

**AN INSTITUTIONAL VIEW OF THE DEVELOPMENT OF  
VENTURE CAPITAL IN THE U.S., EUROPE AND ASIA**

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# **AN INSTITUTIONAL VIEW OF THE DEVELOPMENT OF VENTURE CAPITAL IN THE U.S., EUROPE AND ASIA**

## **ABSTRACT**

Professions develop isomorphic, or similar, characteristics not only within countries but also around the world. This research examines venture capital professionals in three distinct regions of the world and finds that their values are shaped by normative institutional processes. The strength of these normative processes leads to stable views on what venture capitalists believe their roles are to be in Europe, U.S., and Asia. However, how those views are implemented around the world is shaped by cognitive institutional influences in the given region of the world. Thus, Asian venture capitalists despite sharing similar views on their roles, implement those roles very differently due to the emphasis on collective action in Asia. This research represents the first examination of venture capital professionals on a worldwide basis and the first specific in-depth examination of Asian venture capital. It also provides the first international examination of professionals who share strong trade and professional associations.

## **AN INSTITUTIONAL VIEW OF THE DEVELOPMENT OF VENTURE CAPITAL IN THE U.S., EUROPE AND ASIA**

Institutions are those structures that provide stability and meaning to social behavior (Scott, 1995a). A result of institutions is that organizations often develop in a similar, or isomorphic manner (Slack & Hinings, 1994). Isomorphic development has previously been noted among professionals with strong trade and professional organizations (Oliver, 1996). For example, the role of institutions in shaping similarities in the professional behavior among the medical (Freidson, 1970; Starr, 1982), and accounting professions (Mezias, 1990) has been examined. However, while this research has documented the similarities in behavior demonstrated, it has not often empirically investigated which of the multiple institutions present in the environment most directly shaped the development of these professions and explain their differences.

The research that has sought to answer questions about the roles of different institutions in the development of professions has examined whether local or national institutions have the greatest impact on their development. For example, Suchman (1995) examined the development of high technology financial practices as reflected by various terms found in the legal documents of venture capital transactions. He found by examining two venture capital funds that these practices were most directly impacted by structures within a given region, Silicon Valley. In contrast, DiMaggio (1991) examined the development of United States (U.S.) art museums and the professionals associated with them through the case of the Branch Museum. He argued nationwide institutional structures shaped the development of the standards within the field, not structures in any given locale.

Thus, prior research has relied on small sample, qualitative investigations, but has not been able to clearly indicate whether it is local or national institutions that shape professions. The impact of even broader institutions on professional behavior has to date been ignored. It has been recognized in other domains that cultural systems which may be present across multiple nations create institutional structures that impact organizational behavior (Friedland & Alford, 1991). But to date, the impact of such multinational cultural institutions on the development of professional standards has yet to be examined. This absence of the consideration of different cultures on professional behavior is consistent with the often-lamented fact that the theoretical development of management, in general, has not examined issues from a multinational perspective (Doktor, Tung, & VonGlinow, 1991; Hofstede, 1990).

Therefore, there is a need to determine the impact of such multinational cultural institutions on professions which are interconnected around the world. Scott (1995b) argued that there were three different types of institutions: normative, regulatory, and cognitive. He argued that normative and cognitive institutional influences were the most critical to professionals. Broadly, normative institutional forces are the codes of behavior that develop for individuals while cognitive institutional forces are behaviors that become so ingrained that they are taken for granted. Our research examines the impact of normative and cognitive institutional forces on the venture capital industry in the U.S., Europe, and Asia. We will argue that certain normative forces have helped shape a level of uniformity in the roles venture capitalists perceive themselves to be fulfilling, but that cognitive, cultural forces have led to differences in the manner in which these roles are implemented.

The venture capital industry is ideal to investigate the impact of multinational institutions on professionals. The industry is a worldwide industry that remains relatively concentrated

among a limited numbers of individuals despite its large financial impact. Specifically, this research will examine venture capital professionals in three distinct parts of the world --- the U.S., continental Europe, and Asia. This research is the first large-scale examination of the venture capital industry around the world. The research will provide the first examination of how multiple institutions shape professional behavior in a worldwide industry.

## **THEORETICAL BACKGROUND**

### **Venture Capital Industry**

Venture capital has become an increasingly important part of entrepreneurial efforts around the world (Patricof, 1989). The industry began in the U.S. following World War II. However, during the 1970s venture capital evolved into a worldwide industry. It grew and developed gradually until the late 1970s when it entered a period of rapid growth (Reiner, 1989). The industry grew from 719 professional in 142 firms in 1980 to 3,021 professionals in 547 firms in 1998. Total capital raised by the industry in 1980 was \$2.1 billion, and \$25.3 billion in 1998. Total capital under management grew dramatically from \$4.1 billion in 1980 to \$84.2 billion in 1998. As the industry grew dramatically in the U.S. it also spread worldwide. Today the European (Ooghe, Manigart, & Fassin, 1991) and Asian (Guide to Venture Capital in Asia, 1996) venture capital industry each raise over \$3 billion per year of new investable capital.

Yet to date, most of our understanding of venture capital is based on the U.S. industry. The industry in the U.S. has a high profile since venture capitalists have funded such notable firms as Intel, Apple Computer, Microsoft, Genetech, and Federal Express. In the U.S., typically the venture capitalist invests and manages the investable capital as general partner in a limited partnership. Most of the capital invested is provided by institutional investors. The limited partnership has a finite life by the end of which all of the investments must either be liquidated or

distributed to the partners. The venture capitalist chooses companies for investment and negotiates the purchase of stock in private transactions.

The U.S. industry is noted for its strong interconnections between venture capitalists, (Bygrave, 1987); similar strong interconnections have also been found within Europe (Manigart, Clarysse, & Debackere, 1994). In part, such strong interconnections developed historically due to the relatively small number of firms active in the industry during its initial expansion. The small size of the industry at this time encouraged venture capitalist to work and invest together to limit their risk. The interconnections are seen in the fact that venture capitalists in the U.S. often communicate with each other about potential investments, frequently seeking advice from each other (Fried & Hisrich, 1994). Additionally it is common, particularly in early stage investments, that venture capitalists seek out other venture capitalists as co-investors (Reiner, 1989). Syndication allows the venture capitalist to diversify their investment risk and to share knowledge (Bygrave, 1987). Finally, after an investment is made, the venture capitalists in the U.S. often cooperate in monitoring the investment (Bruton, Fried, & Hisrich, 1998).

