

**EQUITY INTERNATIONAL JOINT VENTURES (IJVs) AND INTERNATIONAL
ACQUISITIONS (IAs): GENERIC DIFFERENCES IN THEIR PRE- AND POST-
INCORPORATION STAGES? – THE CASE OF ISRAEL**

3.2 Managerial Competence and Corporate Culture

Final Version of Accepted Competitive Paper

**Orly Yeheskel
Tel-Aviv University
The Faculty of Management
Tel-Aviv 69978
Israel
Phone: 972-3-640-6296
Fax: 972-3-546-6064
E-mail: orlyy@post.tau.ac.il**

**William Newburry
Rutgers University
Management Education Center, Room 319
111 Washington Street
Newark, NJ 07102
U.S.A.
Phone: 973-353-5168
Fax: 973-353-1273
E-Mail: newburry@business.rutgers.edu**

**Yoram Zeira
Tel-Aviv University
The Faculty of Management
Tel-Aviv 69978
Israel
Phone: 972-3-640-6302
Fax: 972-3-571-2965
E-Mail: zeira@post.tau.ac.il**

September 2000

This is a fully collaborative effort. Address all correspondence to William Newburry.

EQUITY INTERNATIONAL JOINT VENTURES (IJVs) AND INTERNATIONAL ACQUISITIONS (IAs): GENERIC DIFFERENCES IN THEIR PRE- AND POST- INCORPORATION STAGES? – THE CASE OF ISRAEL

Abstract

This paper examines procedures associated with the pre-incorporation and post-incorporation phases of both equity international joint ventures (IJVs) and international acquisitions (IAs). Equity international joint ventures (IJVs) and international acquisitions (IAs) are currently two of the most popular forms of foreign direct investment. However, despite their popularity, both forms of investment have had high failure rates. Recently, Zeira and Newburry (1999) theoretically examined some of the generic differences between IJVs and IAs, as they appear in the pre- and post-incorporation phases of each FDI type. This paper builds upon this theoretical examination by empirically examining and comparing the pre- and post-incorporation phases of a sample of IJVs and IAs operating in Israel. As a result of this examination, this manuscript suggests that effectiveness of both IJVs and IAs is related to successfully managing the pre- and post-incorporation stages of these business forms. Moreover, it is suggested that critical components of each stage are different for IJVs from those of IAs.

Key Words: International Joint Venture, International Acquisition, Effectiveness

EQUITY INTERNATIONAL JOINT VENTURES (IJVs) AND INTERNATIONAL ACQUISITIONS (IAs): GENERIC DIFFERENCES IN THEIR PRE- AND POST- INCORPORATION STAGES? – THE CASE OF ISRAEL

Equity international joint ventures (IJVs) and international acquisitions (IAs) are two of the most prominent forms of foreign direct investment (FDI). However, despite their popularity, both forms of investment have had high failure rates. (Some summary statistics will follow.) Moreover, the tendency of multinationals to be simultaneously involved with both of these business types may lead managers to confuse subtle and even not-so-subtle differences between the management of these business types. Recently, Zeira and Newburry (1999) theoretically examined some of the generic differences between IJVs and IAs, as they appear in the pre- and post-incorporation phases of each FDI type. This paper builds upon this theoretical examination by empirically examining and comparing the pre- and post-incorporation phases of a sample of IJVs and IAs operating in Israel. As a result of this research, this manuscript suggests that effectiveness of both IJVs and IAs is related to successfully managing the pre- and post-incorporation stages of these FDI forms. Moreover, it is suggested that critical components of each stage are different for IJVs than they are for IAs. While empirical evidence exists regarding the importance of individual factors to either the success of IJVs or IAs, we believe these findings enhance our understanding of both similarities and differences of the IJV and IA pre-incorporation and post-incorporation stages, as comparative studies of this type (to the best of our knowledge) have not been previously conducted.

As noted above, both IJVs and IAs have enjoyed tremendous popularity over the past decade (Markides & Oyon, 1998, Weber, 1996). With respect to IJVs, 48% of all strategic

alliances established between 1990 and 1999 were joint ventures (Nam-Hoon & Kentaro, 2000). Moreover, 78% of these joint ventures were international in form (Nam-Hoon & Kentaro, 2000). With respect to IAs, their number and value grew significantly from 1997 to 1999, reaching a total value of \$544 billion in 1998 (60% growth from 1997) and a total value of \$720 billion in 1999 (35% growth from 1998) (UNCTAD, 1999). Moreover, the number of extremely large mergers and acquisitions with a value of \$1 billion or more grew from 58 in 1997 to 89 in 1998 (UNCTAD, 1999).

