DIFFERENCES BETWEEN WOMEN AND MINORITY BUSINESSES AND NONMINORITY BUSINESSES: A CULTURE-BASED EXPLANATION

by

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Copyright © by Eva Darlene Dodd-Walker 2006 All Rights Reserved This work is dedicated to the loving memory of my father, Douglas Dodd, Sr., and my family—Essie Dodd, Lorraine Holmes, Vera Watson, Annette Oni, Linda Latimer, and Douglas Dodd, Jr. It represents the realization of my father's dream for me. It was possible because of my family's love, support, and prayers.

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ABSTRACT

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As the American workforce is buffeted by industries that are downsizing, requesting pay concessions and relocating production to foreign countries with lower factor costs, politicians and union representatives wave the flag of protectionism and explain the state of affairs in terms of a lack of national competitiveness. Porter (1990) links national competitiveness to the competitiveness of the nation's companies, asserting that this competitiveness is achieved through acts of innovation. According to the Small Business Administration (SBA), small business has become the dominant economic force in the United States again (U.S. SBA, 2000), producing 47 percent of all American sales, 51 percent of the private gross domestic product, and 55 percent of innovations. (U. S. SBA: The Facts, 1999) Women and minorities have taken the lead in expressing interest in small business ownership (U. S. Census Bureau:

Statistics about Business Size; U. S. Department of Commerce WB92-1, 1996; U. S. SBA: Minorities, 2001; U.S. SBA: Women, 2001). However, the cultural values of women and minorities differ from the traditional values of nonminorities; those values, according to England and Lee (1974), influence both a person's behavior and success. This dissertation discusses the impact of those cultural differences on firm behavior with respect to firm commitment, risk propensity, and the internationalization rates of women (WBOs) and minority business owners (MBOs), key drivers to national competitiveness.

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CHAPTER 1

INTRODUCTION

"The United States is an achievement-oriented society that has historically encouraged and honored individual accomplishment and the attainment of material prosperity. In the past, Americans have spoken proudly of the American dream, which embodies the belief that this is a land not only of material abundance but also of political and economic opportunity. (Spence, 1985: p. 1286)" More recently, however, our cultural values have come under attack as social critics decry the excesses of individualism (Spence, 1985). Alarms have been sounded about the decrease in American productivity and the ensuing economic consequences (Spence, 1985). Although it is conceded that this state of affairs is largely due to governmental policies, external political events, and impersonal economic forces, many have also blamed the individual worker as well as organizational and managerial practices (Spence, 1985).

Amid this controversy, however, the face of America is changing as well as its values. That is, the American work force is becoming more diverse, with women and minorities accounting for the majority of net additions to the work force (Cox, Lobel, and Mcleod, 1991). Some researchers contend that "cultural diversity in work forces brings value to organizations and ultimately improves

their performance. (Cox et al., 1991: p. 827)" An extension of this argument would suggest that an increased presence of women and minority business owners would bring value to the American economy, ultimately improving the nation's performance or national productivity.

Small firms represent opportunity for many who have traditionally had little access to economic power—including minorities, immigrants, and women. The numbers of women and minorities in business have been rising as never before. In 1997, an estimated 8 million women and 3.2 million minorities owned small, noncorporate businesses. Of the self-employed, more than one-third were women; African American, Hispanic, and Asian American minorities each owned between 5 and 6 percent of noncorporate businesses. (The State of Small Business, 1999)

Although it has been established that cultural diversity affects group performance and thus organizational success (Cox et al., 1991), we have yet to understand the impact of cultural diversity on firm performance through the organization's strategies.

Importance of Research

Ongoing work force reductions are causing an increase in American unemployment and contributing to stagnating living standards. As the American workforce is buffeted by industries that are downsizing, requesting pay concessions and relocating production to foreign countries with lower factor costs, politicians and union representatives wave the flag of protectionism and explain the state of affairs in terms of a lack of national competitiveness. Krugman (1996: pp. 9 and 18) asserts that the growth rate of living standards

equals the growth rate of domestic productivity and warns that thinking and speaking in terms of competitiveness is dangerous because it may lead to wasteful government spending, protectionism and trade wars, or bad public policy. According to Porter (1990):

The only meaningful concept of competitiveness at the national level is productivity. The principal goal of a nation is to produce a high and rising standard of living for its citizens. The ability to do so depends on the productivity with which a nation's labor and capital are employed. Productivity is the value of the output produced by a unit of labor or capital. (Porter, 1990: 84)

However, Porter (1990) states that "Seeking to explain 'competitiveness' at the national level, then, is to answer the wrong question. What we must understand instead is the determinants of productivity and the rate of productivity growth. (p. 85)" Thurow (1990) reviews Michael Porter's (1990) book, *The competitive advantage of nations*. Thurow agrees with Porter that a nation's success depends on its productivity and rate of productivity growth. He also agrees with Porter that America's economic problems are the result of market harvesting, which results in too little investment in skills, plants and equipment, research and development, and infrastructure. Thurow criticizes Porter by saying that Porter's analysis fails where earlier intellectual explorers have failed—unable to specify when and why countries stop increasing productivity and enter the wealth-driven stage of decline. In addition, Thurow (1994) attacks Krugman's assertion,

arguing rather that the success of the domestic economy (i.e., higher productivity and income) is contingent upon successful global competition.

Research by Hofstede (1984) suggests that cultural orientation is a contributing factor to a nation's productivity; he found a relationship between economic growth and individualist/collectivist values in wealthy countries. Many studies have found that women and minorities have a different cultural orientation than nonminorities (Eagly, 1987; Hofstede, 1984; McWhirter, 1997; Nwankwo and Lindridge, 1998). According to the Small Business Administration, the role of women and minorities in small business is intensifying and small business has become the dominant economic force in the United States (U.S. Census Bureau: Statistics about Business Size, 2002; U.S. Department of Commerce WB92-1, 1996; U.S. SBA, 2000; U.S. SBA: Minorities, 2001; U.S. SBA: The Facts, 1999; U.S. SBA: Women, 2001). Porter (1990) contends that a nation's competitiveness is based on the competitiveness of its industries, that national prosperity is created rather than inherited; since competitive advantage is created and sustained through a highly localized process, national differences in values, culture, histories, institutions, economic structures all contribute to competitive success. An extension of this logic would suggest that differences in values, subcultures, histories, institutions, and economic structures within a nation affect competitive success. Thus, a study of the impact of women and minorities on national competitiveness is both necessary and timely.

Rationale of Research

Thurow (1994) contends that national productivity is tied to successful global competition, the primary driver of which is internationalization. Many, mistakenly, use the terms internationalization and globalization interchangeably. According to Dicken (1998; in McGovern, 2002: p. 25), "Processes of internationalization are defined as the simple extension of economic activities across national boundaries. It is...essentially a quantitative process which leads to a more extensive geographical pattern of economic activity. Globalization processes, on the other hand, are qualitatively different from internationalization processes in that they involve not merely the geographical extension of economic activity across national boundaries but also—and more importantly—the functional integration of such internationally dispersed activities."

Regardless of the terminology used, trade among nations is increasing rapidly; by 2015, trade among nations will exceed the trade within nations, and it will be virtually impossible for firms to survive, particularly in high-tech industries, unless they scan the world for competitors, suppliers, human resources, customers, and technology (Dess and Lumpkin, 2003). That is, firms must pursue internationalization to sustain organizational viability. According to Yip, Johansson, and Roos (1997), nationality or culture significantly affects whether or to what degree businesses pursue global strategies; they found that American businesses were significantly less likely than Japanese businesses to make use of

global strategies. Hofstede (1984) indicated that Asiatic societies, such as the Japanese, tend to have collectivist values, while individualist values prevail in the United States. This suggests a possible association between individualism-collectivism orientation and the pursuit of global strategies. Individualism-collectivism orientation differs, however, within the United States. Several researchers note the different value orientation of women and minorities relative to nonminorities. Specifically, some researchers note the collectivist values of Mexican Americans (Cox et al., 1991; McWhirter, 1997), Blacks (Cox et al., 1991; Nwankwo and Lindridge, 1998), and women (Eagly, 1987) as well as Asians (Cox et al., 1991).

Given extant theoretical and empirical support for the association between nationality and the pursuit of global strategies as well as the cultural orientation of women and minorities in the United States, the primary purpose of this study is to analyze how these cultural differences affect the competitiveness of women- and minority-owned businesses relative to nonminority-owned businesses. A secondary purpose is to integrate women and minority research. The primary argument to be advanced in this dissertation is that culture is a determinant of national productivity or competitiveness as manifested through firm commitment, risk orientation, and the international rates of women and minority business owners.

Research Definitions and Variable Selection

In this study, the following acronyms are used: WBOs, MBOs, and NMBOs. WBOs refer to women business owners and include women of all ethnicities. MBOs refer to minority business owners; this group includes all minorities as specified by the Small Business Administration of the United States—Blacks, Hispanics, Asians, Pacific Islanders, American Indians, and Alaska Natives—irrespective of gender. NMBOs refer to nonminority business owners; this group consists of businesses owned by White males, consistent with literature in the field.

The primary purpose of this study is to determine the impact of culture on the competitiveness of women- and minority-owned businesses relative to nonminority-owned businesses. Thus, differences in firm behavior are the focus of this study. National competitiveness literature suggests that market harvesting (Porter, 1990; Thurow, 1990) and global competition (Yip et al., 1997) are two weaknesses of American companies. In addition, extant research has demonstrated the relationship between risk orientation and firm profitability. Therefore, I selected firm commitment, internationalization rate, and risk orientation variables because they reflect three major areas of firm behavior directly related to firm competitiveness, which aggregates to national competitiveness.

Research Objective

The purpose of this study is to demonstrate the impact of diversity on national competitiveness. The associated benefits of diversity are numerous. First, minority-owned firms have increased three to seven times faster than nonminority-owned firms (U. S. SBA: Minorities, 2001), while women-owned firms have increased two to four times faster than all firms (U. S. SBA: Women, 2001). Second, recent research evidence suggests that WBOs place more emphasis on quality when making both purchasing and other decisions (National Foundation for Women Business Owners, NFWBO, 2000). Third, extant research indicates that women and minority business owners are more risk averse than NMBOs (e.g., Watson and Robinson, 2003; Sexton and Bowman-Upton, 1990), suggesting that they would be more likely to remain in maturing industries, a practice that needs to be encouraged to counteract some of the problematic results of market harvesting. This notion is supported by research conducted by the National Foundation of Women Business Owners, which found that relative to the average U.S. business, women-owned businesses are more likely to remain in business (NFWBO, 2000). Thus, the accruing benefits of diversity include increased growth in the number of small businesses, increased emphasis on quality in decision-making, and business longevity.

Overview of Dissertation

The development of this dissertation will proceed as follows. Chapter 2 provides a review and evaluation of the dominant paradigm in internationalization research as well as a review and evaluation of the individualism-collectivism cultural dimension. This first part of this chapter discusses both the contributions and limitations of the Uppsala model. It concludes by suggesting the natural extension of the model, which is an inclusion of the decision maker. The second division of the chapter briefly discusses the evolution of the individualismcollectivism dimension in social science. It presents extant research to substantiate the collectivist orientation of WBOs and MBOs, which is crucial to the proper evaluation of the model to be developed in the following chapter. Chapter 3 presents the theoretical development of the model, which ensues from the hypotheses presented. In this chapter, a profile is established for women and minority business owners. In addition, thirteen hypotheses are developed that indicate the relationships among culture, commitment, risk aversion, and internationalization rates as well as the impact of occupational socialization. In chapter 4, the research design is presented. This chapter discusses the following: research strategy, research data source, levels analysis and reconciliation, research setting, research focus, measures, data collection, data analysis and techniques, and missing data. Chapter 5 presents both the results and findings of the study. The final chapter, chapter 6, discusses the findings, research contributions, study limitations, and directions for future research.

CHAPTER 2

LITERATURE REVIEW

This chapter focuses on both a review and evaluation of the dominant paradigm in internationalization research—the Uppsala model—as well as the individualism-collectivism cultural dimension. The first part of the chapter presents both the contributions and limitations of the Uppsala model. This division of the chapter concludes by suggesting the natural extension of the model (i.e., the incorporation of the decision maker). The second part of the chapter presents the evolution of the individualism-collectivism dimension in culture research, the cultural orientation of WBOs and MBOs, the faces and distinctions of the individualism-collectivism dimension, and the examination of the individualism-collectivism dimension within the context of this study. The goal of this chapter is to examine the assumptions of the internationalization model, thereby establishing the foundation to explicate the behavior of WBOs and MBOs.