Today, the industry has grown to be one of the most important sources of capital for entrepreneurial firms (Maier & Walker, 1987). The nature of organizations involved in venture capital has changed from when the industry began. The amount of capital managed by an average venture capital firm has increased dramatically, significantly reducing the need to share risk through co-investing. In addition, some venture capital firms are not limited partnerships but units of mature firms. For example, Microsoft has one of the largest venture capital funds in the area of high technology. But despite this growth in industry size and change in firm structure those businesses active in the industry maintain strong interconnections with each other.

One outcome associated with these strong interconnections are the consistent patterns of behavior demonstrated by venture capitalists in the U.S. For example, Fried and Hisrich (1995) highlighted the role of such interconnections in developing similarities among venture capitalists which they called the industry's dominant logic. Similar consistent patterns of behavior have also been found in Europe (Sapienza, Manigart, & Vermeir, 1996). This consistency in venture capital behavior, at least in the U.S., is pointed to as support for institutional theory (Bruton, Fried, & Hisrich, 1998).

The acknowledgement of these patterns of corresponding behaviors in the venture capital industry have led others to use an institutional theory framework to analyze the development of these consistencies in the U.S. Suchman (1995) found that legal terms in venture capital agreements initially became routine among law firms in Silicon Valley. The further a law firm was from Silicon Valley, the less the routine was followed. Then over time the routine spread from Silicon Valley to the rest of the country. However, the venture capital investments whose legal documents made up Suchman's sample were limited to those of two venture capital firms in Silicon Valley.

To date, the Asian venture capital industry has largely been ignored. However, it cannot be presumed that venture capital operates in Asia as it does in the West (Bruton, Dattani, Fung, Chow, & Ahlstrom, 1999). Frequently, in the West the strong financial performance of the venture capital industry is assumed to be due to the extensive control and oversight of the firm in which the venture capitalists invest (Zider, 1998). This strong level of control may be inspired by the agency relationship present between the venture capitalist and the CEO of the funded firm (Bruton, Fried, & Hisrich, 1998).

Asian businesses, in general, are characterized by far greater emphasis on the group rather than on individuals (Hofstede & Bond, 1988). There are indications that agency concerns, such as exists in the U.S., may not be perceived as present in Asia. For example, there is evidence that CEOs of funded firms in Asia are not removed as frequently as they are in the West (Bruton et al., 1999). Interview based data further suggests that there may be differences between East and West in how venture capitalists and CEOs interact concerning control of the firm; the Asian emphasis on the group may result in the venture capitalists' viewing their relationship with the CEO of the firm, not as an arms-length agency relationship, but more as a unified network or team (Bruton et al., 1999). However, to this point, no quantitative empirical investigations of these relationships in Asia have been published.

### **Institutional Perspectives**

Institutional theory has been viewed through numerous lenses. For example, some researchers have built institutional theory conjectures on organizational action from economic perspectives such as game theory (Schotter, 1981), and transaction cost economics (Coase, 1937; Williamson, 1985). In contrast, others have viewed institutional theory through an organizational theory perspective (DiMaggio & Powell, 1991). These different lenses have led to some disagreement as to the institutional elements that may impact a firm's behavior.

Scott (1995a) sought to bring some consistency to the analysis of institutional theory. He recognized that various theoretical lenses emphasize different institutional forces and that the institutional forces emphasized could be grouped together into three categories: normative, regulatory, and cognitive. Each rests on a different assumption about the nature of social action (Scott, 1995a: 49). Researchers have commonly examined only one of these institutional categories at a time in their research (Scott, 1995a). However, any or all of the forces may be

independently influencing different behaviors within a given organization. Thus, richer investigations may result if researchers employ more than a single dimension to examine institutional effects (Scott, 1995a).

The first of Scott's (1995a) forces are normative institutional pressures; these pressures help define what behaviors and values are expected of individuals (Selznick, 1949; March, 1981; Scott, 1995a). For example, in educational institutions there are strong norms against the development of romantic relationships between teachers and their current students. Regulatory forces, the second category, include the laws and political power that regulate individual and organizational action (Scott, 1995a). For example, insider trading laws proscribe the use of certain information for individual or company gain. The third category consists of cognitive institutional influence that develops over time through social interactions among participants (Berger & Luckmann, 1967). Such cognitive processes shape individuals' views of what is possible and what actions should not be considered (Scott, 1995b). One of the principal forms of such cognitive influence is the culture of the region in which the firm operates.

Normative and cognitive processes are the most critical to professionals (Scott, 1995a). Regulatory ones are of lesser importance since the behavior of the profession is so complex that laws cannot establish all such behaviors. This is particularly true in an international setting since the laws of any single country cannot control the complex behavior of individuals around the world.

### **Normative Institutional Pressures and Professionals**

Normative institutions are important for professionals since their behavior is often principally guided by the belief system of the profession. The profession fabricates the principles or guidelines for action by the professionals within the industry (Scott & Backman, 1990). These

guidelines ultimately produce behaviors that separate the profession as a unique group. Such actions are more complex than can be produced through the technical education associated with the profession (Abbott, 1988). In some professions, such as in the medical field, the control of such normative structures ultimately grows so strong that the state yields part of its power over regulation to the profession (Starr, 1982).

Normative influences develop through shared interactions that ultimately lead to behaviors that are taken-for-granted over time and which ultimately constrain the potential actions of professionals that staff those firms (Berger & Luckman, 1967; Jepperson, 1991). These interactions and the roles of professionals within those organizations are determined initially by economic efficiency concerns. However, later entrants to an industry respond more to the isomorphic forces present (Kalbers & Fogarty, 1998). Among the isomorphic forces that encourage this consistency in behavior are strong trade and professional associations within the industry (Oliver, 1996). These groups' commonly held beliefs about what conduct is expected of participants in the industry shape late entrants' development of structures and the roles of professionals (March, 1981).

