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**ORGANIZATIONAL CLIMATE SIMILARITY AND PERFORMANCE:
INTERNATIONAL JOINT VENTURES IN RUSSIA**

by

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ABSTRACT

This study examines how organizational climate dissimilarity between parent firms and the joint venture organization (JVO) affects joint venture performance. Data are obtained from interviews with the general manager of 40 IJVs and questionnaires completed by top-level managers from both parents and the JVO (6 people / IJV). Results indicate that to have the best chance at success, it is important for a firm starting a joint venture to select a partner with an organizational climate similar to its own. Results also indicate that it is important to create an organizational climate at the JVO that is similar to the foreign parent's organizational climate.

INTRODUCTION

IJVs have increased significantly in popularity in recent years (Beamish and Delios, 1997) as firms find themselves under increasing pressure to expand internationally to be competitive. However, international joint ventures (IJVs) continue to be challenging to manage and, as a result, often lead to failure. In a meta-analysis of 12 past studies of IJVs, Beamish and Delios (1997) found that between 32% and 61% of the IJVs in each sample had unsatisfactory performance. Consequently, both managers and academics are keenly interested in what firms can do to increase their IJVs' chances of success. One of the most common reasons given for IJVs not performing well is due to difficulties between parent firms (Hyder, 1988). It is therefore essential to consider how such difficulties can be avoided. One hypothesis about how to avoid difficulties, and the focus of this paper, is that the more dissimilar parent firms are, the more likely they are to experience difficulties with their joint venture. Several authors have suggested, but not tested, that interfirm diversity can severely impede the ability of companies to work effectively together (Harrigan, 1988a; Parkhe, 1991; Perlmutter and Heenan, 1986). One way of measuring dissimilarity is to examine the dissimilarity of the firms' organizational climates. This study chooses this approach and focuses on the relationship between organizational climate dissimilarity between parent firms and the joint venture organization (JVO) and joint venture performance.

The importance of inter-firm organizational culture / climate similarity for firms involved in joint ventures has received little systematic attention in the literature. Some IJV researchers have alluded to the drawbacks of organizational culture / climate dissimilarity by suggesting that it is beneficial for an IJV's parents to have similar organizational climates in order to obtain optimal IJV performance (e.g., Geringer, 1988; Parkhe, 1991; Simiar, 1982). However, we are not aware of any past research that has systematically empirically investigated this issue. This study seeks to help fill this void. Throughout the paper, the term *joint venture organization* (JVO) will be used to refer to the joint venture excluding the parents. This is in contrast to our use of the terms IJV and JV which we use to represent the JVO and its parents. As discussed in the methodology section, this study is limited to IJVs with two parents.

The decision to focus on the importance of organizational climate similarity between parent firms and the JVO derives from three exploratory studies which investigated success strategies for Russian international joint ventures--RIJVs (self cite). The studies were conducted to determine which relationships were important rather than to test the importance of specific relationships. The studies involved interviews with general managers from 42 Russian international joint ventures (RIJVs). In some cases other managers from the JVO and parent firms were also interviewed. The importance of organizational climate similarity between parent firms and the JVO was one of the key success factors alluded to most frequently during these interviews.

The central goal of this paper is to determine how organizational climate dissimilarity between parent firms and the JVO affects IJV performance. Russia provides a good location to investigate this question since IJVs in Russia are often a meeting place for parent firms with diverse organizational climates. However, we hope that the findings of this study will be useful beyond the Russian context. The paper first compares and contrasts the organizational climate and organizational culture literatures. The study's hypotheses are then developed using transaction cost theory as a theoretical lens. Next, the variables that are controlled for in the study are discussed followed by an explanation of the study's methodology. The results are then presented and discussed. The paper concludes with topics for further study.

ORGANIZATIONAL CLIMATE

Litwin and Stringer (1968, p.1) define organizational climate as "a set of measurable properties of the work environment, perceived directly or indirectly by people who live and work in this environment and assumed to influence their motivation and behavior."

Organizational climate has its roots in early studies, by Lewin, of experimentally-created social climates (Lewin, Lippit, and White, 1939; Lewin, 1951) which laid the foundation for

Litwin and Stringer's (1968) and Tagiuri and Litwin's (1968) work on organizational climate. Litwin and Stringer investigated how organizational climate affects individual motivation. They also suggested that organizational climate was comprised of eight dimensions: structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity. Tagiuri and Litwin's (1968) book was comprised of a series of essays that treated climate in ways ranging from a subjective interpretation of organizational characteristics to an objective set of organizational characteristics. Other early studies suggest which dimensions comprise organizational climate (e.g., Campbell, Dunnette, Lawler, and Weick, 1970; Halpin and Croft, 1962; Likert, 1961, 1967).

HYPOTHESIS DEVELOPMENT

Transaction Cost Theory

Transaction cost theory (Williamson, 1975; 1985) will be used to frame the study's hypotheses. Transaction cost theory has been used previously to show that scope joint ventures (Beamish and Banks, 1987; Hennart, 1988) and scale joint ventures (Stuckey, 1983) can be an optimal form of governance. However, not all joint ventures are born equal, and in this paper we are concerned about using transaction cost theory to explain which types of joint ventures are likely to incur lower organization costs and thus perform better. It is sometimes forgotten that Williamson (1975) investigated aspects of the optimal way to design a firm inside of one organizational form. For example, Williamson concludes that the number of people a person can manage effectively is limited because of issues of bounded rationality.

Brown, Rugman, and Verbeke (1989) have extended the above line of within-mode transaction cost theory and applied it to joint ventures. They use transaction cost reasoning to hypothesize that dissimilarity of national and organizational cultures between joint venture parents is likely to lead to joint venture failure. Their main argument is that as organizational and national culture dissimilarity between parent firms increases, opportunism is likely to increase. This increase in opportunism will in turn increase the organization costs associated with using such a JV. Their paper, however, does not have an empirical part.

Organizational Climate Dissimilarity in Transaction Cost Theory

This study expands on the above type of transaction cost analysis and examines how one key decision in designing a joint venture--partner selection [for a discussion of partner selection criteria see (Geringer, 1988)]--can affect the organizational costs encountered in employing a joint venture and thus a joint venture's performance. The characteristic of partners focused on here is the degree of organizational climate dissimilarity. The key concern for this study is whether joint ventures between partners having more dissimilar organizational climates experience different organizational costs which would in turn impact overall firm performance.

Depending on the degree of organizational climate dissimilarity present in a joint venture, several items contribute to different joint ventures experiencing different levels of

organizational costs: avoiding process losses, decreasing uncertainty, and decreasing the risk of opportunistic behavior. Each of these items will now be discussed in greater detail.

Avoiding Process Losses

When firms work together it is desirable that they have similar organizational climates since this homogeneity avoids process losses in coordination and control that are normally associated with diversity (Steiner, 1972). Differences in organizational climates possessed by different firms trying to work together have been shown to lead to differences in management practices and values. These differences may in turn lead to cultural ambiguity and process losses when people from different organizational climates work together (Buono, Bowditch, and Lewis, 1985). These process losses in turn increase the cost of conducting a transaction.