However, while evidence demonstrates that the number of IJVs and IAs is increasing, scholars have also shown that these FDI types are prone to failure. With respect to IJVs, failure rates have been found ranging from 30% to 70% (Killing, 1983, Reuer, 1998, Li, Xin, Tusi & Hambrick, 1999; Deresky, 2000). Specific examples include a study that found a 68% failure rate for Japanese-US IJVs located in the US (Hennart & Zeng, 1997) and a study that found the same failure rate for IJVs in the electronic industry (Park & Russo, 1996). Similarly, empirical evidence also suggests that IAs are prone to failure. One study found that 30% of acquisitions conducted by British companies failed (Sundarsanam, 1995). Other studies have found that from 50% to 70% of acquisitions do not reach their financial expectations, or are a financial failure (Weber, 1996; Jackson, 1998; McKinsey, 1998; Beard, 1999; Markides & Oyon, 1998).

Taking into account these findings, this paper suggests that an empirical examination of the IJV and IA pre- and post-incorporation phases may reveal new ways of increasing the effectiveness of these two organization types. A basic assumption underlying this analysis is that while MNCs may be aware that IJVs and IAs are established to achieve different goals, they may be less aware of the specific differences which should take place in managing the pre- and post-incorporation phases of these activities because of the high level of similarity in these phases.

As noted in Zeira and Newburry (1999), this may occur because of the subtle nature of differences between IJVs and IAs in the pre- and post- incorporation phases. Due to this similarity, a transfer of learning (e.g. Argyris and Schon 1978; March 1991) may take place within MNCs which operate both organizational types. However, we suggest that this transferred learning within MNCs may in fact decrease organizational effectiveness because MNC managers may become blinded to inherent problems which stem from differences between these two business forms.

IJVs and IAs in Israel. During the last decade, Israel has experienced a significant growth in total foreign investment in multiple FDI forms, including IJVs and IAs. In 1992, total foreign investment in Israel was \$537 million. By 1996, this total had grown to \$3.6 billion. This growth is explained by several factors including: massive immigration to Israel (especially from Russia), structural changes in the Israeli economic system (including major liberalization in foreign investment laws), geopolitical developments in the Middle East, and a general global trend towards foreign investment in emerging markets. In 1998, due to political changes in Israel as well as the global financial crises (Asia, Korea, Russia), total foreign investment in Israel decreased by about 40%, but increased again in 1999 and 2000. Data for the 1st quarter of 2000 shows \$5 billion in foreign investments (Israeli Statistic Book, 2000).

Accompanying the growth in FDI, there has been significant growth in the involvement of MNEs in Israel during recent years. This involvement has occurred in multiple forms, including direct investment (via fully owned subsidiaries, strategic alliances, IJVs, mergers and IAs) and portfolio investments (Israeli Statistical Yearbook, 2000). With respect to IJVs, an example of this phenomenon is that BIRD (Bionational Industrial Research and Development fund) has helped create 520 technology-based Israeli - US IJVs in recent years (Deloitte &

Touch, 1999). Another example is that Israel and Jordan have agreed on a plan of creating 24 Israeli – Jordanian IJVs for the development of their mutual border (Arabic News, Sept. 2nd, 1997). There has also been significant growth in the IA phenomena in Israel in recent years. During the 1st half of 1999, Israeli companies valued at \$1.44 billion were acquired by foreign companies (Statistical Yearbook, 1999). Much of this activity is taking place in high-tech industries due to the dominance of Israeli companies in R&D. Some notable examples include: In 1998, AOL acquired Mirabelis for \$407 million; In 2000, Lucent acquired Chromatics for \$4.8 billion; In 2000, Meridian (US) acquired Sirious Computers for \$2.7 million; In 2000, SCI acquired a part of Telrad for \$60 – 70 million; Also in 2000, Intel acquired CSPC for \$1.6 million. Overall, the preceding examples of both IJVs and IAs in Israel make the country a logical place to conduct research comparing the two FDI forms.

Based upon the arguments presented above, this manuscript empirically examines and compares the pre- and post-incorporation phases of a sample of IJVs and IAs operating in Israel. The next section of this manuscript develops research hypotheses regarding the effectiveness of Israeli IAs and IJVs. This is followed by a section which outlines our research methods for testing these hypotheses. The manuscript then presents our study results. It concludes with a discussion of these results and some suggestions for future research.