Evidence of the presence, and power, of normative factors in a professional setting is evident in how human resource programs have developed in the U.S. (Barron, Dobbin, & Jennings, 1986), affirmative action programs have been developed by human resource professionals (Dobbin, Edelman, Meyer, Scott, & Swidler, 1988), and the establishment of audit committees within firms (Kalbers & Fogarty, 1998). In each of those cases the professionals in firms that follow the originators tended to replicate what the others have done whether or not it was economically rational for the followers to do so.

## **Normative Influences and Venture Capitalists**

The worldwide venture capital industry appears to have a similar pattern of development. The industry initially developed behaviors and values driven by economic pressures. One of the principal rationales that has motivated the U.S. venture capital industry is the desire to do as well as financially possible (Sahlman, 1990). The industry started very small. The risk in financing startup ventures is very high. Thus, in order for venture capitalists to diversify their investment risk when the industry was beginning, venture capital firms often syndicated their investments with other venture capitalists (Reiner, 1989). For such relationships to work strong interconnections and relationships among venture capitalists had to be developed (Bygrave, 1987).

The number of venture capitalists in the U.S. has greatly expanded. Additionally, today the average venture fund in the U.S. is much larger and often less likely to syndicate investments. Thus, the economic pressures in the industry have changed. However despite these changes the interconnections among venture capitalists in the country continue. For example, the level of connection is such that it continues to be common practice for a venture capitalist in the U.S. to seek advice from other venture capitalists on a wide variety of issues (Fried & Hisrich, 1994). Additionally, the relationship among many venture capital firms result in venture capitalists cooperating in monitoring of investments (Bruton, Fried, Hisrich, 1998).

These strong interconnections and the need to work together lead, in turn, to the presence of strong sets of similar values among the venture capitalists in the U.S. (Fried & Hisrich, 1995). To illustrate, one of the areas where a venture capitalist's values is most evident is their perceived roles in their interactions with funded firms. MacMillan, Kulow, and Khoylian (1989)

found strong consistency among the ratings by U.S. venture capitalists of over 20 different activities in they carry out when interacting with the CEOs of funded firms.

These similar values are reinforced by a strong trade association. The National Venture Capital Association was formed in 1973. In addition to supporting public policy initiatives, the Association provides continuing education and industry research services. Its annual national meeting is well-attended. A major thrust of the organization is the promotion of “professional behavior”. The Association has written professional standards with which members agree to comply. Despite being a strictly voluntary organization with relatively expensive membership fees (e.g. \$8,000 per year for a venture firm with \$100 million under management), over half of the venture capitalists in the U.S. are members.

There is evidence that norms of behavior and the institutional configurations of U.S. venture capital firms have been exported to other parts of the world (Manigart, 1994). For example, Sapienza, Manigart, & Vermeir (1996) examined venture capitalists in both Europe and the U.S. and found high similarities in the emphasis venture capitalists placed on various functions. These roles, the collective sum of the functions venture capitalists perform with regard to their portfolio companies, were very consistent in both the U.S. and Europe with earlier studies on what venture capitalists do in their post-investment involvement with portfolio companies (Gorman & Sahlman, 1989). However, there was not a clear theoretical reason offered by Sapienza, et al. (1996) as to why such activities were valued equally within these differing regions.

Institutional theory would suggest that there would be similarities in the perceived roles of the venture capitalists around the world. The presence of strong professional associations, strong personal interlinkages, sharing of information by venture capitalists in the U.S. (Bygrave,

1987), as well as the great success and reputation of the U.S. venture capital industry for fostering entrepreneurial growth, all raise the possibility that the U.S. view of the roles and functions of venture capital might spread as venture capital develops in other parts of the world. Indeed, venture capital as practiced in the U.S. has been brought to other parts of the world by venture capitalists trained in the U.S., employees of U.S. firms, or managers of funds affiliated with U.S.-based venture capital funds (Manigart, 1994). Many brought with them a great understanding of the U.S. venture capital industry and maintained close interconnections with the U.S. industry. As role models and opinion leaders, U.S. practices are apt not only to be transferred by venture capitalists trained in the U.S. and moving elsewhere, but also to be copied by firms seeking to replicate the success of U.S. firms. In short, we would expect the normative forces at work in the venture capital industry to be such that as venture capital spreads to Europe and Asia, the same structure, function, and roles would emerge rather than for fully new ones to be invented in each new region. Based on these normative forces it is hypothesized that:

Hypothesis 1: The roles of venture capitalist perceived as important will be the same in the United States, Europe, and Asia.

### **Cognitive Influences and Professionals**

The culture of different regions of the world have been shown to impact how organizational activities are implemented within countries around the world (Adler, 1991). Thus, in examining how institutions impact international professions the role of cognitive forces should also be examined. It is particularly important to consider cognitive structures when comparing East to West management actions since cultural values are so different between (and perhaps even within sub-regions of) the two. For example, it has been argued that Asian culture possesses a dimension, Confucian dynamism, which is not present in Western culture (Hofstede & Bond,

1988). Confucian dynamism emphasized ordered relationships and the impact of shame; these characteristics, relatively less dominant in Western business practice, highlight the dominance of group-related values in Asia and the lower role of individualism so dominant in the West.

A wide range of literature has found support for differences in organizational behavior in Asia from that of the West. Principal among the differences between Asian and Western organizational behavior is the collective-orientation of Asian culture with its strong commitment to shared responsibility (Boisot & Child, 1988). For example, the cultural commitment to shared responsibility leads to decision making within Asian firms that is fundamentally different from that in the West. In Asian firms there is a greater reliance on collective group efforts rather than individual decision making (Biggart & Hamilton, 1992; Hamilton & Biggart, 1988; Orru, Biggart, & Hamilton, 1991). In part, such differences have led Biggart and Hamilton (1992, p. 472) to argue that “Asian economies espouse different institutional logics from Western economies, ones rooted in connectedness and relationships.” Thus, when professions are examined on an international basis researchers must consider the impact of cognitive forces such as culture. This is particularly true when comparing Asian professionals in the same industry with those from the U.S. and Europe.