Process losses may result from a variety of different situations. For example, process losses may result from one parent firm's not being able to understand what another parent firm does because of ineffective communication between the two firms (organizational communication flow is a dimension of organizational climate). This ineffective communication may result from the parent firms' organizational climates being so different that it is hard for the firms to know how to relate to each other. For example, firm A may be very hierarchical with upper management approving most decisions while firm B may have few levels of hierarchy and workers empowered to make decisions. A worker in firm B might try to ask a worker in the firm A about his opinion on a certain issue. However, the worker in firm A may be reluctant to give his opinion without first consulting his manager. The worker in firm B may misinterpret this reluctance as an attempt not to cooperate. This misinterpretation may in turn lead to retaliation of workers in firm B or at least frustration at the firm A worker's unwillingness to cooperate. Clearly, the troubles caused by the two firms' differing communication patterns will increase the organizational costs of using the joint venture described above compared to a joint venture where both parents have similar communication flow patterns. Process losses may also result because one firm's organizational climate is more oriented toward taking risks than is the other firm's. Thus, it is desirable that parties involved in a joint venture have similar organizational climates to avoid such process losses and to minimize organizational costs.

Minimize Uncertainty

Much uncertainty relating to transactions results from measurement difficulties (Barzel, 1982; Ouchi, 1980; Williamson, 1994). For example, it is often difficult to know how to value or measure what a firm's contribution to a cooperative project is worth. For example, perhaps a firm promises to provide another firm with introductions to many good potential customers and contacts to help navigate Russian bureaucracy. It is hard to know in advance how valuable these customers will be or how much help the contacts will provide in navigating Russian bureaucracy. When such measurement difficulties exist, Barzel (1982) suggests it is often desirable to internalize or partially internalize the transaction (e.g., form a joint venture) to help deal with uncertainty and minimize free rider problems.

When two parties in a joint venture have similar organizational climates, they are likely to have similar measurement and control systems. Certain transactions possess uncertainties, information asymmetries, and free rider problems that are especially well-suited to certain measurement and control systems (organizational climates). Thus, two parent firms having similar organizational climates are likely to experience similar efficiency improvements by internalizing a particular transaction as opposed to conducting it using the market and thus have the same preferences for which transactions to internalize.

Uncertainty causes parent firms to make more complicated JV contracts, spend more time monitoring the environment and the other parties involved in the joint venture, and spend more time and resources preparing for different contingences. Clearly all of these activities cost something, and thus the presence of uncertainty increases the organizational costs. Therefore, the greater the uncertainty, the worse the joint venture is likely to perform because organizational costs will increase as uncertainty increases. Organizational costs will also increase due to greater uncertainty because increased monitoring will be necessary. Thus, for a joint venture to perform better, it is desirable for uncertainty to be decreased.

Decrease Opportunism

A critical insight provided by transaction cost theory in regard to joint ventures is the issue of opportunism and the organizational safeguards that can be enacted to guard against opportunism inside a firm. It was, after all, the threat of opportunistic behavior in the market that initially drove the partners to form a JV. As Williamson (1975; 1985) has argued, the organizational structure reduces the costs of opportunism at the expense of increasing bureaucratic or administrative costs. As discussed above, several researchers have explored opportunism in JVs and argued that if properly developed, trust can reduce the threat of opportunism and make the JV mode the most efficient mode in some cases (e.g., Beamish and Banks, 1987).

However, it is not only the presence of trust that can reduce the hazards of opportunism. Organizations possessing similar organizational climates can use what Ouchi (1980) terms the “clan method of control.” Ouchi’s (1980) concept of clan control is defined by the case when people or organizations of similar cultures decide to work together. In such a situation, they are more confident that equity and reciprocity will exist in the relationship and thus savings can occur in needed monitoring costs. Thus, clan control decreases the chances of opportunism which decreases the necessary monitoring. Decreased monitoring costs can in turn increase joint venture performance. This argument is similar to Mayo’s (1945) view that socialization increases efficiency. The above reasoning is also consistent with Barnard (1968) who suggested that changing states of mind of people or organizations working together such that they are congruent is important for firm success.

Differences in organizational climates may also result in one partner misinterpreting the actions of the other partner as being opportunistic. As Buckley and Casson (1988) point out, when one partner stops exercising forbearance, the other partner’s incentive to continue to exercise forbearance decreases significantly. As a result, this organizational climate difference-based misunderstanding may lead to a real attempt to engage in opportunistic actions often irreversibly ending forbearance and impairing joint venture performance.

Therefore, forming a joint venture with a firm that has a more similar organizational climate, and thus is more predisposed to avoid opportunistic behavior, is desirable. Such a joint venture is desirable because, by being less predisposed towards opportunistic behavior, the joint venture can avoid some safeguards against behavior which are costly (e.g., frequent meetings, visits to the JVO by each parent, daily reports, faxes, constraints on managerial action). The lower costs associated with the reduction in the threat of opportunism will presumably be translated into higher performance both in terms of satisfaction and in terms of financial outcomes.

Empirical Evidence Relating to the Importance of Organizational Climate Similarity

The above theoretical arguments in place, we turn to consider if any relevant empirical evidence exists. Some preliminary empirical evidence does exist, and it provides

some support for our assertions. The joint venture literature speaks to only anecdotal suggestions of the importance of organizational climate similarity (e.g., Geringer, 1988; Harrigan, 1988a; Lane and Beamish, 1990; Parkhe, 1991). While no studies of which we are aware provide good empirical evidence about the relationship between organizational climate similarity between companies that are considering working together and the resulting performance, a few studies on mergers and acquisitions (related but not identical to IJVs) provide preliminary empirical support that is related to the organizational climate similarity question and thus worth noting.

Most of these studies (all dealing with mergers and acquisitions) have been case studies or studies primarily based on anecdotal evidence (e.g., Costello, Kubis, and Schaffer, 1963; Gaves, 1981). Some studies have also assisted with theory building regarding the importance of organizational similarity (e.g., Buono and Bowditch, 1989; Buono, Bowditch, and Lewis, 1985; Jemison and Sitkin, 1986; Nahavandi and Malekzadeh, 1988). For example, Jemison and Sitkin (1986) theorize that the degree of organizational climate similarity between the two firms involved in an acquisition affects how well the new organization can integrate its daily activities after the acquisition. In addition, Buono and Bowditch (1989, p. 134) hypothesize that differences in management styles are a major reason why mergers and acquisitions often fail to achieve the performance level predicted by feasibility studies.

Three empirical studies focusing on mergers and acquisition deserve special mention. Calori and Sarnin (1991) concluded, based on a three-year study of French firms, that growth in sales is linked to national cultural homogeneity. Datta (1991) demonstrated that differences in top management styles have a negative effect on post-acquisition performance. Finally, Chatterjee, Lubatkin, Schweiger, and Weber (1992) demonstrated that shareholder gains were inversely related to perceived corporate cultural differences in acquisitions.

Organizational Climate Dissimilarity-Performance Hypotheses

As shown above, organizational climate dissimilarity between firms should increase the costs of organization. Hence, we expect that, all else being equal, the increased organizational costs will be reflected in worse joint venture performance. Across the three organizational interactions in this study (JVO-Russian parent, JVO-foreign parent, and Russian parent-foreign parent), we expect this relationship to hold. Operationally, the organizational climate dissimilarity-performance relationships across the three organizational interactions can be stated in the following hypotheses:

Hypothesis 1: Organizational climate dissimilarity between the Russian parent and the JV organization (JVO) is negatively related to IJV performance.