The Dominant Paradigm of Internationalization

The Uppsala Model: A Review

Given that a focus of this research is to study determinants of internationalization, one might ask, "Why study the impact of culture?" The dominant paradigm—the Uppsala model—in the internationalization field

suggests antecedents such as firm size, firm age, and technology (Johanson and Vahlne, 1977). Johanson and Vahlne (1977) contend that internationalization is a gradual process, the product of a series of incremental decisions. The process of internationalization is not the result of a strategy but rather the consequence of a process of incremental adjustments to changing conditions of the firm as well as its environment. Typically, firms begin by exporting to a foreign country through an agent; later, the firm establishes a sales subsidiary; finally, in cases of extensive internationalization, the firm initiates production in the host country. The model is based on three assumptions: (1) The model assumes that growth is a primary goal of the firm. (2) The firm seeks to minimize risk-taking or keep it at a low level. (3) The model of the internationalization process of the firm assumes that the firm lacks knowledge about foreign markets and operations, which hampers the development of international operations, and that the necessary knowledge is acquired mainly through experience (i.e., operations abroad). In their internationalization process model, knowledge is considered to be vested in the decision-making system rather than the individual decision-maker. That is, they do not explicitly deal with the individual decision-maker. They acknowledge the limited predictive value of their model because they disregard both the decision maker and the specific properties of the various decision situations and focus on the decision-making system. (Johanson and Vahlne, 1977)

In their research, Johanson and Vahlne (1977) distinguish two directions of internationalization: increasing firm involvement in a single foreign country and successive operations in new countries. The time order of the establishment of international operations is related to the psychic distance between the home and import/host countries (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). According to Johanson and Vahlne (1977), psychic distance is the summation of factors preventing the flow of information to and from the market, such as differences in language, education, business practices, culture, and industrial development. They assert that lack of knowledge with respect to country differences (e.g., language and culture) is an important obstacle to decision-making with regards to the development of international operations; such differences constitute the main characteristic of international as opposed to domestic operations. Their model assumes that the firm begins with no experiential knowledge of foreign markets, and this experiential knowledge is gained only during successive operations in a country. (Johanson and Vahlne, 1977)

Johanson and Vahlne (1977) believe that experiential knowledge is gradually acquired, integrated, and utilized by the firm. They argue that it is difficult to simply hire personnel or outside consultants with the experiential knowledge because proper exploitation of this knowledge requires both firm experience and market experience. Firm experience and market experience are

essential in the internationalization process. They are acquired through current activities. It is not possible to gain this experience through either hiring personnel or outside consultants with this experience because persons working on the boundary between the firm and its market must be able to interpret both information from the firm as well as the market. The interpretation of one kind of information is possible only when one has experience with the other; that is, one can only interpret market information accurately if s/he is knowledgeable with respect to the firm and vice versa. This makes it difficult to substitute personnel or advice from outside consultants for current activities. It is possible to hire personnel with market experience and use them profitably after they have acquired firm experience. If the new personnel already have firm experience, they may be profitably exploited without delay. (Johanson and Vahlne, 1977) This assertion is substantiated by the findings of Hörnell, Vahlne, and Wiedersheim-Paul (in Johanson and Vahlne, 1977); in their case study of Pharmacia, they observed faster establishment of international operations when the decision maker was familiar with or had prior knowledge of the host country. Specifically, the decision-maker had received part of his education in the host country.

In concluding the development of their model, Johanson and Vahlne (1977) discuss two antecedents to decisions to commit resources: reduced market uncertainty and an increase in the firm's resources. According to the authors,

scale-increasing commitments can result from a decline in market uncertainty incidental to gaining market knowledge, which is acquired with experience. A decline in market uncertainty is possible when market conditions are both stable and heterogeneous. If market conditions are unstable, experience will not lead to decreased uncertainty. If market conditions are homogeneous, experience is not a requisite for market knowledge. Scale-increasing commitments can also result from an increase of the maximum tolerable risk level due to an increase in the firm's resources or a more risk accepting stance. (Johanson and Vahlne, 1977)

The Uppsala Model: Its Limitations

In Johanson and Vahlne's (1977) internationalization process model, knowledge is considered to be vested in the decision-making system rather than the individual decision-maker; that is, they do not explicitly deal with the individual decision-maker. The obvious limitation here is that knowledge is acquired through, and decisions made by, individuals. As such, the individual decision maker must be incorporated into the model.

Characteristics of the decision maker as well as her/his goals affect the decisions s/he makes. Cyert and March (1963) concur, adding that decision-maker goals are important to the decisions they make. Per England and Lee (1974), a manager's values influence both her behavior and success. Hambrick and Mason (1984) contend that organizational outcomes—both strategies and effectiveness—reflect the values of powerful organizational actors; In addition,

they assert a positive association between these values, measured via background characteristics, and firm profitability.

The consideration of WBOS and MBOs further reveals the inadequacy of the Uppsala model because two of the assumptions—growth is a primary goal of the firm and the firm lacks knowledge about foreign markets and operations—are violated. According to Hisrich and Brush (1986), the typical minority entrepreneur's business is fairly small, with sales between \$1-5 million and less than twenty employees. Butler and Greene (in Chaganti and Greene, 2002) concur, adding not only are they smaller but they are less likely to grow. Womenowned businesses are also less likely to grow than their male counterparts (Cooper, Gimeno-Gascon, and Woo, 1994). In addition, it is likely that some minority business owners have knowledge about foreign markets and operations as many minorities maintain ties or relations with the countries in which they have cultural roots and minority classes include first-generation immigrants.

There are many factors that increase the likelihood of internationalization, including education, management experience abroad, foreign ties, and foreign language ability. O'Farrell, Wood, and Zheng (cited in Westhead, Wright, and Ucbasaran, 2001) suggest that education develops a wide variety of skills that can be used to build internal competences to sell abroad. Tihanyi, Ellstrand, Daily, and Dalton's (2000) findings posit a positive relationship between an elite education and higher levels of international involvement. They suggest that an

elite education provides a broader worldview. Westhead, Wright, and Ucbasaran (2001) add management experience abroad to the factors of internationalization. Managers that have lived or worked abroad have experience with foreign markets and are thus more able to detect and exploit foreign opportunities. Tihanyi et al. (2000) results confirm the association between international experience and internationalization. The density of foreign ties (i.e., foreign networks) is also an internationalization factor. For example, first-generation immigrants would be expected to have numerous contacts in their native country, and thus would be more inclined to internationalize. Marger (2001) states that social capital is key to immigrant adaptation when they're accumulating resources to exploit entrepreneurial opportunities. Finally, Jones (2001) suggests that both foreign language ability and overseas education predispose firms to making foreign contacts.

Culture and the Individualism-Collectivism Dimension

The Evolution of Individualism-Collectivism Research

Many social scientists have commented on the individualistic slant of various modern-day theories (e.g., Spence, 1985). According to Sampson (1977, 1978, 1988), American theories of psychology and group behavior have an individualistic slant or predisposition; thus, social theories developed in the United States typically fail to represent the full range of human variability. Concurring, Spence (1985), in her presidential address to the American

Psychological Association titled, Achievement American Style: The Rewards and Costs of Individualism, states "contemporary theories of achievement and achievement motivation are rooted in individualism and may have validity primarily for American and other similar cultures. (p. 1285)" Sampson (1977, 1978) speculates that the impact of collectivism might stimulate cooperation in ways not envisioned by extant research. Other researchers contend that various other contemporary theories or models (e.g., psychological theories of the self) based on individualistic assumptions may prove inadequate in explicating the behavior of individuals with collectivist orientations (e.g., Lykes, 1985).

Individualism-collectivism is an analytical dimension that captures the relative importance people accord to personal interests and to shared pursuits. As defined by Wagner and Moch (1986), individualism is the condition in which personal interests are accorded greater importance than are the needs of groups. Individualists look after themselves and tend to ignore group interests if they conflict with personal desires. The opposite of individualism, collectivism, occurs when the demands and interests of groups take precedence over the desires and needs of individuals. Collectivists look out for the well-being of the groups to which they belong, even if such actions sometimes require that personal interests be disregarded. (Wagner, 1995)

"In the social sciences, evidence of the distinction between individualism and collectivism can be detected as far back as Aristotle's critique of the collectivist vision of Plato's *Republic*, in his own individualist-leaning *Politics*. (King-Farlow, 1964; cited in Wagner, 1995)" The distinction between self orientation or individualism and collective orientation or collectivism was

introduced to North American social scientists by Parsons in the first half of the 20th century (Wagner, 1995). According to Wagner (1995), European authors updated this cultural distinction between individualism and collectivism and reintroduced it to modern social scientists to explain behavioral differences across societies (see Hofstede, 1980) as well as among individuals within a single society (see Silverman, 1971).

Although cross-cultural studies (i.e., the examination of behavioral differences across societies) have developed into a significant domain of organizational research, fewer studies have investigated the effect of cultural variations within a single society. In such an investigation into group cooperation among American students, Wagner (1995) found that individualism-collectivism differences had both main and moderator effects on group performance (i.e., cooperation). Specifically, Wagner's (1995) findings substantiate the contention that variations in individualism-collectivism exist within a single societal culture and these variations or differences can affect group performance. Although the purpose of his study was to assess the effects of group size, identifiability, shared responsibility, and individualism-collectivism on cooperation, a secondary issue grew out of the proliferation of individualism-collectivism questionnaire measures, three of which were dominant among organizational researchers. That is, which measure was most appropriate for his study?

One of these, by Wagner and Moch (1986), is a three-dimensional instrument derived from an earlier measure by Breer and Locke (1965) that includes three items measuring individualistcollectivist beliefs, three assessing individualist-collectivist values, and four tapping individualist-collectivist norms. The second measure, by Erez and Earley (1987), is based on the work of Hofstede (1980) and is a single scale made up of four items measuring individualist-collectivist cultural values. measure, by Triandis and colleagues (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988), includes a first dimension of 12 items assessing self-reliance and competitiveness, a second dimension of 10 items from Hui (1988) that tap concern for others in an in-group (e.g., friends, family, community), and a third dimension of 7 items assessing differentiation between individuals and their in-groups. (Wagner, 1995)

No single study has compared the three measures. Therefore, it is unclear whether they overlap enough to be considered synonymous, or if instead they access distinctly different aspects of individualism-collectivism and should be interpreted independently. If the measures are independent, it is not readily apparent which of them taps the aspects of individualism-collectivism having the kinds of effects hypothesized here. To deal with measurement issues of this sort, I conducted a factor analysis of the three measures and derived a multidimensional measure that was then used to conduct hypothesis tests. (Wagner, 1995)

Because of the proliferation of individualism-collectivism questionnaire measures and the lack of convergent and discriminant validation studies of the measures, Wagner had to consolidate the measures and conduct factor analysis to derive a new multidimensional measure of individualism-collectivism.

WBOs and MBOs and the Individualism-Collectivism Dimension

Another empirical analysis of cultural variations within a single societal culture (i.e., the United States) was conducted by Cox, Lobel, and McLeod

(1991). Their study found that "at an individual level, Asian, Black, and Hispanic individuals had a more collectivist-cooperative orientation to a task than Anglo individuals. (p. 839)" Their finding substantiates the observations of several theorists (e.g., Hofstede, 1984; Nwankwo and Lindridge, 1998; and McWhirter, 1997) Hofstede (1984) indicated that Asiatic societies tend to have collectivist (i.e., lower individualist) values. McWhirter (1997) acknowledges the close-knit, interdependent family structure (i.e., collectivist values) of the Mexican-American culture. Nwankwo and Lindridge (1998) note the collectivist tendency of Black African-Caribbeans. The finding and observations are consistent with previous research and theory that suggests that these cultural differences derive from differences in the national cultures in which the various groups have cultural roots (Cox et al, 1991).

Cultural variations within a single societal culture are also suggested by women's research. "Extensive theoretical and empirical evidence has been presented to argue convincingly that the experiences of women...Blacks and other persons of color...are not faithfully represented by self-theories that emphasize autonomy and individualism. (Lykes, 1985)" In a study on gender and individualistic-collectivist bases for notions about the self, Lykes (1985) found that women were significantly more likely than men to reflect the notion of the self as social individuality as measured by the apperception index. Social individuality is another term for collectivism (see Sampson, 1988). According to

Lykes (1985), social individuality is a contrasting notion to autonomous individualism, and it "reflects a dialectical understanding of individuality and sociality grounded in an experience of social relations characterized by inequalities of power. (p. 356)" Lykes' (1985) empirical investigation, which sampled 84 white adult women and men, provided evidence that women and men possess two different notions of the self (i.e., social individuality and autonomous individualism). According to Sampson (1988), self-in-relation is the inclusive concept of the person that is central to collectivism, which he refers to as "ensembled individualism." Lyons (1983) conducted an empirical study to test the relation between gender and self-definition and found that women more frequently characterized themselves as "connected" while men more frequently characterized themselves as "separate" when they were asked to describe or define themselves.