Even within one country, the evidence is that while functions or roles may be universal how those roles are implemented will be impacted by the local setting of the firm. For example, in accounting it has been shown that while overall control and expected roles may be established centrally by strong institutions the actual performance of a given task is learned locally from others doing a similar function (Freidson, 1986; Meyer & Rowan, 1977). For example, Dirsmith, Heian, and Covaleski (1997) argue that in the accounting profession overall roles may be determined centrally by strong professional institutions, but the performance of those functions

are decoupled from those professional institutions and actual learning of actions occurs locally. Thus, it is reasonable to expect employees in an industry where strong perceived roles may be present to adapt those roles to local conditions. One of the principal factors determining those local conditions when examining professionals internationally being the cognitive, or cultural, institutions.

### **Cognitive Influences and Venture Capitalists**

As noted before, there is evidence that the dismissal of CEOs as a mechanism of control is far less common in Asia than it is in the U.S. (Bruton et al., 1999). We contend that the collective nature of governance on Asia as compared to the West is likely to result in very different means for carrying out the established roles of venture capitalists. Sahlman (1990) argued that venture capital is structured as it is in the U.S. in order to maximize returns to the venture capital firms, to minimize agency risk, and to maximize efficiency in the operation of the venture capital firm itself. Implicit in these rationales is the belief that the venture capital firms and their entrepreneurial investment firms are two totally separate and independent entities. Thus, an agency condition is established wherein the venture capital firm will focus on ways to prevent agency risk since the entrepreneurial firm is apt to maximize its own well-being at the expense the venture capitalist firm. Furthermore, the venture capital firm will be protective of its own time and effort commitment to the venture if it does not feel such effort will pay in capital gains.

However, the venture capitalist/entrepreneur relationship may be viewed substantially differently in those settings where collectivism, rather than individualism is the cultural, or cognitive norm. If, as Biggart and Hamilton (1988) argue, one of the fundamental differences of Asian culture is its emphasis on collectivism then the view of the relationship between the

venture capitalist and the entrepreneur can be that they are a collective entity. If true, then there is less of a need to control agency risks, and the governance of the funded venture will be substantively different than in the West.

### **Governance In Venture Capital Funded Firms**

The only investigation, to our knowledge, that has examined venture capital governance across national borders employed agency and business risk theories to examine governance of venture capitalists in the U.S., the UK, the Netherlands, and France (Sapienza, et al. , 1996). Consistent with Salzman's (1990) depiction of venture capital firms, this study argued and found some support for a relationship between risk and governance effort: the amount of time the venture capitalist spent in face-to-face contact with the venture CEO varied according to the perceived risk of the funded venture. However, they also found that, in general, the agency factors were more effective in predicting the behavior of U.S. investors than those in Europe.

We contend that an even greater "distance" exists between the U.S. and Asia and between Europe and Asia, so that differences in the implementation of governance will be evident if we compare funded firm governance across these settings. In short, we expect that governance will be different in Asia since the venture capitalists will view the CEO of the funded firm not as an agent but as part of the same collective organization. For example, Sapienza, et al. (1996) argued that interactions between the venture capitalist and the CEO would drop over time as business risk diminished, consistent with the efficiency arguments of Sahlman (1990).

We do not hold this same view for the Asian market. Instead, employing a cognitive or cultural perspective it is expected there will be different expectations for Asian venture capital firms. If the venture capitalist and CEO see themselves as part of the same organization, not as agent and owner, the time spent with each other will be impacted more by the effort to build and

maintain the relationship and the joint success of both firms rather than on self-interested attempts to economize on effort or to take opportunities to consume perquisites. Time spent interacting later in the relationship should be as valuable as time spent initially. Thus, in Asia we would not expect the venture capitalist's time spent with the CEO to vary according to the number of years since initial investment. Therefore, we hypothesize that:

Hypothesis 2: The number of years the funded venture has been in the portfolio of the venture capitalist will be negatively related to the frequency of interaction between the venture capitalist and the CEO in the United States and Europe, whereas time in portfolio will be unrelated to the frequency of interaction in Asia.

A primary governance mechanism of venture capital is the funded firm's board of directors. Venture capitalists often exert their greatest influence on portfolio companies through their roles on the boards of directors. Consequently, venture capitalists often insist that the board of directors reflect a given makeup in order for their investment to be made. Their view is that the board is the principal means by which they will influence the funded firm (Fried et al., 1998).

We would expect that the different conceptions of the relationship between the venture capital firm and the funded firm will also influence venture capitalists' preferences for board size and structure in the U.S., Europe, and Asia. These relationships have not been specifically addressed in prior research on venture capital. However, it can be expected that in an effort to build relationships among the officers of the firm and outside stakeholders, that the board of directors of the funded firms in Asia would be larger than would occur in the U.S. or Europe. In the West, the focus of the board is on efficient decision making by those who have control of the firm. Thus, firm size is often constrained by those who have control. However, in a culture where the emphasis is on the collective nature of the firm, the central focus of the firm shifts to building relationships among all of the various parties of interest for the firm. While the focus in

the West may be on efficiency and speed of decision making, in Asia it may be more on establishing broad contacts and the legitimacy of the firm. The former goals are best achieved by having a relatively small board, while the latter is best achieved with a greater size. Therefore, we hypothesize:

Hypothesis 3: The board of directors of venture capital funded firms in Asia will be larger than venture capital backed firms in the United States and Europe.

In the West it is not uncommon for the board of directors to have limited insider representation, in order to control agency risk both through a reduction of information asymmetry and to influence decisions (Sahlman, 1990). Thus, in the West there are often limits placed on the number of internal board members. However in Asia if the venture capitalist views the relationship not as an agent/principal relationship but one where their interests are the same, there is less incentive to have outside board control. The result is that it could be expected that the board of directors of the funded venture in Asia will include more internal board members than comparative firms in the U.S. and Europe. Therefore, we hypothesize:

Hypothesis 4a: The board of directors of venture capital funded firms in Asia will include a greater number of internal board members than will firms in the United States and Europe.

Hypothesis 4b: The board of directors of venture capital funded firms in Asia will include a greater percentage of internal board members than will similar firms in the United States and Europe.