Hypothesis 2: Organizational climate dissimilarity between the foreign parent and the JVO is negatively related to IJV performance.

Hypothesis 3: Organizational climate dissimilarity between an IJV's parent firms is negatively related to IJV performance.

OTHER CONSTRUCTS AFFECTING IJV PERFORMANCE

From the preliminary interviews with managers from 40 Russian international joint ventures, other constructs besides organizational climate similarity emerged as important in differentiating between successful and unsuccessful joint ventures. The existence of commitment, parent need, loose control, and national culture similarity were those most frequently discussed. JVO organizational climate type (different from organizational climate similarity) and parent firm resource contribution are also controlled for.

Parkhe (1991) proposes in a theoretical article that there are two important types of interfirm diversity which affect global strategic alliances (GSAs). Parkhe (1991, p.580) defines type 1 diversity as diversity which deals with “the reciprocal strengths and complementary resources furnished by the alliance partners” and type 2 diversity as diversity which deals with “differences in partner characteristics.” This paper focuses on type 2 diversity by investigating organizational climate dissimilarity. However, Parkhe raises an interesting point in questioning whether or not it is desirable for firms to contribute different resources to an alliance. Certainly, most of the alliance literature has suggested that it is indeed beneficial for firms to contribute different resources to an alliance. In fact, past literature asserts that alliances should be formed only when parent firms have different, but complementary, resources to contribute to the alliance (Harrigan, 1988a; Hennart, 1988; Killing, 1983). Thus, the degree of dissimilarity present in parent resource contributions will also be controlled for.

VARIABLES

This section discusses how each of the variables in this study was operationalized. We first discuss the control variables.

Control refers to the extent to which parents ensure that the JVO performs according to their wishes. Just as a child does not always want to follow its parents’ wishes, neither does a JVO always want to follow its parents’ wishes. Many authors have suggested that control affects IJV performance (Beamish, 1988; Franko, 1971; Janger, 1980; Hebert, 1984, Killing, 1983; Raffi, 1978; Schaan, 1983; Tomlinson, 1970; Yan, 1993; Yan and Gray, 1994). Following the work of Tomlinson (1970), Killing (1983), Beamish (1988), and

Hübner (1994), control was measured using a three-item (technological control, operational control, and strategic control), five-point Likert-type scale developed by Hübner (1994) where 1="totally decided by JV managers" and 5="totally decided by parent firm managers." Due to our small sample size of n=24 our data does not fulfill all requirements for parametric tests. Nevertheless, we calculate the Cronbach's alpha as an approximation of scale reliability and found the alpha to be 0.72 which is above the commonly accepted 0.70 reliability cutoff.

Commitment refers to the degree to which a parent feels bound to the stability and success of the JV (Hübner, 1994). Several studies have shown that parent firm commitment affects IJV performance (Beamish, 1988; Cullen, Johnson, and Sakano, 1995; Hebert, 1994; Lee, 1989; Schaan, 1983; Tomlinson and Willie, 1982). Parent firm commitment was measured using a nine-item Likert-type scale developed by Lee and Beamish (1995) based on Beamish (1988). Due to our small sample size our data does not fulfill all requirements for parametric tests. Nevertheless, we calculated the Cronbach's alpha as an approximation of scale reliability and found it to equal 0.86.

National culture similarity refers to the extent to which parent firms' national cultures are similar. Several authors have suggested that national culture affects IJV performance (Brown, 1990; Schuller, Dowling, and De Cier, 1992). National culture is represented by Hofstede's (1980) widely-used four dimensions--masculinity, power distance, uncertainty avoidance, and individualism. The difference between the parent firms was calculated for each of the four dimensions and then combined into a single cultural distance measure using Kogut and Singh's (1988) method.

Parent firm resource contribution dissimilarity was measured using a nine-item scale. Items in the scale were Likert-type questions measuring the extent different types of resources (inexpensive labor, local political advantages, raw materials, knowledge of local business practices, general knowledge of local market and culture, management know-how, capital, better export opportunities, and access to good technology or equipment) were contributed by parent firms. The difference in Russian parent and foreign parent contributions was calculated for each type of resource and then the average difference for all

nine items was calculated to give a measure of parent firm resource dissimilarity. Due to our small sample size of $n=24$ our data does not fulfill all requirements for parametric tests. Never the less, we calculate the cronbach's alpha as an approximation of scale reliability and found the alpha to equally 0.88.

IJV Performance

Various measures of IJV performance have been used by previous IJV scholars (e.g., financial-based measures, survival, instability, subjective assessments of performance). This study, like many other IJV studies (Beamish, 1988; Hübner, 1994; Inkpen, 1992; Killing, 1983; Lee and Beamish, 1995; Schaan, 1983), uses a single-item, five-point perceptual subjective assessment of IJV performance. A single-item subject assessment of IJV performance was chosen because IJV parents have diverse goals. Maximizing financial profit in the short term (what financial-based measures capture) is often not their primary goal. The lack of financial reporting standards in Russia makes comparing financial information from different firms difficult. Further, Geringer and Hübner (1991) found a high correlation between various subjective and objective performance measures. In addition, nine other performance measures were collected as part of this study, including an eight-item performance measure. All performance measures were correlated at over 0.65 and most over .80. In this study, performance was measured by asking managers to assess “how is your joint venture’s overall performance (where 1 is ‘poor’ and 5 is ‘outstanding’)?” The average of all six managers’ (six managers per joint venture completed a questionnaire) assessments of their IJV’s performance was the measure of performance used in this study.

Organizational Climate

Many different instruments exist to measure organizational climate. After reviewing over fifty instruments, the Survey of Organizations (SOO) (Bowers, 1988) developed by Rensis Likert and David Bowers was selected for this study because of its extensive use, minimal length, and relevant questions. The SOO has 40 years of use, \$25,000,000 of questionnaire usage fees, and about 850,000 respondents to support it (Bowers, 1988). The instrument is based on Likert's meta-theory of human organization management (Likert, 1961). The SOO has undergone extensive psychometric analysis. Taylor and Bower's (1972) book describes the development process of the SOO and shows that it holds up well to many psychometric tests performed on the instrument (factor analysis, smallest space analysis, hierarchical cluster analysis, and multidimensional scaling). The organizational climate domain is made up of the following SOO indices: organization and work, communication flow, emphasis on human resource primacy, decision-making practices, and influence and control. Each question consists of a five-point Likert-type scale. Denison (1990) has performed more recent extensive psychometric analysis on the 36,000 responses to the SOO and shown that the Cronbach's alphas for the SOO indices range from .66 to .87 demonstrating acceptable reliability. Results from our pilot study based on twenty-five respondents in each of two RIJVs, resulted in Cronbach's alphas ranging from .60 to .87. Only the influence and control scale was slightly below Nunally's (1978) .70 cutoff.

