it has never encountered. Crises are obvious examples, but we could also put breakthrough technological advances, such as the emergence of electronic commerce, in this category. If a firm has not been schooled in managing rare situations, it is at odds for its response. The lethargy with which bricks-and-mortar retailers adopted the Internet is an apt example (see Brooker 1999). Our study suggests that a market-oriented firm or a generative learner (see Sinkula 1994) should build a buffer to manage unique, unpredictable challenges reactively. Slater and Narver (1995) discuss buffering but in the context of proactive rather than reactive management. We believe that reactive actions are necessary though not desirable. We recognize that we provide only preliminary evidence for the refinement of market orientation in the direction of incorporating reactive resources, but we have taken an important step in this direction.

Managerial Contributions and Implications

What capabilities do firms build to manage crises? This is an important question that today's practitioners are asking as organizations around the world try to cope with the growing pains of economic prosperity. Our research helps provide a partial answer to this question. Managers should stress building the skills of market orientation and strategic flexibility while recognizing their usefulness in managing different facets of the environment.

Market orientation aids in enhancing performance before crisis and, consistent with the "tenacious past" (Kuran 1988) argument, indirectly enhances performance after crisis (through firm performance before crisis). Market orientation should also be stressed in environments characterized by high demand or technological uncertainty, whereas strategic flexibility should be sought after in markets characterized by high levels of competitive intensity.

Conclusion

Economic crises are complex phenomena from both a theoretical and a practical perspective. Our study is among the few attempts to unravel how organizational capabilities may be used to manage these situations effectively. We touch on only two capabilities, and many questions remain to be answered. We hope our research stimulates interest and motivates more organization-level research on economic crises.

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