## **RESEARCH SAMPLE**

Prior support has been found for the use of nations as the units of analysis for the investigation of institutional theory (Kostova, 1997). Therefore, the data utilized in this research was gathered through the use of the same research tool in three separate data collection efforts, in six countries, in three different region of the world. The U.S. data were collected in 1987-1988;

the methodology and results are reported in detail in Sapienza (1992), Sapienza and Gupta (1994), and Sapienza and Timmons (1989). As a portion of the research effort in the U.S., the validity and inter-rater reliability of the survey tool was established.

The European portion of the data was collected in 1992; Sapienza et al. (1996) reports the methodology and results of the research. Sapinenza et al. (1996) examined the three largest venture capital markets in Europe, the United Kingdom (U.K.), France, and the Netherlands. However, it is arguable that the U.K. represents a cultural and economic mixture of the U.S. and continental European countries. For example, Hofstede's (1980) research places the U.S. and U.K. in the same grouping when integrating the information on uncertainty avoidance and masculinity while most of continental Europe appears in other national groupings. Such a result is consistent with part of the findings by Sapienza et al. (1996) which found on several dimensions, such as the impact of the venture stage on the interaction between the CEO and venture capitalists, that the U.K was more similar to the U.S. than to the other two European nations.

However, economic and political interaction resulting from its proximity to continental Europe also results in the U.K. having other characteristics that are more similar to continental Europe than that of the U.S. For example, Hofstede (1980) when examining the integration of his power dimension and uncertainty avoidance places the U.K. with other European countries, rather than t the U.S. Similarly, the European Union has promoted the greater integration of U.K business with continental Europe. Therefore, since the U.K. contains characteristics of both continental Europe and the U.S. this research, in contrast to Sapienza et al. (1996), will not include the U.K. venture capitalist. Rather, respondents from only continental Europe (France and the Netherlands) will be examined.

The Asian portion of the data was collected in 1997. The venture capitalists were identified through the use of the Guide to Venture Capital in Asia (1996). Two waves of surveys were sent to the managing director of venture capitalist firms in three Asian countries -- Japan, Korea and Taiwan. These three countries were selected since they represented the highest value obtained on the “Cultural dynamism” variables among the 22 Asian nations surveyed by Hofstede and Bond (1988). Orru, Biggart, and Hamilton (1991) also used these three countries for their investigation of organizational isomorphism in Asia. The researchers argued that business in the three nations represented qualitatively different conceptualizations than that found in the West.

Tests for differences between respondents and non-respondents were not significant, thus limiting the potential of non-response bias. Similarly, tests between the first and second wave of respondents demonstrated no significant differences, which minimize the potential response bias. While the surveys are from different time periods, the focus of this research is the impact of the normative and cognitive institutions on professionals and such institutions change slowly, thus the impact of the different survey time frames should be minimal.

The response rate for the U.S. portion of the research was 85 percent. The survey in this portion of the research was conducted by personal interview, which encouraged high response rates. Mail surveys were utilized for both the European and Asian samples with response rates of 35 percent and 32 percent were obtained respectively.

The U.S. portion of the research asked each respondent to complete surveys on two portfolio companies, preferably one doing well and one not doing well. The European and Asian respondents were asked to pick one venture only; in Europe it was to be a firm on which they served on the board of directors and invested in at least two years. For the Asian sample,

respondents were asked to detail the investment where they had been on the board of directors the longest. The U.S. and Asian surveys were in English while the European survey was translated into each of the respective nations' predominating languages.

## **ANALYSIS & MEASURES OF THE MODEL**

### **Analysis**

The means and standard deviations for all variables, combining data from all three regions is reported in Table 1. Correlation matrixes for the regression variables and the board variables are also presented in this table.

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Insert Table 1 About Here

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To test Hypothesis 1 the mean of the importance ascribed to each of the eight roles by the venture capitalists in each region was examined, with a values above 2.5 (on a 5.0 scale) indicating the role was viewed as important on a given continent. Hypothesis 2 was tested using an ordinary least squares multiple regression in which the independent variable and control variables were regressed against total time spent by venture capitalist with the CEO of the funded firm. The results are reflected for each individual region of the world. The regression drops all cases with missing data. Tests were conducted to ensure that the data meet the requirements of regression analysis. Multicollinearity was deemed not to be a threat in the data due to tests for minimum tolerance. Tests to assure that common method variance did not undermine the validity of the data were based on Podsakoff and Organ's (1986) work. The factor structure of the dependent and independent variables demonstrated that common method variance should not be a significant problem for this data set. Hypothesis 3, 4a, and 4b were tested using ANOVA and t-tests.

## **Roles of the Venture Capitalist**

Hypothesis 1 predicts that the various roles of the venture capitalist will be perceived the same in the three regions of the world. The potential roles for the venture capitalist were taken from Sapienza, Manigart, and Vermeir (1996).<sup>1</sup> The roles are built on the prior research of Gorman and Sahlman (1989) and MacMillian, Kulow, and Khoylian (1989) and have been shown to have validity in the U.S. The venture capitalists were asked to rate the importance of eight roles: “Sounding Board”, “Financier”, “Business Advisor”, “Mentor/Coach”, “Friend/Confidant”, “Source of Professional Contacts”, “Source of Industry Contacts”, and “Management Recruiter”. Respondents were asked to rate the importance of these roles on a Likert type scale (1=not important, to 5=of great importance).

## **Dependent Variable**

The venture capitalists were asked to provide the total number of hours per year they interacted with the CEO of the funded firm.<sup>2</sup>

## **Regression Independent Variables**

Years of Venture in Portfolio: The number of years the venture had been in the venture capital fund’s portfolio, rounded to the nearest whole year.

## **Regression Control Variables**

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<sup>1</sup> Descriptions of the eight roles provided: Sounding board = Listens, responds objectively, frankly, and truthfully; Financier = Provides or arranges funding in a timely manner; Business advisor = Discusses plans, reviews targets, offers feedback, provides management assistance, notes threats; Mentor/coach = Provides encouragement, positive reinforcement, support, and motivation; Friend/confidant = Is concerned for CEO, will go out of his way for CEO, listens to CEO’s problems; Source of professional contacts = Knows or can locate CPAs, lawyers, etc.; Source of industry contacts = Helps generate orders, reach licensing agreements, locate key suppliers, etc; Management recruiter = Helps locate key members for management team.