Organizational Climate Dissimilarity

Organizational climate dissimilarity was calculated by taking the absolute value of the difference between the response of one organization (e.g., the Russian parent) and another organization (e.g. the foreign parent) for each item. These differences were then summed and averaged for each of the five dimensions of organizational climate. Unit weights were chosen for item and dimension summing since past research (Cohen, 1990) has shown that using unit weights when summing items to form indexes is at least as effective as using factor loadings. A single measure of organizational climate dissimilarity was then calculated by summing the dissimilarities for the five dimensions of organizational climate

METHODOLOGY

This study followed a four-stage approach. First, an extensive review of the IJV literature relating to all types of joint ventures (self cite) and specifically to Eastern European joint ventures was conducted (self cite). Second, exploratory research, based on two questionnaires and interviews with managers from 42 Russian international joint ventures (RIJVs), was conducted to identify key success factors for RIJVs (self cite). Third, a pilot study was conducted in which 20-25 people from each of two JVOs completed the survey. Interviews were also conducted with key managers at the two JVOs and their parents. The pilot study helped pretest the questionnaire, refine the research questions, and investigate variance in different people's assessment of a firm's organizational climate. Fourth, the main study, which is based on 40 RIJVs (this is not the same sample of joint ventures that was used for the key success factor studies mentioned in phase two), assesses the importance of organizational climate similarity between the parent firms and the JVO for IJV performance. This main study uses both interviews and questionnaires. Because of space limitations, this paper focuses on the analysis of the quantitative data from the main study.

The questionnaires are primarily comprised of five-point Likert-type scales. All scales in the questionnaire were previously used by other researchers, therefore minimizing problems with reliability and validity. To ensure effectiveness of the questionnaire, the questionnaire was reviewed by several colleagues conducting related research. Then, the questionnaire was translated into Russian using a thorough translation-backtranslation process (using native translators) with the final results reviewed by an independent expert.

The Main Study

The first part of the main study consisted of interviews with IJVGMs of the 40 RIJVs. The second part of the main study, the focus of this paper, was questionnaire-based. A complete set of responses consisted of two managers at each of the two parent firms and two managers at the joint venture completing the questionnaires (a total of six managers per IJV). One of the strengths of this study was its use of multiple respondents--six respondents in each IJV-- which substantially increases the study's validity and ability to understand better the phenomena being investigated.

To be included in the sample, a RIJV had to be based in Moscow, St. Petersburg, or Novosibirsk [Russia's three largest cities where over 70% of Russia's RIJVs are based (Popova, 1993)]. RIJVs were also required to employ at least 20 people, have one Russian parent, and have one foreign parent in the United States, Canada, England, or Finland (Note: these four countries represent approximately 70% of the variance possible in Kogut and Singh's combined cultural index of Hofstede's four dimensions and each of the four dimensions contributes significant variance). The joint venture must also have started by December 31, 1992, to allow adequate time for IJV performance to begin to stabilize.

If either of the parent firms had less than 20% ownership, it was not counted as a parent since in practice such a parent firm would normally have little or no influence on the IJV and because there are similar phrases in the mode classification definitions of several countries' tax codes (Makino, 1995). Following Håbert (1994) and Geringer (1988), the study was also limited to two-parent IJVs. To have a more homogeneous population of IJVs, the study was further limited to IJVs in the service sector. Estimates are that about 80% of RIJVs are service sector RIJVs (Popova 1993).

From four lists produced by foreign governments and commercial organizations, a list of 623 supposedly active Russian-US, Russian-Finnish, Russian-British, and Russian-Canadian IJVs was compiled. Then, 250 RIJVs were randomly selected for this study. Unfortunately, some of the joint ventures listed could not be contacted because they had either moved, changed their telephone numbers, or gone out of business. As a result, of the

250 IJVs with which contact was attempted, only 171 were reached. Attempts were made to contact each RIJV seven times on different days and at different times of day. Of the RIJVs contacted, only 89 met the study's sampling requirements (having more than 20 employees and being in a service industry). Of the 89 qualifying RIJVs, 40 agreed to take part in the study. This represents an adjusted participation rate of 45%.

Following the interview, the IJVGMs were asked to fill out a questionnaire. In addition, the IJVGM was asked to identify a second manager in the JVO (in addition to the IJVGM), two managers in the Russian parent, and two managers in the foreign parent who were most appropriate to complete the questionnaire. Questionnaires were faxed or given to each of the other five managers. After two weeks, an attempt was made to contact by telephone the managers who had not returned their questionnaires. If a manager was not reached after 10 tries, no further contact was attempted in this round. Managers who had still not returned their questionnaire after three weeks were faxed a second copy of the questionnaire and a letter explaining the importance of their participation in the project. After four weeks an attempt was made to contact by telephone managers who still had not responded to the questionnaire. If a manager was not reached after 15 tries, no further contact was attempted. Managers who had not responded by week eight were considered to be non-respondents. If only one manager from an organization (instead of two managers) responded, the RIJV was still maintained in the sample. 161 out of a possible 240 responses were received (67%). Responses were received from all three parties (Russian parent, foreign parent, and JVO) for 24 of the 40 joint ventures (60% response rate). Thus, these 24 joint ventures are what the statistical analysis is based on.

This section provides several reasons for having only two people in each organization assess its organizational climate. The literature confirms that an important characteristic of organizational climate is that responses to items making up the organizational climate sub-indices are homogeneous across an organization. In addition, various authors (Drexler, 1977; Dunham, 1977; Herman, Dunham, and Hulin, 1975; Newman, 1975) have shown that organizational membership explains more variance in organizational climate than personal

characteristics or department membership. There is also precedence in leading journals for using only one or two respondents to assess the firm's organizational climate (Denison and Mishra, 1994).

Testing the Model

Because of the small sample size, the data were tested using nonparametric statistical techniques--Spearman correlation (Norusis, 1993) and nonparametric regression (Kildea, 1981). Nonparametric multiple regression is a technique which has only recently been used by social scientists because of recent advances (McKean, Sheather, and Hettmansperger, 1990). Nonparametric regression analysis is based on Rank estimates (R-estimates) using Wilcoxon scores. Such estimates are similar to the classical least squares estimates. The difference between the two functions is that with R-estimates the actual residuals are replaced with the ranks of the residuals. As a result, R-estimates are less sensitive to outliers. For a detailed discussion of nonparametric regression using R-estimates, see Draper (1988) or Hettmansperger (1984).

TESTING THE HYPOTHESES

Extent of control, JV organizational climate type, parent firm commitment, and parent firm national culture similarity are suggested to affect IJV performance and thus must be controlled for when investigating how organizational climate similarity between parent firms and the JVO affects IJV performance. The main model contains the three organizational climate dissimilarity variables as independent variables plus these five control variables. Table 1 presents the means, standard deviations, and correlation matrix for the variables in this study. Multivariate nonparametric regression is used to investigate the effects of the variables listed above on IJV performance (see Table 2).

It is important to consider intercorrelations between the independent variables that are included in the regression model due to multicollinearity. As can be seen in Table 1, several of the variables included in the regression model are intercorrelated (e.g., the correlation for

JVO-foreign parent organizational climate dissimilarity with foreign parent commitment to the IJV is .53). This intercorrelation could present problems for the regression analysis due to multicollinearity. Such problems must be considered when interpreting the results. Given the nature of the constructs that are highly correlated and the context of the study, the high intercorrelations are not surprising. However, the different constructs are conceptually distinct and thus must be kept separate.

Hierarchical regression analysis is used to isolate the additional effect of the organizational climate dissimilarity variables in explaining IJV performance. The use of hierarchical regression analysis deals with most of the problems that can be caused by multicollinearity between organizational climate dissimilarity variables and other control variables. Given potential multicollinearity, hierarchical regression provides a conservative estimate of the explanatory power of the independent variables added to the model (in this case the organizational climate dissimilarity variables). The benefit of hierarchical regression is that regardless of any multicollinearity, the variance attributed to the independent variables added to the model is due to them.