RESEARCH PROPOSITIONS

For the purpose of this examination, we use the following IJV and IA definitions:

An IJV is a separate legal organizational entity representing the partial holdings of two or more parent firms, in which the headquarters of at least one is located outside the country of operation of the joint venture. This entity is subject to the joint control of its parent

firms, each of which is economically and legally independent of the other (Shenkar and Zeira 1987, p. 547).

An IA is the purchase of the trade name and assets of one company (an acquiree) by another company (an acquirer), headquartered outside the country where the acquired company has been located. Following the acquisition, the acquired company is subject to managerial, economic, and legal control of the acquiring company (Zeira and Newburry, 1999).

Analysis of the IJV and IA literature reveals that it is phase oriented, dating back to Kitching's empirical studies (Kitching 1967; Hunt 1990). Pre-incorporation and post-incorporation are the two major phases analyzed and related to IJV or IA effectiveness. For the purpose of this manuscript, the pre-incorporation phase includes all those activities conducted until the time when contractual agreements are finalized either for the incorporation of an IJV or the acquisition of an acquired firm. Post-incorporation includes all the activities that follow these agreements, and generally focuses on the physical establishment and management of the IJV and the integration of an acquired firm and its subsequent management. This study generally assumes that effectiveness of both IJVs and IAs is related to how activities are conducted during both the pre- and post-incorporation stages of these respective business ventures. Our goal in this empirical examination is to show the overwhelming similarities between IJVs and IAs in these two phases of development and how they may disguise the subtle, but very important differences between the two business types.

Pre-Incorporation Activities. Zeira and Newburry (1999) found that when considering pursuing an IJV or an IA, there is general agreement in the academic literature regarding the importance of three general categories of activities: investigation of the host country operating

environment (e.g. Parkhe, 1991; Haspelslaph and Jemison, 1991; Gray and Yan, 1998), partner selection/company compatibility (e.g. Geringer, 1988; Harrigan, 1988; Hunt, 1990; Olk, 1998) and the negotiation and development of comprehensive legal documents (e.g. BenDaniel and Rosenbloom, 1990; Dymsha, 1988; Norberg, Campbell and Verbeke, 1998). In fact, the examination found that it is very apparent that there are an overwhelming number of similarities between the pre-incorporation activities for IJVs and IAs. Because of this high level of similarity between the FDI forms, MNC managers may have a diminished awareness of the subtle differences in management activities which may be appropriate for the pre-incorporation stage for each type of organization. For example, while comprehensive legal documents will be very important to both IJVs and IAs, differences between IJVs and IAs regarding the number of owners and equity ownership will affect specific strategies for pursuing these documents. Relatedly, a comprehensive strategic business plan also seems crucial to ensure business success. However, since IJVs involve multiple parents while IAs involve only one, it would seem easier for IA parents to make post-acquisition changes in their business plans than it would be for IJV parents. Moreover, IA time constraints due to the need to maintain secrecy in order to guard against potential competing bidders may make this detailed level of analysis impossible to achieve prior to the acquisition.

Based upon the preceding discussion, it is suggested that while there are similarities between the management of IJVs and IAs in the pre-incorporation stage, the set of critical activities for managing each FDI type will differ. Moreover, success in these ventures will depend upon devoting attention and effort to the correct mix of activities. Based upon the above evidence, hypotheses 1 and 2 are proposed as follows. The two hypotheses differ in that the first hypothesis addresses which activities are actually performed (conducted) at an IJV or IA, while

the second hypothesis addresses which activities are deemed as being more important by IJV/IA parent companies.

***Hypothesis 1:** IJVs and IAs performing relevant critical pre-incorporation activities will be more effective than those not performing such activities.*

***Hypothesis 2:** Parent companies of more effective IJVs and IAs place greater importance on performing relevant critical pre-incorporation activities than parent companies of less effective IJVs and IAs.*

Post-Incorporation Activities. Many of the problems that occur during the IJV/IA post-incorporation phases are summarized by Jemison and Sitkin (1986), who noted that, “the thrill of the chase blinded pursuers to the consequences of the catch”. Although there is much more differentiation in the IJV/IA post-incorporation phases than there is in the pre-incorporation activities, common themes still occur in both phases, including IJV creation/IA assimilation (e.g. Lane and Beamish, 1990; Ernst and Young, 1994), commitment (e.g. Mohr and Spekman, 1994; Rosenweig and Nohria, 1994; Sarkar, Cavusgil and Evrigen, 1998; Arino, 1998), flexibility/adaptability (e.g. Parkhe, 1991; Bartlett and Ghoshal, 1987), and autonomy (e.g. Newburry and Zeira, 1999; Haspelslaph and Jemison, 1991).