The dependent variable in this regression is the interaction between the venture capitalist and the CEO of the funded firm. It is possible that the distance between these two individuals may impact the level of interaction, particularly in Asia where there are often difficulties in communication and the travel. While the sampled venture capitalist are from Japan, Korea, and Taiwan, these venture capitalist often invest over a wide area in Asia. Thus, geographic distance will be controlled.

In the U.S. it has been shown that the experience level of the venture capitalist impacts their interaction with the CEO. More senior venture capitalists interact less with funded firms' CEOs (Sapienza & Gupta, 1994). Evidence of similar behavior was found in continental Europe (Sapienza et al., 1996). From an institutional theory perspective there is not a strong prediction of what the impact experience will have on venture capitalist behavior in Asia. Therefore, the venture capitalist's experience is employed as a control variable. The experience of the venture capitalist was examined in two ways, first their experience as a venture capitalist and second their experience in the industry of the funded firm.

Geographic Distance: Geographic distance was measured as a control variable as the time in minutes it took for the venture capitalist to travel to the headquarters of the portfolio company.

Venture Capitalist Experience: The focus in all three surveys was the time of the venture capitalist in the venture capitalist industry. However, venture capitalist experience was examined in the U.S., European, Asian samples in slightly different ways. In the U.S. the venture capitalist were surveyed and their responses coded as 0 if the venture capitalist had been in the industry five years or fewer years, and 1 if he/she had been in the industry more than five years. In Europe and Asia the venture capitalist's experience in the venture capitalist industry were not

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<sup>2</sup> Sapienza, Manigart, and Vermeir (1996) asked for hours in face to face contact. However, in Asia travel can be

coded 0/1, rather the number of years experience in each area was collected. The experience of the venture capitalist in the focal industry in the United States was measured by the number of rounds of financing they had funded in that industry while in Europe and Asia it was the number of years of operating experience in that industry.

### **ANOVA Comparison Variables**

Board Size: Total number of board members on the funded venture where the venture capitalist has served the longest.

Internal Board Members: The members of the board who were employees of the firm.

## **RESULTS**

Hypothesis 1 argued that venture capitalist would perceive their role in funded firms similarly across all three continents. Table 2 shows the means for each role from each continent. These roles are ones that have previously been shown to have value among venture capitalists in the U.S. All roles were rated above 2.5 on a 5.0 scale on all three continents. Thus, all the roles examined were viewed important on all 3 continents and Hypothesis 1 was supported.

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Insert Table 2 About Here

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Hypothesis 2 argued that the length of time the funded venture was in the portfolio of the venture capitalist would impact the interaction between the venture capitalist and the CEO of the funded firm in the U.S. and Europe, but not Asia. It was tested using a least square regression for each region of the world and was supported. The regression results for Europe and the United States were significant and demonstrate the longer the funded firm was in the venture capitalist portfolio the lower were the hours worked with the firm. As predicted, the regression for Asia was not significant nor was time the venture was in the portfolio.

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difficult, so total contact time was considered to be a more relevant measure.

As noted above, venture capitalist experience was employed as a control variable. In a manner consistent with Sapienza, Manigart, and Vermeir (1996) the experience of the venture capitalist in the industry of the funded firm was significant in the U.S. and Europe; but as expected the control variable was not significant in Asia. The summary of the regression results appear in Table 3.

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Insert Table 3 About Here

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Hypothesis 3 argued that the board of directors of venture capital funded firms would be larger in Asia than in the U.S. and European. A review of the ANOVA results in Table 4 show that Asian boards of venture backed firms are significantly larger than European boards, but not U.S. boards. Thus, there is moderate support for Hypothesis 3.

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Insert Table 4 About Here

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Hypotheses 4a and 4b argued that the numbers of insiders on Asian boards, both in terms of absolute numbers and in terms of percentages, would be greater. A review of Table 4 shows strong support for the hypotheses. Thus in summary, there is clear support for Hypothesis 1, 2, 4a and 4b. Hypothesis 3 has moderate support with the Asian board of directors being larger than those of Europeans but not the U.S.

## **DISCUSSION**

The results show institutional theory provides a powerful framework to explain the professional behavior of international venture capitalists. Hypothesis 1, predicts that the roles venture capitalists view as important would be the same in the U.S., Europe, and Asia, and was supported. To examine this finding further the relative importance of these various roles was also examined. Relative rankings were also similar across continents, although slight variances

were also found. Table 5 shows the ranked importance of each role on the three continents. “Business Advisor” and “Sounding Board” were ranked in the top three roles on all continents. “Mentor/Coach”, “Source of Professional Contacts”, and “Friend and Confidant” were broadly seen as of average importance in all three continents, with “Source of Industry Contacts” and “Management Recruiter” consistently seen as the least important. The one difference in the rankings is that “Financier” is ranked higher in Europe and Asia

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Insert Table 5 About Here

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To further the analysis, an ANOVA of the various means on each of the responses was also employed. No significant differences were found on the mean values of the four least important roles. However, the four most significant roles for a venture capitalist did show significant differences on the ANOVA p-values. It should be noted in reviewing the ANOVA results that Asian respondents had a tendency to avoid extreme answers particularly for the positive response of 5 on the 5 point Likert scale (e.g. role means for Asia varied from 2.9 to 4.0 while the U.S. varied from 2.6 to 4.5.) As a result, an ANOVA analysis will overstate the level of relative difference between Asia and the other two continents. Such tendencies to employ Likert type scales in different manners is part of the difficulty in ensuring comparability in cross national research (Chen, 1995). In summary, the additional evidence from the relative rankings of the importance of different roles further supports the findings of Hypothesis 1.