The results of the hierarchical regression analysis shown in Table 2 indicate that when the three organizational climate similarity variables are added as a group to the regression model (to form the full model), the R^2 for the model increases from .67 to .81. In other words, adding the three organizational climate dissimilarity variables enables the model to explain an additional 14% of the variance. The incremental F statistic of 3.91, corresponding to the 14% increase in R^2 , is significant at $p < .05$, thus providing support for the positive effect of the organizational climate dissimilarity variables taken as a group on IJV performance.

----- Insert Tables 1 and 2 about here -----

Two independent variables are significant in the full model--parent firm resource contribution dissimilarity and JVO-foreign parent organizational climate dissimilarity. However, the scarcity of significant individual independent variables in the multivariate model on IJV performance may be a result of multicollinearity problems. Based on the

bivariate Spearman correlation results (Table 1), it appears that Russian parent commitment, foreign parent commitment, joint venture organizational climate type, and Russian parent-foreign parent organizational climate dissimilarity are also determinants of RIJV performance. Each of these variables has a univariate Spearman correlation with performance of at least .50 and is significant at the $p < .01$ level or better.

Betas, R^2 s, and t statistics do not tell the whole story about regression equations. It is important to consider how well the regression model on performance fits the actual data. This consideration is taken into account by looking at the residuals and Cook's measure of leverage for each case. The residuals appear randomly distributed which is indicative of a good fit of the regression model to the data. Also, when a regression equation fits the data well, no individual data point exerts considerably more influence (leverage) on the regression equation than any other point. Such is the case in this study since no point exerts greater than a .60 leverage which is well under the 1.08 cutoff obtained by the formula suggested by Cook and Weisberg (1982).

We will now look at the relationship between organizational climate dissimilarity and IJV performance in more detail. Organizational climate was measured by five dimensions: decision making practices, communication flow, emphasis on human resources, organization of work, and influence and control. Thus, each of the organizational climate dissimilarities (JVO-Russian parent, JVO-foreign parent, and Russian parent-foreign parent) is also made up of five dimensions. It is interesting to look at how dissimilar the various dimensions of organizational climate are between the JVO and Russian parent, JVO and foreign parent, and Russian parent and foreign parent. Figure 1 shows comparative radar charts for the dimensions of organizational climate dissimilarity for the best and worst performing RIJVs.

----- Insert Figure 1 about here -----

The further away a line is from the origin in Figure 1, the more dissimilar the organizational climates. The JVOs' and Russian parents' organizational climates are relatively similar in all five dimensions in both the high and poor performing RIJVs. Not observing a relationship between JVO-Russian parent organizational climate dissimilarity

and IJV performance is consistent with the findings of the regression and correlation analysis. There are, however, substantial differences between the organizational climate dissimilarity of the various dimensions for the good and poor performing RIJVs for JVO-foreign parent organizational climate dissimilarity and for Russian parent-foreign parent organizational climate dissimilarity. In general, the better performing RIJVs have much less organizational climate dissimilarity (the lines representing them are closer to the origin) than the poor performing RIJVs.

DISCUSSION OF RESULTS

The hierarchical nonparametric regression results shown in Table 2 indicate that it is most important for the JVO to focus its efforts on creating an organizational climate similar to its foreign parent's organizational climate (hypothesis 2). In addition, to enhance the joint venture's chances of obtaining superior performance, support is provided for firms selecting a partner which has a similar organizational climate (hypothesis 3). This is the case since the correlation between parent firm organizational climate dissimilarity and IJV performance is highly, negative, and significant. Parent firm organizational climate dissimilarity is not significant in the multivariate model because of the high correlation between parent firm organizational climate dissimilarity and foreign parent-JVO organizational climate dissimilarity. The foreign parent-JVO organizational climate dissimilarity has a stronger relationship with IJV performance. The fact that these two organizational climate dissimilarity constructs are highly correlated is not surprising since they are related. However, they are conceptually different constructs and thus should be kept separate. Hypothesis 1, relating to the importance of JVO-Russian parent organizational climate dissimilarity, is not supported by the empirical results.

There are several possible explanations for the observed results. In most cases the foreign parent and Russian parent make different types of contributions to the IJV. For example, the government and other organizations may be more favorably inclined towards a

firm which has a Russian parent, especially if the Russian parent is well-connected. In addition, the Russian parent may be able to contribute inexpensive labor, an existing network of customers, or obtain needed (potentially scarce) resources at favorable prices. The foreign parent, on the other hand, generally provides more access to foreign markets, technology, and capital for the joint venture and tries to have its experience of operating a business in a capitalist system have an impact on the joint venture. The joint venture is able to take advantage of the Russian parent's contributions to the joint venture regardless of the dissimilarity in organizational climates. However, the foreign parent's contributions can be used to their maximum potential only if the JVO's organizational climate is similar to that of the foreign parent since the foreign parent's strategies and operational suggestions are based on an organization having an organizational climate like its own. Consequently, because of the nature of the contributions from the two parents, it is important that the foreign parent and the JVO have similar organizational climates. It is less important that the Russian parent and the JVO have similar organizational climates.

An additional explanation for the low observed correlation between IJV performance and JVO-Russian parent organizational climate dissimilarity is that since the Russian parent and the JVO are located geographically very close to each other (in our sample they are always located in the same town and often even in the same block), the Russian parent is better able to gain a deeper understanding of the JVO even if it has a different organizational climate. However, because the foreign parents are geographically removed from the JVO, dissimilar organizational climates pose a barrier to parent firm managers' obtaining the optimal understanding of the JVO, thus hindering IJV performance.

An alternative explanation for the relationship between organizational climate dissimilarity and RIJV performance is that Russian firms' organizational climates are often considered to be less effective than their Western counterparts' organizational climates. Thus, the argument suggests that relationships between organizational climate dissimilarity and performance can be a result of Russian firms' organizational climates in general being ineffective compared to Western firms' organizational climates. As a result, RIJVs may benefit from organizational climates more similar to those of Western organizations than to those of Russian organizations. The argument continues that a strong negative relationship between JVO and foreign parent organizational climate dissimilarity and performance and between foreign parent and Russian parent organizational climate dissimilarity and performance is a result of Russian organizations being ineffective and not due to the dissimilarity hypotheses. However, if this alternative explanation is correct, a strong negative correlation would be expected between JVO-Russian parent organizational climate dissimilarity and performance. No such relationship was observed. Even more importantly, JVO organizational climate type is entered in the multiple regression models to control for any relationship that may result from certain types of JVO organizational climate being more conducive to good IJV performance. As a result, the original organizational climate dissimilarity arguments are the more defensible explanation of the results.