The first major task in the IJV/IA post-incorporation phase is that of IJV creation or IA assimilation. Moreover, these two activities evoke many common themes. For example, both IJV creators and IA assimilators must concern themselves with management policies, production decisions, financial structures, and various organizational support functions. However, it is important to recognize that while the focuses of the activities are similar, IA parents must form policies around existing organizational structures, while IJV parents typically create entirely new entities. For an IJV, policies must be coordinated amongst at least two legally and economically

independent partners and the IJV. Moreover, control boundaries must be established. IA parents and their acquired companies, by contrast, are advised to focus on mutual adaptation during the initial post-incorporation period.

While both IJV parents and acquiring firms must be committed to their ventures and flexible enough to adapt to changing conditions, flexibility of IJVs has one dimension which differs from IAs. IJV parents must avoid becoming so strictly tied to written contract details that they lose track of the IJV's overall purpose. Parents must be willing to begin implementing necessary project changes even before the formal contract document is fully modified. Another important factor in IJV and IA management, and one of considerable disagreement, is autonomy. Numerous authors discuss the importance of providing IJV autonomy (e.g. Newburry and Zeira, 1999). However, where to draw the line between IJV autonomy and parent company control is a major contention point. While both sets of literature recognize the need for a balance between strategic links within an international organization and giving the IJV/IA freedom to maneuver (see Haspeslagh and Jemison, 1991, regarding IAs), findings suggest that successful IJVs have greater autonomy than successful IAs (Chowdhury, 1992). This may be largely due to the fact that IJVs have to concern themselves with multiple parents, while IAs generally involve one acquiring firm.

Based upon the preceding discussion, it is suggested that while there are similarities between the management of IJVs and IAs in the post-incorporation stage, the set of critical activities for managing each FDI type will differ. Moreover, success in these ventures will depend upon devoting attention and effort to the correct mix of activities. Accordingly, hypotheses 3 and 4 are proposed as follows.

Hypothesis 3: IJVs and IAs performing relevant critical post-incorporation activities will be

more effective than those not performing such activities.

Hypothesis 4: *Parent companies of more effective IJVs and IAs place greater importance on performing relevant critical post-incorporation activities than parent companies of less effective IJVs and IAs.*

Pre- and Post-Incorporation Interaction. In addition to examining pre- and post-incorporation activities separately, as was done in the preceding two sections, it is suggested that there might be an interaction between these two management phases such that when critical activities for both phases are conducted, the IJV or IA will be even more effective.

Accordingly, hypotheses 5 and 6 are proposed as follows:

Hypothesis 5: *IJVs and IAs performing relevant critical pre- and post-incorporation activities will be more effective than those not performing such activities.*

Hypothesis 6: *Parent companies of more effective IJVs and IAs place greater importance on performing relevant critical pre- and post-incorporation activities than parent companies of less effective IJVs and IAs.*

METHODOLOGY

The following sections describe the questionnaires used within our study, the operationalizations of our dependent variables, our test procedures, and our respondents.

Data

Data for the research reported below were collected during the years 1996-1999. Thirty five IJVs and thirty four IAs located in Israel participated. All of the study participants fit either the IJV or IA definition previously presented. These IJVs and IAs were identified using the following procedure. First, an effort was made to find an authorized office or agency that holds

information regarding all the IJVs and IAs working in Israel. Since our investigation made clear that no such office exists in Israel, we approached many different offices and agencies, such as the ministry of commerce, the ministry of treasure, the American-Israel chamber of commerce, the institute of export, the chief scientist and different embassies, in order to get as much information as possible. At the second stage of the investigation, the information gathered from all the mentioned offices was screened (analyzed) with a focus being set upon identifying companies that are either registered as an IJV or as an IA and fit the definition of an IJV or an IA presented earlier in this manuscript. The number of possible candidates eligible for our study at the end of this screening procedure was too small. Hence, we moved into a third stage where we approached private data bases like Dun and Bradstreet, or public ones like the internet, compact disks containing forecasts of public owned companies and general news papers. With the help of these data bases, we were able to generate a list of three hundred and fifty companies that fit our research definitions.

All of the three hundred and fifty companies were then contacted by phone in order to corroborate the data gathered and find out about their readiness to take part in the research. This resulted in a list of 120 IJVs and IAs. The 120 IJV and IA CEOs were then contacted and asked to complete our questionnaire regarding IJV or IA management. After follow-up contacts and face-to-face interviews with many CEOs, we eventually obtained 69 completed questionnaires.