The means by which normative institutions have been transmitted to Asia are not difficult to identify. As noted previously many venture capitalists in Asia received their training in the U.S., and maintain contact with U.S. venture capitalists.. But there are also other sources of such influence. For example, the leading institute for training of venture capitalists in Asia is

the Institute of Private Equity Investment. Since 1995, this institute has provided semi-annual annual training seminars in Asia for new Asian venture capitalists. Over 60 percent of the Institute's instructors were venture capitalists who either received their education or training in the U.S., or are currently affiliated with an American firm. In addition, the instructional materials used in the training are largely drawn from research on the U.S. industry. Thus, even now the normative institutions on which the values of the industry in Asia rest are connected to the U.S. industry.

However, how those values and attitudes are implemented is determined by the local culture, or cognitive institutions. These cultural values have power across multiple nations within the given region to shape the venture capitalists' professional behavior. For example, while the focus on efficiency encourages venture capitalists from the U.S. and Europe to reduce the time spent with the CEO of a funded firm the longer that venture is in their portfolio, this is not true in Asia. The indication is that venture capitalists in Asia focus principally not on operating their relationship in the most time efficient manner, but rather on the collective nature of their association with the funded firm. This a finding is consistent with the general evidence concerning the impact of collectiveness from Asian on business within the region.

Similarly in building the governance mechanisms associated with the funded firm the venture capitalist reflects the local business culture. Rather than focusing on efficiency and control of potential agency relationships, the Asian venture capitalist focuses on building a cohesive relationship with the group.

It is interesting to note from the regression results in Table 3 that as the culture connection from the U.S. gets more distant, the explanatory power of the models developed in the U.S. grow increasingly weaker. The explanatory power of the variables in the regression is

greatest in the U.S., then declines as the model is applied to the European sample, and disappears in Asia. These results demonstrate that a richer understanding of the impact of cognitive institutions to shape organizational behavior needs greater understanding. The assumption that research conducted in the U.S. has automatic application in different parts of the world can not be supported.

### **Future Research**

The lack of difference between the U.S. and Asia in board size needs greater investigation since the findings are counter to what is predicted. For example, there may be significant differences in the background of board members. While the size of the boards in the two regions are similar, the composition of Asian boards may be far different. Particularly, outside board members in Asia may be more likely to include those who have a relationship with the firm that might bias their analysis: such as a consultant to the firm, a supplier, or relative of an insider. This finding would be consistent with the limited information on control by boards in Asia (Weidenbaum & Hughes, 1996).

Future research on board behavior should also examine control issues in light of the cognitive institutions present in Asia. For example, how actively do boards in the different regions intervene in the funded firms, what is their role in strategy development and evaluation, and what upon what information do they base their decisions. It could be expected that with the collectiveness of the Asian venture capitalists the interventions may be far less than in the West. Similarly, since the relationship is so strongly based on personal relationships, the dispersal of formal information to board members may be far lower in Asia than in the West but informal dispersal higher.

In general, the venture capital industry in Asia also needs greater investigation. To date, research is quite limited. However, the evidence here is that cognitive institutions lead to a somewhat different industry than in the West. The nature of the interaction between the CEO of the funded firm and the venture capitalist will likely be different in Asia. Thus, topics such as CEO dismissal need to be examined in Asia in light of institutional theory. Similarly, the networks of informal control that develop between the various parties in Asia that may substitute for formal legal and structural control mechanisms used in the West need to be examined.

Finally, Scott (1995a) argued for a broader investigation of the institutions so that the impact of the different types of institutions on organizational behavior could be better understood. The information presented here supports this analysis. The evidence is that while normative institutions shape overall values, it is the cognitive institutions that shape the implementation of those values among professionals in a world wide industry. Future researchers should seek to expand this understanding to better comprehend how various institutions interact with each other to shape professionals behavior. Similarly, different professions need to be examine across the three regions to examine the applicability of the findings to other professional groups which have strong worldwide interactions. There is no reason to expect that venture capitalists as professional group act radically different than other professionals, however, the findings here should be validated.

## **CONCLUSION**

To date the development of management theory has been based on a single culture, that of the U.S. (Doktor, Tung, & VonGlinow, 1991; Hofstede, 1990). There is a need for management scholars to examine how management theory differ for other countries, particularly those in Asia, and how these differences are shaped by cognitive institutions. Increasing there is a

tendency by Asian business schools to establish separate courses in “Asian Management”. This trend is the embodiment of the recognition that management practice in Asia is different from the West. To avoid fragmentation of the body of management knowledge and practice, scholars must seek to understand both the differences and similarities between management practice in different parts of the world. Institutional theory, as demonstrated here, provides a strong basis to seek to understand those differences and similarities. Future researchers should continue to build and expand our understanding of the theory in global settings.

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**TABLE 1**  
**Means, Standard Deviations, Correlation**

**A. Hypothesis 1 - Means and Standard Deviations**  
**Eight Roles of Venture Capitalists:**

|                                 | Mean | Standard Deviation |
|---------------------------------|------|--------------------|
| Financier                       | 4.06 | 1.20               |
| Source of Professional Contacts | 3.07 | 1.00               |
| Source of Industry Contacts     | 2.88 | 1.28               |
| Business Advisor                | 4.05 | 0.89               |
| Sounding Board                  | 4.19 | 0.87               |
| Mentor Coach                    | 3.67 | 1.01               |
| Friend and Confidant            | 3.20 | 1.10               |
| Manager Recruiter               | 2.96 | 1.28               |

**B. Hypothesis 2 - Means, Standard Deviations, Correlation**  
**Regression Dependent, Independent, and Control Variables**

|  | Mean   | Standard Deviation | Experience | Experience in Industry | Time in Portfolio | Distance |
|--|--------|--------------------|------------|------------------------|-------------------|----------|
| Hours Contact Between Venture Capitalist and CEO of Firm | 174.57 | 373.41             | -0.05      | 0.18                   | 0.05              | 0.05     |
| Venture Capitalist Experience as Venture Capitalist      | 6.03   | 6.17               |            | 0.25                   | 0.44              | -0.03    |
| Venture Capitalist Experience in Industry of Funded Firm | 2.51   | 1.29               |            |                        | 0.49              | 0.11     |
| Time in Portfolio  | 2.94   | 3.20               |            |                        |                   | 0.32     |
| Distance   | 192.12 | 676.28             |            |                        |                   |          |