It is also interesting to consider what the above empirical results have to say about transaction cost theory. The above results are reasonably consistent with the transaction cost arguments made to frame the hypotheses. One modification, however, is needed to account for the JVO-Russian parent organizational climate dissimilarity not being an important determinant of IJV performance. One can find support for the modification in transaction cost reasoning. The relative geographic location of the parent firms and the JVO leads to a transaction cost supported explanation for the observed results. The logic is that since the foreign parent is located in a different country from the JVO, the foreign parent should experience higher costs to monitor the JVO's actions than the Russian parent. Thus, actions to decrease the foreign parent's monitoring costs (a form of transaction or organizational

cost) should have a greater effect on IJV performance compared to decreasing the Russian parent's monitoring costs. This situation likely occurs because geographic distance increases monitoring costs. More specifically, dissimilarity between the foreign parent and the JVO should have a larger negative effect on performance than dissimilarity between the Russian parent and the JVO in determining performance. As was shown above, this relationship is precisely what this study observed.

The study also has several interesting findings which arise from the control variables. First, the study provides empirical support for Parkhe's (1991) assertion that alliance performance (note: IJVs are a subset of alliances) will benefit from being formed between partner firms which contribute diverse resources. This result has much intuitive appeal. After all, if we consider the extreme case where two firms form a joint venture and contribute identical resources, it is hard to see the benefit of forming the joint venture. Clearly, as our results show, joint ventures are most useful when parents have different resources to contribute to a joint venture.

It is also interesting to note that this study's results do not provide any support for national culture dissimilarity being significantly related to IJV performance in any way. This is interesting since there has been more talk in the extant literature about the difficulties posed by having IJV parent firms from vastly different national cultures than from vastly different organizational climates. Since most such discussions in the literature have been anecdotal references, perhaps authors have misattributed troubles to national culture dissimilarity when in fact they were resulting from organizational climate dissimilarity. In any case, the results of this study suggest that minimizing organizational climate dissimilarity is more important than minimizing national culture dissimilarity. It is important to note that this is what Harrigan (1988b) suggested, but lacked systematic empirical data to show.

CONCLUSIONS

This study provides empirical evidence for how dissimilarity between parent firms and the JVO affects IJV performance. Despite the fact that many researchers have suggested

that it is important to pay attention to cultural differences when taking part in international business, little research has been conducted to test systematically whether firms involved in IJVs with firms with substantially different organizational climates are more or less likely to be successful. This study helps to fill this void.

The study has made several contributions to theory. This study has highlighted the importance and appropriateness of clearly differentiating between organizational climate, organizational culture, and national culture. It has also shown the importance of minimizing JVO-foreign parent and Russian parent-foreign parent organizational climate dissimilarity for IJV success. These results assist in developing efficiency criterion for evaluating joint venture designs. The study also supports Ouchi's (1980) assertion that transaction cost theory is likely to be able to provide a framework to enrich organization theory by developing such efficiency criteria. In addition, the vast majority of the existing management research has been done in Western countries and especially in the USA. As a result, it has been difficult to evaluate the universality of theories. Since this study is set in Russia, it provides important empirical evidence for the generalizability of transaction cost theory.

Several key empirical findings emerge from this study. First, it is important for firms considering a joint venture to select a partner that has an organizational climate similar to their own in order to have the best chance at obtaining optimal IJV performance. The study also shows that it is desirable to create an organizational climate at the JVO that is similar to the foreign parent's organizational climate. This is the most important organizational climate dissimilarity relationship on which to focus. Further, it appears that organizational climate dissimilarity between parent firms is more important than national culture dissimilarity in determining IJV success. Finally, the study provides support for Parkhe's (1991) assertion that it is beneficial for parents to contribute dissimilar resources to an IJV. The article also raises several interesting avenues for future study. It would be interesting to repeat a similar study with a larger sample of IJVs to enable the use of causal modelling and additional controls (due to more degrees of freedom). While we do not have any reason to doubt the generalizability of the results in this study, it would definitely be interesting to

repeat this study in other settings to see how generalizable the studies results are. It would, for example, be interesting to see if the results hold equally well for manufacturing JVs and JVs located in other countries (especially those located in developed countries). It would also be interesting to repeat this study with IJV parents from a wide variety of countries in one study to further explore the relative importance of national culture dissimilarity and organizational culture dissimilarity. Another useful extension would be to repeat this study in a setting with a greater variance of IJV age in order to investigate the role that IJV age may play. Ideally, such a study would be longitudinal, allowing for an evolutionary theory of IJVs to be developed.

REFERENCES

- Barnard, C. 1968. *The functions of the executive*, 30th anniversary edition. Cambridge, MA: Harvard University Press.
- Barzel, Y. 1982. Measurement cost and the organization of markets. *Journal of Law and Economics*, 25(1): 27.
- Beamish, P. 1985. The characteristics of joint ventures in developed and developing countries. *Columbia Journal of World Business*, 20(3): 13-19.
- Beamish, P. 1988. *Multinational joint ventures in developing countries*. London: Routledge.
- Beamish P. & J. Banks. 1987. Equity joint ventures and the theory of the multinational enterprise. *Journal of International Business Studies*, 18(2): 1-16.
- Beamish, P. & A. Delios 1997. Improving joint venture performance through congruent measures of success. In P. Beamish & P. Killing, editors, *Cooperative strategies: European perspectives*. San Francisco, CA: The New Lexington Press, pp. 103-127.
- Bowers, D. 1988. *The survey of organizations*. Ann Arbor, MI: Rensis Likert and Associates.
- Brown, D. 1990. Welcome, comrades, to marketing 101. *Management Review*, 79: 30-2.
- Brown, L., A. Rugman, & A. Verbeke 1989. Japanese joint ventures with western multinationals: Synthesizing the economic and cultural explanations of failure. *Asia Pacific Journal of Management*, 6: 225-242.
- Buckley, P. & M. Casson 1988. A theory of cooperation in international business. In F. Contractor & P. Lorange, editors, *Cooperative strategies in international business*. New York: Lexington Press.
- Buono, L. & J. Bowditch 1989. *The human side of mergers and acquisitions*. San Francisco, CA: The New Lexington Press.
- Buono, A., J. Bowditch, & J. Lewis 1985. When cultures collide: The anatomy of a merger. *Human Relations*, 68: 477-500.
- Calori, R., & P. Sarnin 1991. Corporate culture and economic performance: A French study. *Organization Studies*, 12(1): 49-74.
- Campbell, J., M. Dunnette, E. Lawler, & K. Weick. 1979. *Managerial behavior, performance, and effectiveness*. New York: McGraw-Hill.