An understanding of individualism-collectivism is essential as extant research suggests a relation between this cultural dimension and strategy selection. That is, there is a relation between cultural orientation and how individuals approach conflict resolution. Concurring, Faucheux (1977) asserts that strategy formulation is a cultural process. Carol Gilligan (1977, 1982) hypothesized a relationship between gender and moral judgment. Specifically, she argued that there are two distinct modes of moral judgment rather than the one indicated by Kohlberg (1969, 1981). Gilligan also hypothesized that these two

modes of moral judgment might be related to modes of self-definition. Lyons (1983) conducted an empirical investigation to test Gilligan's hypotheses. Her findings supported Gilligan's assertions. Lyons found that the following are statistically dependent: (1) gender and moral choice, (2) gender and self definition, and (3) self definition and moral choice. In evaluating and resolving real-life moral conflicts, men predominantly consider justice and rights and women predominantly consider care and response to others in their own terms (Lyons, 1983). When asked to describe or define themselves, women more frequently characterized themselves as connected, while men more frequently characterized themselves as separate and objective (Lyons, 1983). Individuals who characterized themselves as connected more frequently used considerations of care and response in constructing, evaluating, and resolving real-life moral conflicts, whereas individuals who characterized themselves as separate more frequently used considerations of justice and rights (Lyons, 1983). Thus, Lyons' (1983) findings lend credence to the cultural orientation-strategy formulation relationship.

The Faces and Distinctions of Individualism-Collectivism

An extensive review of literature on culture reveals many faces and distinctions of the individualism-collectivism dimension. For example, individualism is also referred to as "self-contained individualism" (Sampson, 1988). Other names for collectivism include "cooperation" (Mead, 1967; in

Triandis, Leung, Villareal, and Clack, 1985), and "ensembled individualism" (Sampson, 1988). Cross-cultural researchers contend that distinctions are needed when referring to the individualism-collectivism dimension at the cultural, psychological, and values levels (Triandis et al., 1985). Because Hofstede (1980) performed his analysis at the national level, employing the terms individualism and collectivism, Triandis and colleagues (1985) propose the use of the individualism-collectivism terminology at the cultural level only. They further propose the use of idiocentric-allocentric for analyses at the individual level (Triandis et al., 1985). Kluckhohm and Strodtbeck (1961; in Triandis et al., 1985) use the terms individuality and collaterality to refer to this dimension at the values level. Adherence to this distinction reveals that idiocentrism is also called "autonomous individualism" (Lykes, 1985), while allocentrism is also referred to as "social individuality" (Lykes, 1985). At the values level, individuality is also referred to as "agentic" (Eagly, 1987), while collaterality is also known as "communal" (Eagly, 1987).

Confusion and misapplication in the literature occurs because of the correspondence between the levels. That is, the individualism-collectivism dimension at the cultural level corresponds to the idiocentrism-allocentrism dimension at the psychological level and the individuality-collaterality dimension at the values level, respectively (Triandis et al., 1985). Specifically, Triandis and colleagues (1985) found that collectivism converged with allocentrism as

measured by the value items. Further confusion ensues because Triandis and colleagues (1985) also found that collectivism converged on cooperation. Thus, theses terms are often used interchangeably in culture research. Explicating the appropriate use of terminology, Triandis and colleagues (1985) suggest that a modal profile that is idiocentric would justify labeling the culture individualist; similarly, when the modal profile is predominantly allocentric, the culture would be labeled collectivist. An extension of this logic would suggest that when the modal profile is individuality, individuals are labeled idiocentric; when the modal profile is collaterality, individuals are labeled allocentric (see Figure 1).

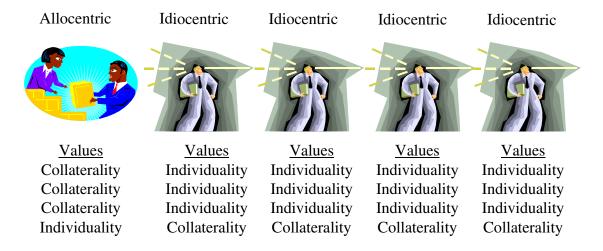


Figure 1: Individualism-Collectivism Terminology for an Individualist Nation

Individualism-Collectivism Within the Context of this Study

In this study, I use Hofstede's work to develop my theory because his work considers the association between variations in culture and work-related values. Thus, his work suggests the national consequences of individualism-collectivism values. Specifically, Hofstede's work suggests that a collectivist orientation is associated with the faster accumulation of wealth or greater productivity, a greater predisposition towards commitment, greater risk aversion, and a greater predisposition towards global strategies or internationalization. Extant research, both theoretical and empirical, indicates the collectivist (i.e., allocentric) orientation of women and minorities (i.e., Blacks, Asians, and Hispanics, the dominant minority groups in the United States). This study seeks to test the association between cultural orientation and work-related values, predicting the work-related behaviors of WBOs and MBOs.

Given the increasing diversity of American business owners and the country's focus on national competitiveness, it would seem imperative to gain an understanding of the work-related behaviors of WBOS and MBOs. The following relationships or competitive landscape changes suggest the magnitude of the impact of WBOs and MBOs.

- A relationship exists between cultural orientation and strategy selection.
- WBOS and MBOs differ from NMBOs with respect to cultural orientation.

- The growth rate of women- and minority-owned businesses is greater than nonminority-owned businesses and these are predominantly small businesses.
- Small businesses have become the dominant economic force in the United States.
- The United States is struggling with issues of national competitiveness.
- National competitiveness is the aggregate of the competitiveness of the nation's firms.
- Firm performance is affected by market harvesting (i.e., a short-term focus), risk orientation, and global competition (i.e., internationalization).
- Collectivists differ from individualists with respect to these workrelated behaviors.
- WBOs and MBOs in the United States have a collectivist orientation or are at least less individualistic than NMBOs.

CHAPTER 3

THEORETICAL DEVELOPMENT AND HYPOTHESES

In this chapter, a profile is established for women and minority business owners. Women and minorities are evaluated with respect to their increased participation in small business, motivation for entry into small business, cultural orientation, and firm behavior or performance. In addition, thirteen hypotheses are developed that indicate the relationships of the model's constructs: cultural orientation, firm commitment, risk aversion, and internationalization rates. Competing hypotheses are developed for the culture-internationalization relationship because culture has two opposing effects. Reconciliation of these hypotheses necessitates separate sets of hypotheses for WBOs and MBOs with respect to the culture-internationalization relationship. This chapter concludes with a discussion of the implications of the impact of occupational socialization.

A Profile of Women and Minority Business Owners

Women and Minorities and Small Business

According to the Small Business Administration (SBA), small business has become the dominant economic force in the United States again (U.S. SBA, 2000). Small businesses (SBs) are firms with fewer than 500 employees. They

employ 53 percent of the private nonfarm work force in the United States, produce 47 percent of all American sales, 51 percent of the private gross domestic product, and 55 percent of innovations. In recent years, there has been unprecedented interest in SB startups and ownership. (U. S. SBA: The Facts, 1999) However, the greatest increase has been in minority business ownership. Minority-owned firms have increased three to seven times faster than nonminority-owned firms. They increased 68 percent from 1987 to 1992, and 30 percent from 1992 to 1997. (U. S. SBA: Minorities, 2001) Also, the growth of women-owned firms continued to outpace the growth of all businesses, increasing 43 percent from 1987 to 1992 and 27 percent from 1992 to 1997 with all businesses increasing 26 percent and 6 percent respectively during the same period. (U. S. Census Bureau: Statistics about Business Size, 2002; U. S. Department of Commerce WB92-1, 1996; U.S. SBA: Women, 2001) United States' minority data reflect Black, Hispanic, and API/AIAN (i.e., Asian, Pacific Islander, American Indian, and Alaska Native) business owners. According to the SBA, minority business ownership for 1997 was as follows: 44 percent Hispanicowned, 33 percent API/AIAN owned, and 27 percent Black-owned. (U. S. SBA: The Facts, 1999) Summed percentage totals will be greater than 100 percent because Hispanic is an ethnic origin that may include people of any race. Specifically, a business may be classified as both API/AIAN owned and Hispanic-owned or Black-owned and Hispanic-owned. The business itself, however, is counted only once, as one minority-owned business. (U. S. SBA: Minorities, 1999)

Women and Minorities and their Motivation for Small Business Entry

There is little consensus regarding the reason minorities decide to enter business. One camp asserts mostly positive reasons for self-employment that do not differ significantly from the general small business population (Curran & Blackburn; Srinivasan in Ram, 1997). Another group argues that the selfemployment rate of some minority groups, particularly South Asians, is due to "self-help" ethos as well as a culture that is conducive to entrepreneurial activity (A. Basu; Werbner in Ram, 1997). Another camp, however, maintains that "ethnic minority businesses often arise out of a context of disadvantage, and that the adverse 'opportunity structure' carries greater explanatory power than speculations on 'culture' and so-called 'ethnic' resources" (Jones et al. cited in Ram, 1997). Similarly, the Ethnic Minority Business Initiative, launched in 1985, asserts that discrimination in employment as well as disproportionately high levels of unemployment experienced by ethnic minorities force them to seek autonomous means to economic activity via self-employment (Taner & Tiesdell, 1999). Hagen's (1962) "principle of relative social blockage" lends further credence to the third view; he states that "the channel in which creative energies will flow depends in part on the degree to which other possible channels are blocked" (p. 241). Additionally, he states

Social groups are often pushed rather than pulled into economic innovation. The 'minority thesis'...provides an example of this. This thesis is that if a minority group within a society is rejected by the society as a whole, that group will tend to be especially industrious and innovational in an effort to give itself economic security. (Hagen, 1968: p. 223)

He notes that this is not always the case. Sometimes, rejected minorities submit to their fate or console themselves with traditional rituals. Generally, however, subordinated groups in the modern world are innovative, where discrimination is not so oppressive as to make it impossible. (Hagen, 1968)

Social Blockage engenders need aggression within the subordinated individual. If the familial environment is nurturant, need achievement and need autonomy may also be acquired. If need aggression dominates the individual's behavior, s/he will become a common criminal. However, if need achievement is greater than need aggression, s/he will seek creative outlets. If conventional channels are not open to the individual, s/he may become a racketeer. If, however, conventional channels are not closed, s/he is likely to pursue status recognition via entrepreneurship. (Hagen, 1962)

Women and Minorities and Culture

Hofstede (1984) distinguishes between culture, used to describe nations or societies, and subculture, used to describe ethnic or regional groups. I will maintain that distinction here. Hofstede (1984) suggests that cultures differ along four main dimensions: Power Distance, Uncertainty Avoidance, Individualism,

and Masculinity. The Power Distance Index (PDI) measures tolerance for social inequality, while the Uncertainty Avoidance Index (UAI) measures tolerance for uncertainty. The Individualism Index (IDV) reflects the relationship between the individual and the group or collectivity in a culture, and the Masculinity Index (MAS) measures the extent to which a culture endorses masculine vs. feminine goals. Hofstede and Bond (1988) expound on these dimensions even further as follows. Power Distance or PDI reflects the extent to which the less powerful members of organizations or institutions accept and expect power to be distributed unequally. Uncertainty Avoidance or UAI indicates the extent to which a culture programs its members to feel either comfortable or uncomfortable in unstructured situations, with high UAI and low UAI noting risk averse individuals who prefer structure and risk accepting individuals who prefer few rules, respectively. Individualism or IDV reflects a continuum of values ranging from individualism to collectivism, describing the degree to which individuals are integrated into groups, with individualism noting loose ties between individuals and collectivism strong ties (i.e., strong, cohesive in-groups). Masculinity or MAS reflects a continuum of values ranging from assertive and competitive at one end (the Masculine pole) to modest and nurturing at the other end (the Feminine pole); in Masculine countries, a gap exists between men's values and women's values, which does not exist in Feminine countries. (Hofstede and Bond, 1988)

In a cross-cultural study of 40 nations, Hofstede (1984) explored the existence of differences in thinking and social action and was able to categorize countries into culture areas on the basis of their scores on the four dimensions. He asserts that the degree of cultural integration varies among societies; however, subcultures within a society share enough common traits to make them recognizable to foreigners or those not belonging to their society (Hofstede, 1984). Hofstede (1991) further adds, "Regional, ethnic, and religious cultures account for differences within countries" and "ethnic and religious groups often transcend political country borders. Such groups form minorities at the crossroads between the dominant culture of the nation and their own traditional group culture" (pp. 15-16). Hofstede (1984) contends that the UAI is a summary index for wealthier countries because he found the UAI significantly correlated with PDI, IDV, and MAS, despite negligible intercorrelations between the three indices (i.e., PDI, IDV, and MAS). There were no significant correlations between the indices across the 21 poorer countries in his study (i.e., the indices were mutually independent). He states, "comparative studies which are limited to wealthy countries will easily distinguish only one dimension, Uncertainty Avoidance, which subsumes also Power Distance, Masculinity, and the inverse of Individualism" (Hofstede, 1984: p. 213). Therefore, it is logical to assume that comparative studies within a wealthy country across subcultures will also distinguish along the Uncertainty Avoidance dimension. By definition, Uncertainty Avoidance is equivalent to risk aversion; Hofstede (1984) states that a low UAI means a greater willingness to take risks.