**C. Hypotheses 3 and 4 - Means and Standard Deviations**  
**Board Variables**

|   | Mean | Standard Deviation |
|---|------|--------------------|
| Board Total Size                        | 5.37 | 2.35               |
| Board Insiders                          | 2.21 | 1.61               |
| Board Insiders as a Percentage of Board | 0.41 | 0.26               |

**TABLE 2**  
**Mean Rankings of Venture Capitalist Roles Around the World**  
**(1=not important, 5=very important)**

| <b>Rank of roles</b>            | <i>Europe</i> | <i>Asia</i> | <i>US</i> |
|---------------------------------|---------------|-------------|-----------|
| Financier                       | 4.3           | 3.9         | 3.9       |
| Sounding Board                  | 4.2           | 3.7         | 4.5       |
| Business Advisor                | 3.8           | 4.0         | 4.4       |
| Mentor/Coach                    | 3.5           | 3.6         | 3.9       |
| Source of Professional Contacts | 3.2           | 3.1         | 2.9       |
| Friend/Confidant                | 3.0           | 3.4         | 3.3       |
| Manager Recruiter               | 3.2           | 2.9         | 2.9       |
| Source of Industry Contacts     | 2.7           | 3.4         | 2.6       |

**TABLE 3**  
**Regression Results**  
**U.S. as Base Continent**

|  | <b>ASIA</b>        |                | <b>U.S.</b>        |                | <b>EUROPE</b>      |                |
|--|--------------------|----------------|--------------------|----------------|--------------------|----------------|
|  | <i>Coefficient</i> | <i>p-value</i> | <i>Coefficient</i> | <i>p-value</i> | <i>Coefficient</i> | <i>p-value</i> |
| Intercept  | 48.022             | 0.920          | 142.244            | 0.015          | 84.048             | 0.000          |
| Venture Capitalist Experience as Venture Capitalist      | -16.351            | 0.588          | 40.764             | 0.454          | -0.144             | 0.906          |
| Venture Capitalist Experience in Industry of Funded Firm | 102.028            | 0.479          | 42.849             | 0.060          | 11.300             | 0.095          |
| Time in Portfolio  | 24.803             | 0.611          | -17.286            | 0.026          | -0.150             | 0.040          |
| Distance from Funded Firm                                | -0.055             | 0.647          | 0.344              | 0.026          | -0.150             | 0.278          |
| Adj. R2  | --                 |                | 0.216              |                | 0.035              |                |

**TABLE 4**  
**ANOVA Analysis and T-tests of Board of Directors**

A. Asia Compared to Europe

|             | Mean    |         | t-value  | Df  | P       | Valid N |      | Standard Deviation |          | F-ratio   | p         |
|-------------|---------|---------|----------|-----|---------|---------|------|--------------------|----------|-----------|-----------|
|             | Europe  | Asia    |          |     |         | Europe  | Asia | Europe             | Asia     | Variances | Variances |
| Board Total | 4.62821 | 6.4     | -3.74692 | 116 | 0.00028 | 78      | 40   | 2.291197           | 2.687101 | 1.375445  | 0.234034  |
| Internal    | 1.85897 | 3.26316 | -4.1667  | 114 | 6E-05   | 78      | 38   | 1.439014           | 2.15211  | 2.236654  | 0.003013  |
| %Internal   | 0.38925 | 0.5116  | -2.14559 | 116 | 0.03399 | 78      | 40   | 0.276587           | 0.323574 | 1.368627  | 0.241313  |

B. Europe Compared to the U.S.

|             | Mean    |          | t-value  | Df  | P        | Valid N |      | Standard Deviation |          | F-ratio   | p         |
|-------------|---------|----------|----------|-----|----------|---------|------|--------------------|----------|-----------|-----------|
|             | Europe  | US       |          |     |          | Europe  | Asia | Europe             | Asia     | Variances | Variances |
| Board Total | 4.62821 | 4.71429  | -2.86071 | 125 | 0.00496  | 78      | 49   | 2.291197           | 1.695582 | 1.825942  | 0.026534  |
| Internal    | 1.85897 | 1.959184 | -0.43529 | 125 | 0.664102 | 78      | 49   | 1.439014           | 0.911939 | 2.489997  | 0.000945  |
| %Internal   | 0.38925 | 0.354284 | 0.817267 | 125 | 0.415331 | 78      | 49   | 0.276587           | 0.14386  | 3.696415  | 3.89E-06  |

C. Asia Compared to the U.S.

|             | Mean    |          | t-value  | Df | P        | Valid N |    | Standard Deviation |          | F-ratio   | p         |
|-------------|---------|----------|----------|----|----------|---------|----|--------------------|----------|-----------|-----------|
|             | Asia    | US       |          |    |          | Asia    | US | Asia               | US       | Variances | Variances |
| Board Total | 6.4     | 5.714286 | 1.465272 | 87 | 0.146452 | 40      | 49 | 2.687101           | 1.695582 | 2.511483  | 0.00262   |
| Insiders    | 3.26316 | 1.95918  | 3.82624  | 85 | 0.00025  | 38      | 49 | 2.15211            | 0.911939 | 5.569261  | 6.07E-08  |
| %Insiders   | 0.5116  | 0.35428  | 3.05609  | 87 | 0.00298  | 40      | 49 | 0.323574           | 0.14386  | 5.059013  | 2.29E-07  |

**TABLE 5**  
**Rankings of Venture Capitalist Roles Around the World**  
**ANOVA P-level**

| <b>Rank of roles</b>               | <i>Europe</i> | <i>Asia</i> | <i>US</i> | <i>ANOVA<br/>P-level</i> |
|------------------------------------|---------------|-------------|-----------|--------------------------|
| Financier                          | 1             | 2           | 4         | .05                      |
| Sounding Board                     | 2             | 3           | 1         | .01                      |
| Business Advisor                   | 3             | 1           | 2         | .05                      |
| Mentor/Coach                       | 4             | 4           | 3         | .03                      |
| Source of Professional<br>Contacts | 5             | 8           | 6         | .26                      |
| Friend/Confidant                   | 6             | 6           | 5         | .11                      |
| Manager Recruiter                  | 7             | 7           | 7         | .42                      |
| Source of Industry Contacts        | 8             | 5           | 8         | .28                      |