- Chatterjee, S., D. Lubatkin, D. Schweiger, & Y. Weber 1992. Cultural differences and shareholder value in related mergers: Linking equity and human capital. *Strategic Management Journal*, 13: 319-34.
- Cohen, J. 1990. Soviets do the shuffle - American style. *Management Review*, 79: 42-3.
- Cook, R., & S. Weisberg 1982. *Residuals and influence in regression*. New York: Chapman.
- Costello, T., J. Kubis, & C. Schaffer 1963. An analysis of attitudes towards a planned merger. *Administrative Science Quarterly*, 8: 235-249.
- Cullen, J., J. Johnson, & T. Sakano 1995. Japanese and local partner commitment to IJVs: Psychological consequences of outcomes and investments in the IJV relationship. *Journal of International Business Studies*, 26(1): 91-116.
- Cunningham, J. 1982. Multiple monotone regression, *Psychological Bulletin*, 92:791-800.
- Datta, D. 1991. Organizational fit and acquisition performance: Effects of post-acquisition integration. *Strategic Management Journal*, 12: 281-97.
- Denison, D. 1990. *Corporate culture and organizational effectiveness*. New York: Wiley.
- Denison, D. 1996. What is the difference between organizational climate and organizational culture? A Natives' point of view on a decade of paradigm wars. *Academy of Management Review*, 21(3): 619-54.
- Denison, D., & A. Mishra 1994. Towards a theory of organizational culture and effectiveness. *Organizational Science*, 5(3): 1-18.
- Draper, D. 1988. Rank-based robust analysis of linear models I: Exposition and review. *Statistical Science*, 3: 239-71.
- Drexler, J. 1977. Organizational climate homogeneity within firms. *Journal of Applied Psychology*, 62: 38-42.
- Dunham, R. 1977. Reactions to job characteristics: Moderating effects of the organization. *Academy of Management Journal*, 20: 42-65.
- Durkheim, E. 1933. *The division of labor in society*. New York: Free Press.
- Franko, L. 1971. Joint venture divorce in the multinational company. *Columbia Journal of World Business*, (3).
- Gaves, D. 1981. Individual reactions to a merger of two small firms of brokers within the re-insurance industry: A total population survey. *Journal of Management Studies*, 18: 89-113.
- Geringer, M. 1986. Criteria for selecting partners for joint ventures in industrialized market economies. Unpublished doctoral dissertation, University of Washington.
- Geringer, M. 1988. *Joint venture partner selection: Strategies for developed countries*. Westport, CT.: Quorum.
- Geringer, M., & L. Hübner 1991. Measuring performance of international JVs. *Journal of International Business Studies*, 22(2): 249-63.
- Gresinger, D. 1990. The human side of economic organization. *Academy of Management Review*, 15(3):478-499.
- Halpin, A., & D. Croft 1962. *The organizational climate of schools*, Washington University Press, St. Louis.
- Harrigan, K. 1988a. Joint ventures and competitive strategy. *Strategic Management Journal*, 9: 141-158.
- Harrigan, K. 1988b. Strategic alliances and partner asymmetries. In F. Contractor and P. Lorange, editors, *Cooperative strategies in international business*. Lexington, MA: Lexington Books.
- Hayles, R. 1982. Cost and benefits of integrating persons from diverse cultures into organizations, Twentieth International Congress of Applied Psychology, Edinburgh,

- Scotland.
- Hjbert, L. 1994. Division of control and joint venture performance. Unpublished doctoral dissertation, University of Western Ontario.
- Hennart, J-F. 1988. A transaction cost theory of equity joint ventures. *Strategic Management Journal*, 9: 36-74.
- Herman, J., R. Dunham, & C. Hulin. 1975. Organizational structure, demographic characteristics, and employee response. *Organizational Behavior and Human Performance*, 13: 206-232.
- Hettmansperger, T. 1984. *Statistical inference based on ranks*. New York: John Wiley.
- Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*. Beverly Hills, CA.: Sage Publications.
- Hyder, S. 1988. The development of international joint venture relationships: A longitudinal study of exchange of resources, control, and conflicts. Unpublished doctoral dissertation, University of Uppsala.
- Inkpen, A. 1992. Learning and collaboration: An examination of North American-Japanese JVs. Unpublished doctoral dissertation, University of Western Ontario.
- Janger, A. 1980. *Organization of international joint ventures*. New York: The Conference Board.
- Jemison, D., & S. Sitkin 1986. Corporate acquisitions: A process perspective. *Academy of Management Review*, 11(1): 145-63.
- Kildea, D. 1981. Brown-Mood type median estimators for simple regression models. *American Mathematical Statistics*, 9: 438-42.
- Killing, P. 1983. *Strategies for joint venture success*. New York: Praeger.
- Kogut, B. & H. Singh 1988. The effect of national culture on choice of entry mode. *Journal of International Business Studies*, 19(3): 411-432.
- Lane, H. & P. Beamish, 1990. Cross-cultural cooperative behavior in joint ventures in LDCs. *Management International Review*, 30: 87-102.
- Lee, J. 1989. Study on strategic success of Korean joint ventures overseas. *Song Kong Journal*, 20.
- Lee, C. & P. Beamish 1995. The characteristics and performance of Korean joint ventures in LDCs. *Journal of International Business Studies*, 26:637-654.
- Lewin, K. 1951. *Field theory in social science*. New York: Harper and Row.
- Lewin, K., R. Lippit, & R. White. 1939. Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology*, 10: 271-99.
- Likert, R. 1961. *New patterns of management*. New York: McGraw-Hill.
- Likert, R. 1967. *The human organization*, New York: McGraw-Hill.
- Litwin, G., & R. Stringer. 1968. *Motivation and organizational climate*. Cambridge, MA.: Harvard Press.
- Madhok, A. 1995. Revisiting multinational firm's tolerance for joint ventures: A trust-based approach. *Journal of International Business Studies*, 26(1): 117-38.
- Makino, S. 1995. Joint venture ownership structure and performance: Japanese joint ventures in Asia, Unpublished Doctoral Dissertation, University of Western Ontario.
- Mayo, E. 1945. *The Social problems of industrial civilization*. Cambridge, MA: Harvard University Press.
- McKean, J., S. Sheather, & T. Hettmansperger 1990. Regression diagnostics for rank-based methods. *Journal of the American Statistical Association*, 85: 1018-28.
- Nahavandi, A. & A. Malekzadeh. 1988. Acculturation in mergers and acquisitions.

- Academy of Management Review*, 13(1): 79-90.
- Newman, J. 1975. Understanding the organization structure-job attitude relationship through perceptions of the work environment. *Organizational Behavior and Human Performance*, 14: 371-97.
- Norusis, M. 1993. *SPSS for windows base system user's guide release 6.0*. Chicago: SPSS.
- Nunnally, D. 1978. *Psychometric theory*. New York: McGraw Hill.
- Ouchi, W. 1980. Markets, bureaucracies, and clans. *Administrative Science Quarterly*, 25:129-141.
- Parkhe, A. 1991. Interfirm diversity, organizational learning, and longevity in global strategic alliances. *Journal of International Business Studies*, 22(4): 579-601.
- Perlmutter, H. & D. Heenan. 1986. Cooperate to compete globally. *Harvard Business Review*, (March-April): 136-52.
- Popova, T. 1993. Joint ventures today. *Business and Investment in the CIS*, (11): 9-10.
- Raffi, F. 1978. Joint ventures and transfer of technology to Iran: The impact of foreign control, Unpublished doctoral dissertation, Harvard University.
- Schaan, J.-L. 1983. Parent control and joint venture success: The case of Mexico. Unpublished doctoral dissertation, University of Western Ontario.
- Schuller, R., P. 1992. Dowling, & H. De Cieri. The formation of an international joint venture: Marley automotive components, *European Management Journal*, 10: 304-9.
- Simiar, F. 1982. Major causes of joint venture failures in the middle east: The case of Iran, *Management International Review*, 23(1): 58-68.
- Steiner, I. 1972. *Group process and productivity*. New York: Academic Press.
- Stuckey, J. 1983. *Vertical integration and joint ventures in the aluminum industry*. Cambridge, MA: Harvard University Press.
- Tagiuri, R., & G. Litwin 1968. *Organizational climate: Explorations of a concept*. Cambridge, MA: Harvard.
- Taylor, J., & D. Bowers 1972. *The survey of organizations*, Ann Arbor, MI.: University of Michigan Press.
- Tomlinson, J. 1970. *The JV process in international business: India & Pakistan*. Cambridge, MA: MIT Press.
- Tomlinson, J., & C. Willie. 1982. Modelling the joint venture process in Latin America: Mexico. *Canadian Journal of Development Studies*, 3(1).
- Williamson, O. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.
- Williamson, O. 1985. *The economic institutions of capitalism*. New York: Free Press.
- Williamson, O. 1994. Strategizing, economizing, and economic organization. In R. Rumelt, D. Schendel, & D. Teece, editors, *Fundamental Issues in Strategy*, Cambridge, MA: Harvard Business School Press.
- Woodcock, P., P. Beamish, & S. Makino. 1994. Ownership-based entry mode strategies and international performance. *Journal of International Business Studies*, 25(2): 253-273.
- Yan, A. 1993. Bargaining power, management control, and performance in international joint ventures: Development and test of a negotiations model. Unpublished doctoral dissertation, Pennsylvania State University.
- Yan, A., & B. Gray 1994. Bargaining power, management control, and performance in United States-China joint ventures: A comparative case study. *Academy of Management Journal*, 37(6): 1478-517.