Hofstede (1984) asserted a relationship between economic growth and individualist/collectivist values. Per Hofstede (1991), collectivist values exist "in societies in which the interest of the group prevails over the interest of the individual," and individualist values exist "in societies in which the interests of the individual prevail over the interests of the group" (p. 50). He further states that the vast majority of people in our world live in collectivist rather than individualist societies. Hofstede indicates that individualist countries, such as the United States, tend to be rich and collectivist countries poor (Hofstede, 1991). However, he found Individualism to be negatively related to economic growth for the 19 wealthier countries in his study, which included the United States (Hofstede, 1984). The fact that "wealth is positively associated with individualism, but lower individualism with faster growth of wealth" (Hofstede, 1984: p. 168) is reflected in the growth patterns of MBOs and women. Again, Hispanic and API/AIAN business owners are the fastest growing segment of the small business boom with Blacks and women following close behind (U. S. Department of Commerce MB92-4, 1996; U. S. Department of Commerce WB92-1, 1996). Hofstede (1984) indicated that Asiatic societies tend to have collectivist (i.e., lower individualist) values. McWhirter (1997) acknowledges the close-knit, interdependent family structure (i.e., collectivist values) of the Mexican-American culture. Nwankwo and Lindridge (1998) note the collectivist tendency of Black African-Caribbeans. Eagly (1987) asserts the communal or collectivist values of women. Communal values reflect concern for others, selflessness, and a desire to be at one with others (Eagly, 1987).

Understanding WBO and MBO Firm Performance

Kogut and Zander (1992) maintain that "organizations are social communities in which individual and social expertise is transformed into economically useful products and services..." (p. 384). Cyert & March (1963) contend that decision-maker goals are important to the decisions they make. Hambrick and Mason (1984) contend that organizational outcomes—both strategies and effectiveness—reflect the values of powerful organizational actors; In addition, they assert a positive association between these values, measured via background characteristics, and firm profitability. Per England and Lee (1974), a manager's values influence both her behavior and success.

WBOs and MBOs and Firm Commitment:

Hofstede and Bond (1988) discovered a fifth dimension of culture, which they labeled "Confucian Dynamism" to reflect its basis in Confucianism; it was later renamed "long-term orientation" because its positive pole reflects a future orientation, whereas its negative pole reflects a more static, tradition (i.e., past and present) orientation. Key indicators of a long-term (future) orientation include thrift and perseverance, which are manifested in savings and commitment,

respectively (Hofstede and Bond, 1988). According to Bellah, Madsen, Sullivan, Swidler, and Tipton (in Watson and Morris, 1994), there is a link between commitment and individualism, specifically, individualism undermines deep commitment to others and promotes excessive self-interest. That is, individualism and commitment are inversely related. Stack (1994) lends support to this assertion by suggesting a positive relationship between divorce rates (an indicator of attenuated commitment) and individualism. Lester (1995) confirmed Stack's hypothesis using Hofstede's individualism scores and crude divorce rates as reported by the United Nations. This suggests a relation between the individualism-collectivism and long-term orientation dimensions. Given that WBOs and MBOs have a collectivist orientation, which strengthens their attitude toward commitment, and commitment is associated with a future or long-term orientation, I hypothesize the following with regard to indicators of commitment or long-term orientation:

Hypothesis 1: WBOs and MBOs will invest more in plant and equipment than NMBOs.

Hypothesis 2: WBOs and MBOs will invest more in research and development than NMBOs.

Hypothesis 3: WBOs and MBOs will hold their companies longer than NMBOs.

WBOs and MBOs and Risk Aversion:

Hofstede (1984) contends that high individualism is associated with low UAI (risk acceptance) and low individualism or collectivism is associated with high UAI (risk avoidance). Further, many researchers have suggested that women and minorities have a collectivist orientation. As stated previously, Hofstede (1984) indicated that Asiatic societies tend to have collectivist (i.e., lower individualist) values; McWhirter (1997) acknowledges the close-knit, interdependent family structure (i.e., collectivist values) of the Mexican-American culture; Nwankwo and Lindridge (1998) note the collectivist tendency of Black African-Caribbeans; Eagly (1987) asserts the communal or collectivist values of women. Communal values reflect concern for others, selflessness, and a desire to be at one with others (Eagly, 1987).

Many researchers have compared female and male risk orientations. According to Powell and Ansic (1997), the gender difference of greater risk aversion for women has persistently been documented in both general and business-specific literature. Several empirical analyses support their assertion. Sexton and Bowman-Upton (1990) found that females scored lower than males on risk-taking traits, suggesting that female entrepreneurs were more risk averse than their male counterparts. Jianakoplos and Bernasek (1998) found that single women were more risk averse than single men with regards to financial decision-

making. Barber and Odean (2001) found men to have riskier investments than women. Based on both theoretical and empirical evidence, I hypothesize the following:

Hypothesis 4: WBOs and MBOs' beta will be less than NMBOs.

Hypothesis 5: WBOs and MBOs' current ratio will be greater than NMBOs.

Hypothesis 6: WBOs and MBOs' total debt ratio will be less than NMBOs.

WBOs and MBOs and Internationalization:

Why do firms internationalize? We live in a highly integrated, globalized world economy. Liberalization and privatization of foreign markets continue to spur international trade. Local producers encounter increased competition with foreign competitors in domestic markets. Finite resources and infinite population growth foster competition and may cause environments to reach their carrying capacity (Hannan and Freeman, 1977). These hostile environments, characterized by intense competition and lack of opportunities (Covin and Slevin, 1989), may force firms to export abroad to remain viable.

Transaction cost theory contends that firms internationalize to exploit favorable cost structures; growth via market internationalization will continue until internationalization costs are greater than derived benefits (Westhead, Wright, and Ucbasaran, 2001). Product cycle theory asserts that firms internationalize to protect their mature product markets (Vernon, 1966). According to Pan, Li, and Tse (cited in Kotabe and Helsen, 2001), exporting is the

most popular mechanism for firm internationalization because resource requirements are minimum, flexibility is high, and financial, marketing, and technological benefits are substantial. McDougall and Oviatt (1996) found that ventures with increased international sales had superior performance in both relative market share and return on investment during a two-year longitudinal study.

Although internationalization is an excellent mechanism for improving organizational performance, it also presents many challenges. Local producers enjoy more advantageous positioning because of their familiarity with local Knowledge of applicable laws and tax treatment is customs and culture. necessary to avoid civil and/or criminal penalties. Additionally, institutional voids exist in many developing economies. These voids include product, capital, labor, regulation and contract enforcement; firms must be able to fill these voids to conduct business successfully (Khanna and Palepu, 1997). In other words, internationalization is risky. As stated previously, the internationalization process is related to the psychic distance between the home and import/host countries (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). According to Johanson and Vahlne (1977), psychic distance is the summation of factors preventing the flow of information to and from the market (e.g., differences in language, education, business practices, culture, and industrial development). In addition, Barkema and Vermulen (1997) found a negative relationship between cultural distance and both IJV incidence and survival, a mechanism of internationalization. Given the cultural orientation of WBOs and MBOs and the associated risk aversion, WBOs and MBOs should be less likely to internationalize than NMBOs.

The previous discussion indicates that firms internationalize, in general, because of globalization forces, intense competition, and lack of opportunity as well as to exploit favorable cost structures, protect mature product markets, and increase profitability. The question still remains, however, why do WBOs and MBOs internationalize? Is their motivation the same as the general population? Do additional factors retard or enhance their internationalization proclivities? According to Hofstede (1991), the vast majority of people in the world live in collectivist rather than individualist societies, and individualist countries, such as the United States, tend to be rich and collectivist countries poor. These types of markets are generally characterized by a lack of opportunity (i.e., they have Thus, collectivists are "pushed" into reached their carrying capacity). internationalization because of the insufficient carrying capacity of their home markets, which should cause businesses domiciled in these countries to pursue internationalization more aggressively. This is, in fact, the finding of extant research. According to Yip, Johansson, and Roos (1997), nationality or culture significantly affects whether or to what degree businesses pursue global strategies; they found that American businesses were significantly less likely than Japanese businesses to make use of global strategies. Given the characteristics of the home markets of collectivists, WBOs and MBOs should be more likely to internationalize than NMBOs.

The focus of this study is WBOs and MBOs within the United States. Are they subject to the same "push" hypothesis that is a manifestation of insufficient markets with limited carrying capacity? According to Hisrich and Brush (1986), the typical minority entrepreneur's business is fairly small, with sales between \$1-5 million and less than twenty employees. Butler and Greene (in Chaganti and Greene, 2002) concur, adding not only are they smaller but they are less likely to grow. Chaganti and Greene argue that this is because ethnic entrepreneurs are inclined to enter fragmented business sectors with low barriers to entry, intense competition, low liquidity, and low margins. In addition, because ethnic firms are perceived as largely serving co-ethnics, their growth is potentially bounded by a niche market demand (Chaganti and Greene, 2002). Such an environment (i.e., fragmented markets with bounded growth) would suggest that the "push" hypothesis would hold for MBOs.

According to Anna, Chandler, Jansen, and Mero (1999), the growth of women-owned businesses is encouraging, but the size of such businesses remains small, relative to male-owned businesses, in terms of both revenues and number of employees. "The National Foundation of Women Business Owners (NFWBO) reports that although there has been tremendous growth in the number of women

in non-traditional industries, two out of three women-owned firms remain in the retail trade and service sectors...The concentration of women in these types of businesses is not surprising, given that they represent traditional areas of employment for women...(Anna et al., 1999)" Loscocco and Robinson (1991), in their study of barriers to women's small business success, asserted that women access small capitalism by entering expanding but highly competitive, industrial niches that tend to be unattractive to men. While Watson and Robinson (2003) add that numerous comparative studies of firm performance have found that female-controlled SMEs (i.e., small and medium enterprises) underperformed male-controlled SMEs with respect to economic indices, such measures of firm performance are not appropriate when financial gain is not the primary motivation for business entry (Stanworth and Curran, 1976). This may particularly apply to women as extant research suggests they value less traditional business goals. For example, Buttner and Moore (1997) found, when they examined 129 women executives and professionals who had left large organizations to pursue entrepreneurship, that the women in their study were primarily motivated by the desire for challenge and self-determination as well as a desire to balance family and work responsibilities. While profits and business growth were important to these women entrepreneurs, they primarily measured their success in terms of self-fulfillment and goal achievement (Buttner and Moore, 1997). Given the nature of the industries (i.e., general products in expanding markets) in which

WBOs operate and their primary motivations, the "push" thesis is less likely to hold for WBOs. That is, WBOs are less likely than MBOs to be pushed into internationalization to maintain firm viability.

Thus, WBOs and MBOs differ with respect to the effect of the "push" thesis as it pertains to internationalization, although they are similarly affected by the "push" thesis of entrepreneurship and self-employment (see the section titled, "Women and Minorities and the Motivations for Small Business Entry"). The "push" internationalization thesis asserts an increased proclivity internationalize, whereas the risk propensity associated with a collectivist orientation predicts a decreased internationalization proclivity. As previously stated, the internationalization process is related to the psychic distance between the home and import/host countries (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977). Psychic distance, according to Johanson and Vahlne (1977), is the summation of factors preventing the flow of information to and from the market (e.g., differences in language, education, business practices, culture, and industrial development). In addition, Barkema and Vermulen (1997) found a negative relationship between cultural distance and both IJV incidence and survival, an important mechanism of internationalization. Thus psychic distance or cultural distance increases the risk of internationalization.

The two antithetical forces resulting from the opposing effects of culture must be reconciled for WBOs and MBOs. Given the nature of the markets (i.e.,

expanding markets with general products) of WBOs, I predict that the risk propensity effect of culture will predominate. Thus, I hypothesize the following with respect to WBOs:

Hypothesis 7: WBOs' internationalization rate will be less than NMBOs.

Hypothesis 8: WBOs will internationalize in fewer countries than

NMBOs.

Hypothesis 9: WBOs will be more likely to internationalize in collectivist

countries than NMBOs.

Given the nature of the industries (i.e., fragmented sectors with bounded growth potential) in which MBOs operate, I contend that they will be pushed to internationalize to sustain organizational viability. Their internationalization strategies, however, will reflect their risk propensity. Thus, both cultural forces will affect MBOs. One cultural force will cause them to internationalize more than NMBOs, but the antithetical cultural force will cause them to pursue an internationalization strategy less risky than NMBOs. Thus, I hypothesize the following with respect to MBOs:

Hypothesis 10: MBOs' internationalization rate will be greater than NMBOs.

Hypothesis 11: MBOs will internationalize in more countries than NMBOs.

Hypothesis 12: MBOs will be more likely to internationalize in collectivist

countries than NMBOs.

The Research Model

The foregoing theoretical framework produces a cultural model of firm behavior or performance (see Figure 2). Because WBOs and MBOs are the

subject of interest, the culture construct reflects the collectivist orientation. The model reveals the following: (1) Culture is one determining factor of WBOs' and MBOs' values. (2) WBOs' and MBOs' values affect the behavior or performance of their firms. (3) Firm commitment, risk orientation, and internationalization are three areas of firm behavior or performance that should be affected by the value orientation of the firm's owners. Interpretation of the model suggests that there are both advantages and disadvantages to the increased presence of WBOs and MBOs. The potential advantage is heightened firm commitment and a reversal of problems associated with market harvesting (i.e., too little investment). An additional advantage is the "push" collectivists experience internationalization due to business operations in markets with insufficient carrying capacity. The potential disadvantage is a risk aversive orientation that leads to a reduced propensity to internationalize. Although there is a direct correlation between the level of risk undertaken and firm profitability, a risk aversive orientation can have positive consequences. Watson and Robinson (2003) found no significant difference between the performances of male- and female-controlled businesses when they adjusted for risk, other than a reduction in the volatility of earnings of female-controlled businesses. In addition, the propensity to internationalize can be enhanced by factors that cause the business owner to be more informed, thus reducing the perceived level of risk.

As stated previously, there are many factors that increase the likelihood of internationalization, including education, management experience abroad, foreign ties, and foreign language ability. O'Farrell, Wood, and Zheng (cited in Westhead, Wright, and Ucbasaran, 2001) suggest that education develops a wide variety of skills that can be used to build internal competences to sell abroad. Tihanyi, Ellstrand, Daily, and Dalton's (2000) findings posit a positive relationship between an elite education and higher levels of international involvement. They suggest that an elite education provides a broader worldview. Westhead, Wright, and Ucbasaran (2001) add management experience abroad to the factors of internationalization. Managers that have lived or worked abroad have experience with foreign markets and are thus more able to detect and exploit foreign opportunities. Bloodgood, Sapienza, and Almeida (1996) lend further support to this contention, asserting that greater international work experience among top managers is strongly associated with greater internationalization of new high-potential ventures in the United States. Tihanyi et al. (2000) results confirm the association between international experience and internationalization. The density of foreign ties (i.e., foreign networks) is also an internationalization factor. For example, first-generation immigrants would be expected to have numerous contacts in their native country, and thus would be more inclined to internationalize. Marger (2001) states that social capital is key to immigrant adaptation when they're accumulating resources to exploit entrepreneurial

opportunities. Finally, Jones (2001) suggests that both foreign language ability and overseas education predispose firms to making foreign contacts.

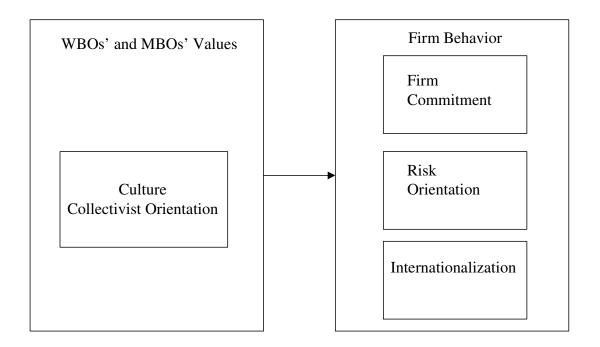


Figure 2: WBOs' and MBOs' Values and Firm Behavior

WBOs and MBOs and Occupational (Adult) Socialization:

According to Hofstede and Bond (1988), Hofstede's first three cultural dimensions refer to types of expected social behavior: (1) behavior toward people higher or lower in rank (Power Distance), (2) behavior according to one's sex (Masculinity/Femininity), and (3) behavior towards the group (Individualism/Collectivism). The values associated with these cultural choices are developed in the family; cultural inheritances are not genetically transferred,

we begin to acquire these values from the day we born (Hofstede and Bond, 1988), typically through the process of childhood (i.e., early) socialization. Thus, cultural traits are transferred from generation to generation (Hofstede and Bond, 1988). Although cultural traits can be sticky and difficult to change in a basic fashion, they can be modified (Hofstede and Bond, 1988).

Occupational socialization theory contends that adults acquire new values over time to operate effectively within work environments. According to Jensen and Schrader (1965), technological and industrial advancements have greatly increased the reorganization rates of social environments, requiring adults to acquire new social learnings to cope effectively. The extraordinary development of contemporary organizations has created a situation in which most adults invest the majority of their time and energy in the organization's ventures; because the individual's welfare is contingent upon his/her success within these conditions, the organization generates powerful forces on the individual to obtain the necessary social learnings (Jensen and Schrader, 1965). Frese (1982) adds, when a person starts a job or career, s/he takes on a role and begins to learn (i.e., acculturate) a new set of values; research in the social sciences has indicated this repeatedly. Frese (1982) further states that through both role ascription and role taking, individuals learn to describe themselves within the job's context (e.g., as a teacher). As WBOs and MBOs acculturate the values necessary to compete effectively within industries, previous performance differences due to early or childhood socialization (i.e., culture) should begin to disappear. This contention is supported by the findings of Gomez-Mejia (1983); he found that the work-related attitudes of men and women converged over time when subjected to the same occupational experiences. Task-related values (intrinsic rewards, such as responsibility and challenge) and job involvement increased in importance for women managers across tenure groups, whereas the importance of contextual values (extrinsic rewards, such as interpersonal relations and working conditions) decreased, reflecting a convergence of work-related attitudes over time (Gomez-Mejia, 1983). Thus, I hypothesize the following:

Hypothesis 13: Performance differences between WBOs, MBOs, and NMBOs will tend to decline over time.

CHAPTER 4

METHODS

In this chapter, I present the methods used in the study. This chapter is divided into four sections. Section one discusses the design of the study; section two describes the measures used; section three discusses the sample and data collection; section four discusses the statistical techniques used as well as data analysis.

Study Design

Research Strategy

A field study design was used to test the hypotheses developed in chapter 3 because I was interested in observing the natural behavior of persons within their natural context or setting; in addition, the treatment or event was also natural as I was interested in the effect of culture and culture is a naturally occurring incident. According to Kidder (1981), "naturalistic or field research encompasses a variety of research strategies that share a common concern with describing human behavior that is representative of the way it exists in real life. (p. 264)" In addition, she states, "In the purest conception of naturalistic research, observation would be made of a naturally occurring behavior...as it happened in its natural setting...as the result of a natural event...while the observer remained unobtrusive. (Kidder, 1981: p. 264)"

I used a matched design to examine behavioral differences among WBOs, MBOs, and NMBOs. Hofstede and Bond (1988) advocate direct measurement of culture through a well-designed questionnaire about people's values and beliefs. Matched samples of respondents are preferred for this type of measurement. Representative samples from whole national populations can be used, but this is not necessary. Cultural differences can also be measured indirectly, by inferring from data about collective behavior. (Hofestede and Bond, 1988) I have chosen indirect measurement, utilizing secondary data. According to Boyd, Dess & Rasheed (1993), archival measures are best for measuring the external constraints on organizations (e.g. firm outcomes), whereas perceptual measures are best for measuring firm actions (e.g., decision-making). The variables of this study assess firm outcomes.

Research Data Source

As stated previously, secondary or archival data were used to test the hypotheses in this study. Disadvantages of archival data, according to Kidder (1981), include: (1) The data have been collected for purposes other than the research in question. Therefore, attention must be given to possible sources of systematic error, such as overreporting and underreporting, procedural inconsistencies, sampling biases, recording and clerical errors, and changing categorical definitions. (2) Archival records often require ingenuity in the translation of existing records into quantifiable indices of the constructs of

interest. (3) Archival studies are particularly susceptible to alternative interpretations for both the natural events and their effects, necessitating the ruling out of other explanations through theoretical development. That is, "The user of archival records must control for spuriousness by controlling for or ruling out other plausible explanations for the obtained relationship. (Kidder, 1981: p. 289)"

Per Kidder (1981), the advantages of archival research include: (1) Data collection is economical. (2) This type of information is regularly collected under natural conditions, facilitating the determination of trends over time. (3) Cooperation of the participant under study is not required. (4) Archival data are well suited for studying large-scale natural phenomena that would be difficult to investigate in other ways.

Types of archival research include statistical records, written documents of a public or personal nature (e.g., diaries or school essays), and mass communications (e.g., newspapers or magazines) (Kidder, 1981). Statistical records were used in this study. Specifically, records from CorpTech database were used, crossed-referenced with Compustat to obtain various financial and operational indices. The primary use of CorpTech was to obtain demographic data. That is, CorpTech lists whether the organizations are female or minority owned; this information is not available in Compustat. (Per CorpTech's technical support and account executive, the female and minority status of firms is indicated in government contracts. The female/minority ownership classification

is determined using the following sources: government websites, SEC filings, company websites, and direct questioning.)

CorpTech profiles over 50,000 private and public companies as well as their business units. The database covers 17 technology industries. The company's research professionals interview the executives of the high-technology companies. The telephone is used to conduct the initial interviews to obtain business information. Accuracy of information is guaranteed by computer and manual checks as well as a review by the participant company of its profile. Due to the type of information needed (i.e., performance measures), I decided to use only public companies for which data were readily available.

Levels Analysis and Reconciliation

According to Klein, Dansereau, and Hall (1994), levels issues are the domain of theorists, first and foremost, rather than statisticians. Improper consideration of levels issues can affect the research conclusions. That is, "the conclusions of research differ as a function of the level of analysis. (Klein et al., 1994: p. 196)"

The hypotheses in this study pertain to the individual level of analysis, whereas the data are collected at the firm level of analysis. This is possible because extant research asserts that the values of individuals affect the decisions that they make. This is supported by Hambrick and Mason's (1984) finding that TMT characteristics affect strategic outcomes. In addition, Cyert and March

(1963) contend that decision-maker goals are important to the decisions that they make. Also per England and Lee (1974), a manager's values influence both his or her behavior and success. Finally, Staw (1991) argues that individual behavior and firm behavior are the same thing when there is an individual decision maker. This logic can be extended to when a decision maker is dominant in the decision-making process. Thus, firm behavior or performance should reflect the values of the organization's owner or owners.

Research Setting

To test my hypotheses, I used two criteria to both identify and select the sample. The first criterion was that the firms should belong to the same or similar industries to control for potential industry effects. According to Miller & Friesen (1984b), the industrial environment of the organization can affect its strategic direction. In addition, Boter and Holmquist (1996) found industry environment to be a greater determinant of the international behavior of small firms than nationality. Thus, the importance of controlling for industry effects are intensified as culture effects are the focus of this study.

The second criterion was that the firms should be high-tech. High-tech firms operate in fast-paced, dynamic environments because of the inherent nature of their businesses. Rapid technological advancements have compressed product life cycles tremendously, necessitating a continual response from industry participants. According to Dess, Lumpkin, and Taylor (2004), product life as well

as technology is further compressed among the high tech firms by the very nature of their industries, with some becoming obsolete in a matter of weeks. In addition, extant research has demonstrated a relation between environmental dynamism and internationalization. Specifically, Andersson, Gabrielsson, and Wictor (2004) found that high levels of environmental dynamism explained why some small firms pursued international activities. That is, "Dynamic and fastchanging environments seem to push small firms to go abroad (Andersson, Gabrielsson, and Wictor, 2004: p. 30)." Additionally, Crick and Jones (2000) found high-tech firms are more internationalized than low-tech firms. Because one of the purposes of this study is to distinguish differences in the internationalization rates of WBOs, MBOs, and NMBOs as well as the effect of socialization on these differences, it is appropriate to analyze an industry with high internationalization potential. These industries are appropriate for the study because these firms have a broad market for their products. That is, they are not restricted to a single country or region.

Research Focus

The internationalization construct is the dominant construct of the three areas of firm behavior studied here because it is the key driver to global competition, which is essential to national competitiveness. Why study culture as a determinant of internationalization rather than other factors suggested by extant research? Other factors suggested by research include the firm's level of

technology and strategic planning as well as the firm's size and age (Andersson et al., 2004). However, McGee and Dowling (1994) found no size effects with regards to firm performance in the high-tech industry. In addition, Andersson and colleagues (2004) found no support for the relationship between either firm size or firm age and the international activities of small, high-tech firms. Neither did they find support for the relationship between the firm's technology level and international activities in small, high-tech firms. Although Andersson and colleagues (2004) found weak support (p≤ .10) for the impact of strategic planning, operationalized as the number of formal board meetings held in the firm during the past year, on the international activities of the small, high-tech firms, strategic planning is not the focus of this study because, according to Faucheux (1977), strategy formulation is a cultural process. Thus, culture emerges as a critical construct in understanding the internationalization rates of WBOs, MBOs and NMBOs and answers the call of Andersson and colleagues (2004) for "more attention and further examination of perceptions and behavioural traits at the individual level in international entrepreneurship research. (p. 30)" Further, Andersson (2000, 2002) asserts that the decision-maker in the firm is a key variable in explaining the internationalization of small firms.