Table 1: Means, Standard Deviations, and Spearman Correlations

| | mean | S.D. | perf | con_ext | com_r | com_f | oc_tjv | c_jvrp | c_jvfp | c_rpfp | nat_cul |
|---------|------|------|----------------|---------|-------|-------|--------|--------|--------|--------|---------|
| perf | 3.34 | 1.02 | | | | | | | | | |
| con_ext | 2.66 | 0.91 | -.10 | | | | | | | | |
| com_r | 3.75 | 0.78 | .53** | .19 | | | | | | | |
| com_f | 3.57 | 0.94 | .63*** | .06 | .45* | | | | | | |
| oc_tjv | 3.56 | 0.65 | .64*** | .02 | .55** | .59** | | | | | |
| c_jvrp | 0.85 | 0.46 | -.02 | -.23 | .05 | -.03 | -.34 | | | | |
| c_jvfp | 0.75 | 0.49 | -.79*** | -.09 | .55** | .53** | .71*** | .02 | | | |
| c_rpfp | 1.18 | 0.56 | -.58** | -.11 | .38 | .43* | .33 | .53** | .56** | | |
| nat_cul | 6.23 | 0.64 | -.03 | .07 | .08 | .38 | .18 | .09 | .08 | .05 | |
| RCD | 1.82 | 0.47 | .49* | .12 | .10 | .21 | .09 | .18 | .13 | .19 | .11 |

*p<.05, **p<.01, ***p<.001

Notes on variable names:

perf: IJV performance

con-ext: the extent of control the parent firms exert on the JVO

com_r: the Russian parent's commitment to the IJV

com_f: the foreign parent's commitment to the IJV

oc_tjv: the JVO's organizational climate type

c_jvrp: the organizational climate dissimilarity between the JVO and the Russian parent

c_jvfp: the organizational climate dissimilarity between the JVO and the Foreign parent

c_rpfp: the organizational climate dissimilarity between the Russian parent and the foreign parent

need_r: the amount the Russian parent is needed by the IJV

need_f: the amount the foreign parent is needed by the IJV

nat_cul: national culture dissimilarity between the Russian parent and the foreign parent

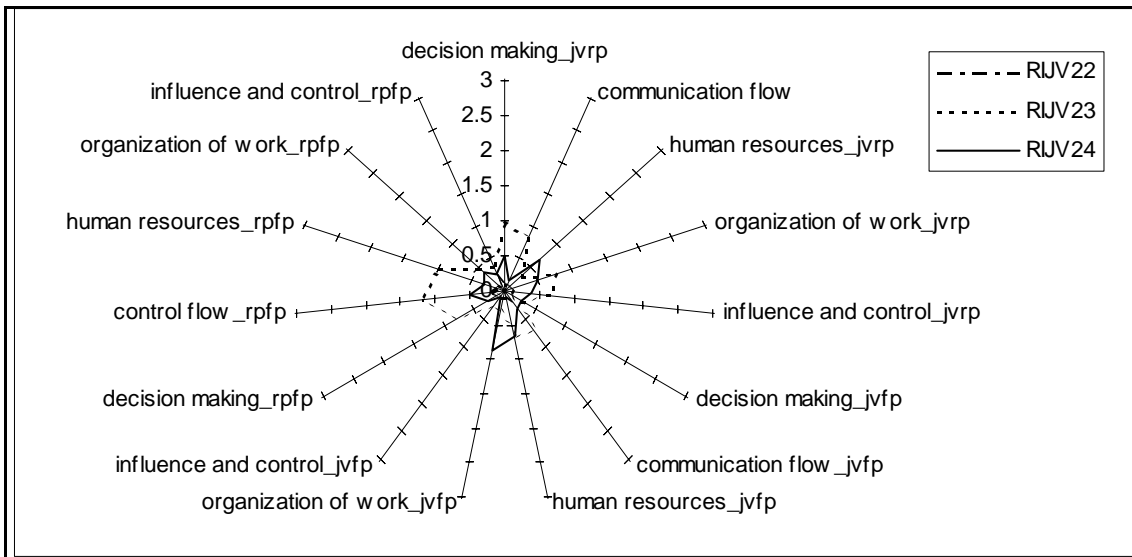
RCD (Resource contribution dissimilarity): The dissimilarity in the types of resources parent firms contribute to the IJV

Table 2: Hierarchical Nonparametric Regression on IJV Performance

| | Partial Model | | Full Model | |
|---|---------------|--------|------------|---------|
| | b | S.E. | Beta | S.E. |
| Constant | -1.81 | 1.44 | 2.31 | 1.99 |
| Extent of control by parents | -0.07 | 0.18 | -0.04 | 0.12 |
| Russian parent commitment | 0.29 | 0.27 | 0.26 | 0.21 |
| Foreign parent commitment | 0.33 | 0.21 | 0.27 | 0.19 |
| JVO organizational climate type | 0.61* | 0.31 | 0.18 | 0.25 |
| Parent firm national culture dissimilarity | 0.15 | 0.22 | -0.15 | 0.15 |
| Parent firm resource contribution dissimilarity | -0.63* | 0.33 | -0.61* | 0.34 |
| Organizational climate dissimilarity (JVO-RP) | | | -0.09 | 0.29 |
| Organizational climate dissimilarity (JVO-FP) | | | -1.25* | 0.53 |
| Organizational climate dissimilarity (RP-FP) | | | -0.27 | 0.33 |
| R² | | 0.67** | | 0.81*** |
| Degrees of freedom | | 17 | | 14 |
| Change in R² | | | | 0.14 |
| F for change in R² | | | | 3.91* |

⁺p<.10, *p<.05, **p<.01, ***p<.001

Figure 1



Organizational Climate Dissimilarity of Best Performing RIJVs¹

Organizational Climate Dissimilarity of Poorest Performing RIJVs¹

1. The radar diagrams depict the three organizational climate dissimilarities (JVO-Russian parent, JVO-foreign parent, and Russian parent-foreign parent). In addition, all five dimensions of organizational climate are shown for each similarity: decision making practices, control flow, human resource practices, organization of work, and influence and control. The further a line goes from the origin, the greater the dissimilarity between the two organizations' organizational climates.