Research Time Frames

According to Miller and Friesen's (1984a) life cycle classification criterion, the birth phase or the period in which a new firm is attempting to

become a viable entity consists of firms that are less than ten years old. McGee and Dowling (1994) as well as Weiss (1981) contend that new firms are no more than eight years old. Some studies estimate a time lag of as much as twelve years before new ventures achieve the same profitability level of mature businesses and eight years before these firms break even (Biggadike, 1979; Weiss, 1981). I averaged the two poles of eight and twelve years and determined a viability period of ten years. That is, class 1 or the viability period will be ten years. According to Miller and Friesen (1984), most phases, especially the growth phase, lasts ten years or more, so I set the growth period at ten years. That is, class 2 or the growth period will also be ten years. Therefore, class 3 will consist of firms that are twenty-one years old or older.

Measures

The endogenous constructs—firm commitment, risk orientation, and internationalization rates—were operationalized by means of firm commitment measures (investment in plant and equipment as well as research & development and age of company), risk aversion measures (beta, current ratio, and total debt ratio), and degree of internationalization (sales rate, number of countries, and number of collectivist countries). Standard measures of internationalization include the percentage of sales derived from foreign business and the number of countries in which an organization is operating. Per Kutschker and Baurle (1997), however, cultural distance must also be considered; that is, both the number of

countries in which a company is operating and the cultural distance between the home market and foreign markets determine the degree of internationalization. The exogenous construct—culture—was operationalized via women and minorities (collectivist orientation) and nonminorities (individualist orientation). Using gender and ethnicity to operationalize culture is an acceptable practice supported by Hambrick and Mason (1984) who advocated the use of demographic variables or managerial characteristics as indicators of the givens or values that they bring to the table.

Data Collection

Thirty-three female and minority-owned companies were found in the database. Eight of these companies were later dropped from the analysis because I was unable to cross-reference them in Compustat, leaving twenty-five female and minority-owned companies in the sample. Thousands of companies were available, however, for NMBOs. To balance the sample for analysis, twenty-five NMBO companies were randomly selected, using a random number table, from each target company's SIC industry. This produced a matched set for data analysis. Data cleaning, however, reduced the sample from twenty-five to twenty-three. Two companies were lost from the NMBO sample because they were not incorporated in the United States, which was problematic for both foreign sales and ethnic determination. This resulted in the two matched cases in the WBO and MBO's sample also being dropped.

Data Analysis and Techniques

Statistical Techniques

The matched data set produced during data collection necessitates statistical techniques for related samples. Given the small sample size and the nonnormality of the data, nonparametric techniques are appropriate. Nonparametric techniques for paired, matched, or related samples include the sign test and the Wilcoxon signed-rank test. The sign test must be used when the sample consists of ordinal data. Interval and ratio data (the measurement scale of the data in this study) allow the use of any of the nonparametric tests for paired, matched, or related samples (i.e., the sign test or the Wilcoxon signed-rank test). Normally, the power of the test increases as more information is included in the analysis. Thus, the Wilcoxon signed-rank test is usually more powerful than the sign test. Both the sign test and the Wilcoxon signed-rank test compare the distributions of two related variables and, thus, are both appropriate for the current analysis. The comparable parametric test would be the paired t test. (Weiss & Hassett, 1987; Conover, 1999; SPSS version 12)

Generally speaking, when the assumptions are satisfied, parametric procedures are more powerful than nonparametric procedures because of the additional assumptions or information. The more information included in the analysis, the more powerful the test usually, and power is the probability of finding a difference when it exists. The rule of thumb is: if the population is

normally distributed, use a parametric procedure because parametric procedures are designed for normal distributions. (Weiss & Hassett, 1987; Conover, 1999)

Conover (1999) contends that it is the researcher's quest to select the test with the greatest power. In doing so, Conover says that we are forced to select the test with the greatest A.R.E. (asymptotic relative efficiency) because power depends on too many factors. "Let n_1 and n_2 be the sample sizes required for two tests T_1 and T_2 to have the same power under the same level of significance. If α and β remain fixed, the limit of n_2/n_1 , as n_1 approaches infinity, is called the asymptotic relative efficiency (A.R.E.) of the first test to the second test.... (Conover, 1999: p. 112)" (See equation below.) The A.R.E. is computed under the assumption that the two population distributions are identical except for their means.

A.R.E._{T1/T2} =
$$n_2/n_1$$

Per Conover, the A.R.E. of the sign test relative to the Wilcoxon signed-rank test is 0.67, and the A.R.E. of the sign test relative to the paired t test is 0.637. That is, the sign test is 67 percent as efficient as the Wilcoxon signed-rank test and 63.7 percent as efficient of the paired t-test, or the Wilcoxon signed-rank test would require 33 percent less data and the paired t-test would require 36.3 percent less data to achieve the same power under the same level of significance. When the differences have a uniform (i.e., light-tailed) distribution, the A.R.E. of the sign test relative to the Wilcoxon signed-rank test or t test drops to 0.33;

however, when the differences have a double-exponential (i.e., heavy-tailed symmetric) distribution, the A.R.E. of the sign test relative to the Wilcoxon signed-rank test rises to 1.33, while the A.R.E. of the sign test relative to the t test rises to 2.0. That is, for some population distributions, the sign test is more efficient or powerful than the Wilcoxon signed-rank and paired t tests (e.g., the Wilcoxon signed-rank test requires 33 percent more data and the t test 100 percent more data when the population has a double-exponential distribution to achieve the same power under the same level of significance).

Per Conover, the A.R.E. of the Wilcoxon signed-rank test relative to the paired t test is never less than 0.864 but may be as high as infinity if the populations differ only with respect to their location parameters (i.e., means). For example, Conover notes the following A.R.E.s for the indicated distributions: normal populations (0.955), uniform populations (1.0), double exponential distributions (1.5). Thus, the Wilcoxon signed-rank test is never less than 86.4 percent as efficient as the paired t test and is 95.5 percent as efficient when populations are normal and more efficient or powerful for some distributions (e.g, the t test would require 50 percent more data to achieve the same power under the same level of significance when the populations have double exponential distributions). (Conover, 1999)

The foregoing discussion suggests that there are both times when the sign test is more powerful than the Wilcoxon signed-rank test and times when the

Wilcoxon signed-rank test is more powerful than the sign test. Thus, I will use both in the current analysis. The sign test computes the differences between two variables for all cases; the differences are then classified as either positive, negative, or tied. The rationale of the test is that if the two variables have similar distributions, the number of positive and negative differences will not differ significantly. The Wilcoxon signed-rank test differs from the sign test in that it also considers information about the magnitude of the differences between the pairs in addition to the sign of the differences. Thus, the Wilcoxon signed-rank test is typically more powerful than the sign test because it incorporates more information about the data. (Weiss & Hassett, 1987; Conover, 1999; SPSS version 12)

Data Analysis

The analysis was conducted with WBOs and MBOs combined relative to NMBOs as well as separately by sex and minority status, and each of these categories was further broken down by the length of time the business was in operation. Class 1 (0 to 10 years) represents the start-up period when the primary focus of businesses is on viability. Thus, internationalization would not be expected to be a strategy at this time. Behavioral differences should be greatest during this period as occupational socialization is just in its beginning stages. Class 2 (11 to 20 years) represents the growth period when the primary focus of businesses is on sales. Thus, internationalization should be a key strategy during

this period. In addition, the values of WBOs and MBOs should be changing due to occupational socialization. Class 3 (21+ years) represents the maturity stage, the period during which the change in WBOs' and MBOs' values should stabilize and performance differences should disappear.

Missing Data

Compustat lists the following eight data codes for missing data: (1) AF (Annual Figure) means that only annual data is available for quarterly items. (2) CF (Combined Figure) means the company has combined that information under another item. (3) IF (Insignificant Figure) means the number is insignificant or immaterial. (4) NA (Not Available) means the company does not disclose that information. (5) NC (Not Calculable) means the rules for calculation were not met. (6) NM (Not Meaningful) means the item is not meaningful for a company. (7) SF (Semi-annual Figure) means that only semi-annual data is available for quarterly items. (8) XE (Not Available Currency) means that the currency exchange rate is not available to translate data. (Compustat help) Although the IF data code suggests that missing data could be coded as zero, all missing data in this study were coded as missing.

During the analysis, cases were excluded on a test-by-test basis to utilize as much of the sample as possible. Each paired test used all cases with valid data for the variables tested. Therefore, sample sizes varied from test to test.

CHAPTER 5

RESULTS

This chapter presents the results of the analysis in relation to each hypothesis. It is divided into four sections. The first section discusses the characteristics of the sample. The second section presents the combined results of WBOs and MBOs relative to NMBOs. That is, WBOs and MBOs are grouped together and compared to NMBOs. The third section presents the results of WBOs relative to NMBOs, and the fourth section presents the results of MBOs relative to NMBOs. Both the sign and Wilcoxon signed-rank tests are used for all the analyses.

Sample Characteristics

The sample consisted of eight female-owned, seventeen minority-owned, and twenty-three white male owned (NMBO) companies. Two companies were both female and minority owned. In the WBO and MBO's sample, the data range was as follows: internationalization rate (0 to 51 percent of total sales); internationalization number of countries (0 to 8); internationalization number of collectivist countries (0 to 5); plant, property, and equipment investment (1 to 144 percent of sales); research and development investment (0 to 18 percent of sales); age of company (8 to 75 years); beta (-0.40 to 3.80); current ratio (0.94 to 13.81);

total debt ratio (0 to 82.90). In the NMBO sample, the data range was as follows: internationalization rate NMBO (0 to 83 percent of total sales); internationalization number of countries NMBO (0 to 5); internationalization number of collectivist countries NMBO (0 to 1); plant, property, and equipment investment NMBO (0 to 400 percent of sales); research and development investment NMBO (0 to 1650 percent of sales); age of company NMBO (3 to 92 years); beta NMBO (0 to 4.20); current ratio NMBO (0.11 to 5.91); debt ratio NMBO (0 to 88.91). (See Table 1.)

Size indices were also recorded to further determine both the appropriateness and comparability of the data. In the WBOs and MBOs' sample, the size indices were as follows: assets (\$3.900 million to \$623.792 million), sales (\$4.323 million to \$838.055 million), and employees (20 to 10,300). In the NMBO sample, the size indices were as follows: assets (\$0.113 million to \$2,017.622 million), sales (\$0.004 million to \$2,501.151 million), and employees (4 to 27,000). In addition, eight of the WBO and MBOs' companies had 500 or more employees, while seven of the NMBOs' companies had 500 or more employees. (See Table 1.) All the larger companies (i.e., companies with 500 or more employees) in the WBOs and MBOs' sample were minority-owned firms.

Table 1 Sample Characteristics

Variable	WBOs and MBOs	NMBOs
Internationalization		
Rate	0 to 51 percent of sales	0 to 83 percent of sales
Number of Countries	0 to 8	0 to 5
Collectivist Countries	0 to 5	0 to 1
Firm Commitment		
PPE Investment	1 to 144 percent of sales	0 to 400 percent of sales
R&D Investment	0 to 18 percent of sales	0 to 1650 percent of sales
Company Age	8 to 75 years	3 to 92 years
Risk Indices		
Beta	-0.40 to 3.80	0 to 4.20
Current Ratio	0.94 to 13.81	0.11 to 5.91
Total Debt Ratio	0 to 82.90	0 to 88.91
Size Indices		
Assets	\$3.900 to 623.792 million	\$0.113 to 2,017.622 million
Sales	\$4.323 to 838.055 million	\$0.004 to 2501.151 million
Number of Employees	20 to 10,300	4 to 27,000
500+ Employees*	8 companies	7 companies

^{*} Number of companies with employees greater than or equal to 500.

WBOs and MBOs Compared to NMBOs

Using the Wilcoxon signed-rank test, significance was found for only one variable. Weak support was found for hypothesis 4 (p<0.10) or the beta hypothesis (see Table 2). That is, WBOs and MBOs' beta is significantly less than NMBOs. Although not significant, the following differences were in the hypothesized direction: age of company and current ratio.

Table 2 Wilcoxon WBO and MBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	p<0.10
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	

Sample sizes vary from test to test. n = 8 to 23

When the sign test was used for analysis, there were no significant findings (see Table 3). However, four differences were in the hypothesized directions: research and development investment, age of company, beta, and current ratio. These findings substantiate the assertion that the Wilcoxon signed-rank test is generally more powerful than the sign test.

Table 3 Sign WBO and MBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	n.s.
Hypothesis 2	R&D hypothesis	n.s.
Hypothesis 3	company age hypothesis	n.s.
Hypothesis 4	beta hypothesis	n.s.
Hypothesis 5	current ratio hypothesis	n.s.
Hypothesis 6	debt hypothesis	n.s.
Hypothesis 7	WBO irate hypothesis	n.s.
Hypothesis 8	WBO inumber hypothesis	n.s.
Hypothesis 9	WBO c.country hypothesis	n.s.
Hypothesis 10	MBO irate hypothesis	n.s.
Hypothesis 11	MBO inumber hypothesis	n.s.
Hypothesis 12	MBO c.country hypothesis	n.s.
Hypothesis 13	o.socialization hypothesis	n.s.

Sample sizes vary from test to test. n = 8 to 23

Class Analysis: WBOs and MBOs Compared to NMBO

In the class 1 Wilcoxon signed-rank analysis (10-year intervals), significance was found for two of the variables—age of company (p=0.05) and beta (p<0.10); thus, for firms of this particular class or age group, there appear to be differences. Strong support was found for the company age hypothesis, although not supported for the overall sample, and weak support was found for the beta hypothesis, a finding also supported for the overall sample (see Table 4). Although not significant, the following variable differences were in the hypothesized directions: plant, property, and equipment investment and current

ratio. Statistics could not be computed for four variables—internationalization rate, number of countries of internationalization, number of collectivist countries, and research and development investment—because there were not enough cases for statistical analysis.

Table 4 Wilcoxon WBO and MBO Results (10-Year Intervals)

Variable	Class1	Class2	Class 3
	0-10 years	11-20 years	21 ⁺ years
PPE	n.s.	p<0.10*	n.s.
R&D	#	#	p<0.10
Age of Company	p=0.05	n.s.	n.s.
Beta	p<0.10	n.s.	n.s.
Current Ratio	n.s.	n.s.	n.s.
Total Debt Ratio	n.s.	n.s.	n.s.
Internationalization Rate	#	#	n.s.
Number of Countries	#	#	n.s.
Collectivist Countries	#	#	n.s.

Sample Size[†]:

n = 1 to 3 n = 0 to 4

n = 2 to 5

Wilcoxon test cannot be performed (insufficient data).

- † Sample sizes vary from test to test.
- * Finding in opposite direction hypothesized.

In the class 1 sign analysis (10-year intervals), no significant differences were found (see Table 5). Although not significant, the following variable differences were in the hypothesized directions—plant, property, and equipment investment, age of company, beta, current ratio, and total debt. Statistics could not be computed for four variables—internationalization rate, number of countries of internationalization, number of collectivist countries, and research and development investment—because of insufficient data (i.e., there were not enough cases for analysis).

Table 5 Sign WBO and MBO Results (10-Year Intervals)

Variable	Class1	Class2	Class 3
	0-10 years	11-20 years	21 ⁺ years
PPE	n.s.	n.s.	n.s.
R&D	#	#	n.s.
Age of Company	n.s.	n.s.	n.s.
Beta	n.s.	n.s.	n.s.
Current Ratio	n.s.	n.s.	n.s.
Total Debt Ratio	n.s.	n.s.	n.s.
Internationalization Rate	#	#	n.s.
Number of Countries	#	#	n.s.
Collectivist Countries	#	#	#

Sample Size[†]:

n = 1 to 3 n = 0 to 4 n = 2 to 5

Sign test cannot be performed (insufficient data).

† Sample sizes vary from test to test.

Class 1, as previously indicated, represents the start-up period when the primary focus of businesses is on viability. Therefore, the internationalization variables are not expected to be significant during this period. However, differences in firm commitment and risk orientation are expected. The results appear to support this assertion. Additionally, behavioral differences should be greatest during this period as occupational socialization is just in its beginning stages.

In class 2 Wilcoxon signed-rank analysis (10-year intervals), significance was found for one variable—plant, property, and equipment investment (p<0.10*); however, it was opposite to the direction hypothesized (see Table 4). Thus, for firms of this particular class or age group, there appear to be differences in firm behavior not supported for the overall sample. The opposite of the PPE hypothesis was supported in class 2 because there is sufficient evidence to conclude that WBOs and MBOs' plant, property, and equipment investment is less than NMBOs. Statistics could not be computed for four variables—internationalization rate, number of countries, collectivist countries, and research and development investment—because there were not enough cases to perform the test. Although not significant, two variable differences were in the hypothesized directions—age of company and beta.

In the class 2 sign analysis (10-year intervals), no significant differences were found (see Table 5). Although not significant, beta was in the hypothesized direction. Because of insufficient data (i.e., there were not enough cases for analysis), statistics could not be computed for four variables—internationalization rate, number of countries, collectivist countries, and research and development investment.

Class 2 represents the growth period, and the primary focus during this period is building sales. Internationalization should be a key strategy during this period; however, there is insufficient data for statistical analysis. The values of WBOs and MBOs should also be changing during this period due to occupational socialization. That is, class 2 differences should be smaller than class 1 differences. This appears to be supported by the Wilcoxon signed-rank analysis. Company age (p=0.05) and beta (p<0.10) variables are significant in class 1 but not class 2.

In the class 3 Wilcoxon signed-rank analysis (10-year intervals), significance was found for one variable—research and development investment (p<0.10); thus, for firms of this particular class or age group, there appear to be differences in firm behavior not supported for the overall sample. Weak support was found for the R&D hypothesis (see Table 4). Although not significant, the following variable differences were in the expected or hypothesized directions: collectivist countries, age of company, and beta.

In the class 3 Sign test (10-year intervals), no significant differences were found (see Table 5). The following variable differences, although not significant, were in the hypothesized directions—collectivist countries, research and development investment, age of company, beta, and current ratio. Statistics could not be computed for the collectivist country variable because there were not enough cases for statistical analysis.

Class 3 represents the maturity stage, the period during which the change in WBOs' and MBOs' values should stabilize and behavior differences should disappear or begin to decrease. Lack of data in classes 1 and 2 for internationalization rates, number of countries, and collectivist countries as well as research and development investment prevents many key comparisons; however, firm behavior differences in these classes for company age, beta, and plant, property, and equipment investment appear to disappear by class 3 in the Wilcoxon signed-rank analysis. This observation lends some support to hypothesis 13, the occupational socialization hypothesis, which asserts that performance differences between the two groups will decline or disappear over time.

WBOs Compared to NMBOs

Under the Wilcoxon signed-rank test, significance was found for only one variable. Strong support was found for hypothesis 7 (p<0.05) or the internationalization rate hypothesis for WBOs (see Table 6). That is, WBOs' internationalization rate is significantly less than NMBOs. Although not significant, the following differences were in the hypothesized direction: number of countries, beta, current ratio, and total debt.

Table 6 Wilcoxon WBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	p<0.05
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	

Sample sizes vary from test to test. n = 2 to 8

Using the sign test, significance was also found for only one variable. Weak support was found for hypothesis 7 (p<0.10) or the internationalization rate hypothesis for WBOs (see Table 7). Again, the findings suggest that WBOs' internationalization rate is significantly less than NMBOs. Although significance was not found for the following differences, they were in the hypothesized directions: current ratio and total debt. These findings again substantiate the assertion that the Wilcoxon signed-rank test is generally a more powerful test that the sign test.

Table 7 Sign WBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	p<0.10
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	

Sample sizes vary from test to test. n = 2 to 8

Class Analysis: WBOs Compared to NMBOs

No statistics were computed because there were not enough cases for analysis. The female sample consisted of eight cases. For this analysis, the companies had to match on class or company age range as well as SIC code. That is, the WBO's company had to match the NMBO's company with respect to both SIC code and company age range. Only one matching case (i.e., the WBO's company and its matching NMBO's company) was found for each class period. Analyses could not be performed with one data point.

MBOs Compared to NMBOs

Wilcoxon signed-rank test results indicate only one significant finding. Strong support was found for the beta hypothesis or hypothesis 4 (p<0.05). That is, MBOs' beta is significantly less than NMBOs (see Table 8). Although not significant, the following differences were in the hypothesized directions: number of countries of internationalization, age of company, and current ratio.

Sign test results also indicate only one significant finding. Weak support was found for the beta hypothesis or hypothesis 4 (p<0.10). Again, MBOs' beta is significantly less than NMBOs (see Table 9). Although the following differences are not significant, they are in the hypothesized directions: internationalization rate, number of countries of internationalization, research and development investment, age of company, current ratio. These findings lend further credence to the argument that the Wilcoxon signed-rank test is generally more powerful than the sign test.

Table 8 Wilcoxon MBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	p<0.05
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	

Sample sizes vary from test to test. n = 5 to 17

Table 9 Sign MBO Results

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	p<0.10
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	

Sample sizes vary from test to test. n = 5 to 17

Class Analysis: MBOs Compared to NMBOs

In the class 1 Wilcoxon signed-rank analysis (10-year intervals), significance was found for two variables—age of company (p=0.05) and beta (p<0.10). Thus, for the firms of this particular class or age group, there appear to be firm behavior differences. Strong support was found for the company age hypothesis, although not supported for the overall sample, while weak support was found for the beta hypothesis (see Table 10), a finding also supported for the overall sample. Although not significant, the following variable differences were in the hypothesized directions: plant, property, and equipment investment and

current ratio. Statistics could not be computed for four variables—internationalization rate, number of countries of internationalization, number of collectivist countries, and research and development investment—because of insufficient data (i.e., there were not enough cases for analysis).

Table 10 Wilcoxon MBO Results (10-Year Intervals)

Variable	Class1	Class2	Class 3
	0-10 years	11-20 years	21+ years
PPE	n.s.	n.s.	n.s.
R&D	#	#	p<0.10
Age of Company	p=0.05	n.s.	n.s.
Beta	p<0.10	p<0.10	n.s.
Current Ratio	n.s.	n.s.	n.s.
Total Debt Ratio	n.s.	n.s.	n.s.
Internationalization Rate	#	#	n.s.
Number of Countries	#	#	n.s.
Collectivist Countries	#	#	n.s.

Sample Size[†]:

n = 1 to 3

n = 0 to 3

n = 2 to 4

Wilcoxon test cannot be performed (insufficient data).

In the class 1 sign analysis (10-year intervals), no significant variable differences were found (see Table 11). The following variable differences were in the hypothesized directions, although not significant—plant, property, and equipment investment, age of company, beta, current ratio, and total debt. As stated above, statistics could not be computed for four variables—

[†] Sample sizes vary from test to test.

internationalization rate, number of countries of internationalization, number of collectivist countries, and research and development investment—because of insufficient data (i.e., there were not enough cases for analysis).

Table 11 Sign MBO Results (10-Year Intervals)

Variable	Class1	Class2	Class 3
	0-10 years	11-20 years	21 ⁺ years
Internationalization Rate	#	#	n.s.
Number of Countries	#	#	n.s.
Collectivist Countries	#	#	#
PPE	n.s.	n.s.	n.s.
R&D	#	#	n.s.
Age of Company	n.s.	n.s.	n.s.
Beta	n.s.	n.s.	n.s.
Current Ratio	n.s.	n.s.	n.s.
Total Debt Ratio	n.s.	n.s.	n.s.

Sample Size[†]:

n = 1 to 3

n = 0 to 3

n = 2 to 4

Sign test cannot be performed (insufficient data).

† Sample sizes vary from test to test.

As stated previously, class 1 represents the start-up period when the primary focus of businesses is on viability. As such, the internationalization variables are not expected to be significant during this period. However, firm commitment and risk orientation variables are expected to be a factor. The results appear to support this assertion. In addition, behavioral differences should be

greatest during this period as occupational socialization is just in its beginning stages.

In the class 2 Wilcoxon signed-rank analysis (10-year intervals), significance was found for only one variable—beta (p<0.10). Thus, for firms of this particular class or age group, there appear to be firm behavior differences. Weak support was found for the beta hypothesis (see Table 10), a finding also supported for the overall sample. Although not significant, the age of company variable difference was in the hypothesized direction. Statistics could not be computed for four variables—internationalization rate, number of countries of internationalization, number of collectivist countries, and research and development investment—because there were not enough cases for analysis.

In the class 2 sign analysis (10-year intervals), no significant variable differences were found (see Table 11). The following variable differences were in the hypothesized directions, although they were not significant—age of company and beta. Statistics could not be computed for four variables—internationalization rate, number of countries, number of collectivist countries, and research and development investment—because there were not enough cases for data analysis.

Class 2 represents the growth period. The primary focus during this period is building sales. Internationalization should be a key strategy during this period. However, there is insufficient data for statistical analysis with respect to

the internationalization variables. The values of WBOs' and MBOs' should also be changing during this period due to occupational socialization. That is, class 2 differences should be smaller than class 1 differences. The results generally appear to support this assertion. The company age variable, although significant in class 1, is not significant in class 2. Beta appears to be constant across both classes. (See Table 10.)

In class 3 Wilcoxon signed-rank analysis (10-year intervals), significance was found for only one variable—research and development investment (p<0.10). Thus, for firms of this particular class or age group, there appear to be firm behavior differences not supported for the overall sample. Weak support was found for the R&D hypothesis (see Table 10). Although not significant, the following variable differences were in the hypothesized directions: internationalization rate, number of countries, and collectivist countries.

In class 3 sign analysis (10-year intervals), no significant variable differences were found (see Table 11). Although not significant, the following variable differences were in the hypothesized directions: internationalization rate, number of countries, collectivist countries, research and development investment, and beta.

As stated previously, class 3 represents the maturity stage. This is the period during which the change in WBOs' and MBOs' values should stabilize and behavior differences should disappear. Lack of data in classes 1 and 2 for

internationalization rate, number of countries, collectivist countries, and research and development variables prevents some key comparisons. However, firm behavior differences in these classes for age of company and beta variables appear to disappear in class 3 in the Wilcoxon signed-rank analysis. This observation lends support to hypothesis 13, the occupational socialization hypothesis, which asserts that behavior differences between WBOs, MBOs, and NMBOs will tend to disappear or decrease over time due to the acculturation of effective behaviors.

CHAPTER 6

DISCUSSION

The purpose of this dissertation was to determine if WBOs and MBOs differed from NMBOs with respect to firm behavior. Both aggregate and component analyses were conducted. That is, in the first analysis, WBOs and MBOs were combined and compared to NMBOs. In the second analysis, WBOs were compared to NMBOs. Finally, in the third analysis, MBOs were compared to NMBOs.

In the first analysis, WBOs and MBOs relative to NMBOs, there was one significant finding: the market views women- and minority-owned businesses as more risk averse than nonminority-owned businesses (p<0.10). Observation of the current ratio variables, although not significant, lends further support to the argument that WBOs and MBOs are more risk averse than NMBOs. Finally, observation of the company age variables, although not significant, suggests that WBOs and MBOs hold their companies longer than NMBOs.

In the class analyses for WBOs and MBOs relative NMBOs, women and minority business owners held their companies longer (p=0.05) and the market

considered them more risk averse (p<0.10) in class 1; these findings support the company age hypothesis and the beta hypothesis for the firms of this particular class or age group. These differences disappeared by class 3, lending support to hypothesis 13, the occupational socialization hypothesis. When sufficient data or enough cases were available to test the R&D hypothesis (class 3 only), it was found that WBOs and MBOs were more likely to invest in research and development than NMBOs, which supports the R&D hypothesis for the firms of this particular class or age group. A contrary finding was that nonminority-owned businesses invested more in plant, property, and equipment than women- and minority-owned businesses (p<0.10) in class 2. Thus, for the firms of this particular class or age group, there appear to be firm behavior differences in the opposite direction hypothesized.

In the second analysis, WBOs relative to NMBOs, there was one significant finding. Strong support was found for hypothesis 7 (p<0.05). That is, WBOs are less likely to internationalize than NMBOs. Observation of the number of countries, beta, current ratio, and total debt variables, although not significant, lend further support to the assertion that WBOs are more risk averse than NMBOs.

Class analysis was not possible for WBOs relative to NMBOs because there were not enough cases for statistical analysis. As stated previously, the female sample consisted of eight cases. For the class analyses, the companies had to match on class or company age range as well as SIC code. That is, the WBO's company had to match the NMBO's company with respect to SIC code as well as company age range. Only one matching case (i.e., the WBO's company and its matching NMBO's company) was found for each class period, which did not permit analysis because analyses cannot be performed with one data point.

In the third analysis, MBOs relative to NMBOs, there was one significant finding. The market views minority-owned businesses as more risk averse than nonminority-owned businesses (p<0.05). Thus, strong support was found for hypothesis 4 or the beta hypothesis. Although not significant, observation of the current ratio, company age, and number of countries of internationalization variables lends further support to the risk propensity, firm commitment, and internationalization arguments advanced in the study.

In the class analyses of MBOs relative to NMBOs, minority business owners held their companies longer (p=0.05) and the market considered them more risk averse (p<0.10) in class 1. Thus, these findings lend strong support to the company age hypothesis and weak support to the beta hypothesis for firms of this particular class or age group. These differences disappeared by class 3, lending support to hypothesis 13, the occupational socialization hypothesis. When sufficient data or enough cases were available to test the R&D hypothesis, which occurred in class 3 only, it was found that MBOs were more likely to invest in research and development than NMBOs (p<0.10), which supports the R&D

hypothesis for the firms of this particular class or age group. These findings generally support the firm commitment and risk propensity assertions advanced in this dissertation.

In the study, support was generally found for both the effects of culture and occupational socialization, although some of the results were weak (p<0.10), contrary to the findings of Mason and Mudrack (1996), whose findings refuted both occupational socialization theory and gender theory (childhood socialization), finding significant differences between employed men and women with no differences between men and women who lacked full-time employment; however, they combined part-time workers and unemployed individuals into the same category for part of the analysis, which could have confounded some of their results. In this study, cultural differences manifested in firm commitment and risk orientation were found in class 1; however, these differences decreased or disappeared by class 3. A possible reason for these changes may be occupational socialization.

Thus, the findings of this study are as follows: (1) WBOs and MBOs are more risk averse than NMBOs. This is supported by the significant findings for the beta hypothesis in the combined WBOs and MBOs' analysis (relative to NMBOs) as well as the MBOs' analysis (relative to NMBOs). It is also suggested by the significant finding for the WBOs' internationalization rate hypothesis. That is, WBOs internationalize less than NMBOs because they are more risk

averse and internationalization is risky. (2) WBOs internationalize less than NMBOs. (see Table 12.)

Table 12 Summary of Findings

Hypothesis	ID	Finding
Hypothesis 1	PPE hypothesis	
Hypothesis 2	R&D hypothesis	
Hypothesis 3	company age hypothesis	
Hypothesis 4	beta hypothesis	Weak, Strong*
Hypothesis 5	current ratio hypothesis	
Hypothesis 6	debt hypothesis	
Hypothesis 7	WBO irate hypothesis	Strong
Hypothesis 8	WBO inumber hypothesis	
Hypothesis 9	WBO c.country hypothesis	
Hypothesis 10	MBO irate hypothesis	
Hypothesis 11	MBO inumber hypothesis	
Hypothesis 12	MBO c.country hypothesis	
Hypothesis 13	o.socialization hypothesis	Weak

^{*} Weak support was found in the combined WBO and MBO analysis; however, strong support was found in the MBO analysis.

The Class findings for this study include the following: (1) Both WBOs and MBOs demonstrated higher firm commitment in that they held their companies longer than NMBOs. This was the finding for class 1 for the firms of this particular class or age group. This finding is supported by research conducted by the National Foundation of Women Business Owners, which found that relative to the average U.S. business, women-owned businesses are more likely to

remain in business (NFWBO, 2000). Higher firm commitment was also suggested by the greater level of research and development investment in class 3 for the firms of this particular class or age group. (2) The market considered WBOs and MBOs more risk averse than NMBOs. This was the finding for class 1 for the WBOs and MBOs' analysis for the firms of this particular class or age group. It was also the finding for class 2 for the MBOs' analysis for the firms of this particular class or age group. (3) These performance differences appeared to disappear or decline over time. Thus, the effects of occupational socialization appear to be present—performance differences due to cultural orientation decrease over time as individuals acculturate the values necessary to compete effectively.

The ramifications of diversity for national competitiveness are numerous: (1) Women- and minority-owned firms are growing faster than nonminority-owned firms (U.S. SBA, 2001). (2) WBOs place more emphasis on quality with respect to decision-making (NFWBO, 2000). (3) The market considers WBOs and MBOs more risk averse than NMBOs. (4) WBOs internationalize less than NMBOs. (5) Firm behavior differences disappear or decline over time. A possible reason for this decline may be occupational socialization.

Thus, the advantages of business owner diversity include increased growth and an emphasis on quality decision-making. The disadvantages of business owner diversity include greater risk aversion and, for WBOs, a lower

internationalization rate. Although greater risk aversion is associated with less profitability, Watson and Robinson (2003) found no significant difference between the performances of male- and female-controlled businesses when they adjusted for risk, other than reduced earnings' volatility for female-controlled businesses. In addition, the propensity to internationalize can be enhanced by factors that cause the business owner to be more informed (e.g., education, management experience abroad, foreign ties, and foreign language ability), thus reducing the perceived level of risk.

While occupational socialization theory suggests that these behavioral differences will decline or disappear over time, the impact of these short-term differences can tremendously impact national competitiveness. The lower quality emphasis with respect to decision-making by NMBOs could negatively affect national competitiveness through the production of inferior products. The increased firm commitment of WBOs and MBOs could positively affect national competitiveness by counteracting the negative consequences of market harvesting found in the United States. The reduced tendency of WBOs to internationalize could negatively affect national competitiveness because internationalization is a primary driver of global competitiveness or competition. Thus, programs should be developed to address the lower quality emphasis of NMBOs with respect to decision-making and the lower internationalization rates of WBOs.

The collectivist orientation of WBOs and MBOs should benefit national competitiveness as the big emerging markets (e.g., Asia and South America) are predominantly collectivist, and Barkema and Vermeulen (1997) found a negative relationship between cultural distance (i.e., differences in uncertainty avoidance or risk aversion) and both IJV incidence and survival. That is, international joint ventures (IJVs) between partners that are either both collectivists or individualists are both more likely to occur and survive. International joint ventures (IJVs) are an important mechanism for pursuing increased international sales, and as stated previously, increased international sales positively affect firm performance (McDougall and Oviatt, 1996), which aggregates to national performance or national competitiveness.

Limitations

This study relies exclusively on Hofstede's (1984, 1991) and Hofstede and Bond's (1988) dimensions to delineate culture. Although Hofstede's work has been used often, it has also been criticized. For instance, Lane (in Barkema and Vermeulen, 1997) argues that cultural diversity is too rich and complex a concept to be fully captured by research using surveys. An additional limitation includes failure of the Wilcoxon signed-rank and sign tests to account for family-wide error. The experimentwide error rate for multiple univariate testing will range from α if the variables are perfectly correlated with each other to 1- $(1-\alpha)^k$ if the variables are mutually independent (i.e., uncorrelated), where k indicates the

number of statistical tests performed (Hair, Anderson, Tatham, and Black, 1998; Hand and Taylor, 1987; Harris, 1975). The third limitation is that the results are only suggestive because of the cross-sectional nature of the data; the study should be replicated when longitudinal data are available. Although causality is precluded because of the study's design, it seems reasonable to suggest that culture is a determinant of firm commitment, risk orientation, and internationalization rates rather than the reverse. The fourth limitation of the study is the small sample size.

Future Research

The model presented in this dissertation is only part of the puzzle. Few empirical studies have explored the relationship between business owners' characteristics and firm behavior and how this relationship changes over time. More research needs to be done in this area, longitudinal research in particular. Future studies should further develop the model by including additional performance constructs, such as financial performance. In addition, contingency frameworks should be employed to determine the factors that influence the culture-firm behavior relation. Culture has important implications for firm behavior and performance through the company's strategies. According to Faucheux (1977), the formulation of strategy is a cultural process. Researchers should continue to analyze varying pieces of the puzzle until a comprehensive, integrative model is developed.

Conclusion

Environmental changes dictate that we reevaluate the definition of organizations, as well as determine what organizational structure is best suited to a dynamic, competitive, global economy. "The challenge to future management is to maintain organizational competitiveness and productivity through new models of structural design and creative approaches to work assignments that maximize human and machine resources. (Offermann and Gowing, 1990: 101)" London (1996) asserts that every generation encounters employment challenges and changes; our challenge is to funnel our brain power to expand both economic development and growth (p. 67).

The ramifications of the impact of women- and minority-owned businesses for national competitiveness are numerous. As stated previously, minority-owned firms have increased three to seven times faster than nonminority-owned firms (U. S. SBA: Minorities, 2001). Nonminority-owned firms are firms owned by White males. According to the National Foundation for Women Business Owners (2000) or NFWBO, the number of women-owned firms increased by 103 percent nationwide between 1987 and 1999, while employment increased 320 percent and sales grew by 436 percent. In addition, WBOs place more emphasis on quality when making both purchasing and other decisions (NFWBO, 2000). Also, this study suggests that WBOs and MBOs' firm commitment is greater than NMBOs. This finding is supported by research

conducted by the National Foundation of Women Business Owners, which found that women-owned businesses are more likely to remain in business relative to the average U.S. business (2000). This attribute, in conjunction with women and minority business owners' higher risk aversion, would suggest that they are more likely to remain in maturing industries, a practice that needs to be encouraged to counteract some of the problematic results of market harvesting. Thus, the benefits of increased diversity include increased growth, quality emphasis with respect to decision-making, and firm commitment as manifested in increased business longevity and investment.

There is much to be gained from an understanding of culture and its impact on national competitiveness. This dissertation sought to develop a theoretical framework for the effect of culture on firm behavior, which affects national competitiveness. My contribution has been a cumulation of knowledge regarding the differences between WBOs and MBOs and NMBOs as well as an integration of WBOs' and MBOs' research.

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