Profile of the IJVs and the IAs

The 35 IJVs in our sample are involved in a variety of industries and services and employ between 14 and 3000 employees (mean: 509 employees). The majority (77.1%) are owned by two parent companies. Only 5 of the 35 IJVs in our sample are owned by more than 3 parent companies. The ages of the IJVs in our sample range from 1 year to 37 years with an average of

9.5. None of the IJVs have parent companies located in more than four different countries.

The 34 IAs in our sample are involved in a variety of industries and services and employ between 20 and 2312 employees (mean: 253 employees). The majority (73%) are state-owned, 20.6% are private owned, and only 5.9% are public owned. The ages of the IAs in our sample range from 1 year to 66 years with an average of 19. The ages of the acquiring firms range from 4 to 83 (mean age: 22.9) and they employ between 10 and 400000 employees (mean number of employees: 4453). Of the acquiring firms, 76.5% are privately-owned and the rest are state-owned.

Variable Measures and Summary Statistics

Tables 1a and 1b present summary means, standard deviations, minimum and maximum values for the effectiveness variable, the pre- and post-incorporation activities composite variables and the control variables utilized within this paper's analyses. These variables are further described in the following sections.

**** Insert Tables 1a and 1b About Here ****

The questionnaire included a variety of items that described pre- and post-incorporation activities. In response to each item, the respondents were asked to rate, on a 5-point likert scale (where: 1 = to a small extent, 5 = to a great extent), to what extent the activity described by the item was performed (actually conducted) at the IJV and/or IA. In addition, they were also asked to indicate on a 5-point likert scale (where: 1 = very low, 5 = very high) the degree of importance ascribed to this activity. The ideal method for analyzing the data might have been multiple regression. However, due to the size of our samples, and for reasons of multicollinearity, we could not investigate at this stage complicated models that encompass a great number of variables. We rather investigate a simple model of effectiveness as explained by two basic

composite variables, pre-incorporation activities and post-incorporation activities.

Composite Variables

To construct composite variables for pre-incorporation activities (based on importance and actual conduct) and post-incorporation activities (also based on importance and actual conduct), we first investigated the correlation matrix between an index of effectiveness and the different dimensions of effectiveness (described below), and the pre- and post-incorporation activity items contained within the study questionnaire. For the pre-incorporation activities, each item that was found to be significantly correlated with any of the effectiveness measurements was included in the pre-incorporation activity composite variable. The same procedure was utilized for the post-incorporation activity composite variable. This procedure was repeated for actual conduct and importance responses separately and for each of our two samples – the IJVs and the IAs. After identifying the items to be included in each composite variable, the composite variables were constructed as a mean of these items. These items are contained with Appendices I and II, along with the reliability index (Cronbach alpha) of each variable. Cronbach alphas for the four IJV-based composite variables ranged from 0.61 to 0.78. Cronbach alphas for the four IA-based composite variables ranged from 0.77 to 0.87.

Effectiveness Measures

The dependent variable in our analysis is IJV and IA effectiveness. Following in the path of previous authors who have shown self-rated measures of effectiveness to be well-suited to studying IJVs (Anderson, 1990; Geringer and Hebert, 1989), our questionnaire respondents were asked to rate the extent to which their IJVs/IAs accomplished the following effectiveness measures: A) have a growing market share; B) meet the expectations of their stakeholders; C) meet the expectations of its own management; and D) meet the expectations of their customers.

Effectiveness measures A through D were chosen because our content analysis of IJV documents of incorporation indicated that they are the most frequently mentioned goals (see also Dobkin et al., 1994). These measures of IJV effectiveness are widely accepted in the literature (Killing, 1983; Schaan, 1983; Beamish, 1984), and their results have been found to correlate significantly with objective financial measurements of the same variables (Dess and Robinson, 1984; Geringer and Hebert, 1989, 1991). Additionally, as noted in Zeira and Parker (1995), usage of a variety of measures helps account for the fact that companies from different countries often pursue different objectives. For the IJV sample, the internal reliability of the four items was found to be quite high (Cronbach alpha = 0.86), suggesting a common underlying factor. For the IA sample, the internal reliability of the four items was lower, but still acceptable (Cronbach alpha = 0.74). Accordingly, a composite variable was created by averaging across these four items of our survey and is reported below as our measure of effectiveness.

Control Variables

In the process of testing the previously hypothesized relationships, two control variables (AGE and SIZE) were considered to assist in isolating the exact conditions that result in significant pre- and post-incorporation activities-effectiveness correlations. AGE represents the age of the IJV/IA in years. Previous authors have concluded that there will be a correlation between an IJV's age and its effectiveness (e.g. Hill and Hellriegel, 1994). SIZE is generated as the log of the number of employees in the IJV/IA. Arguments can be made that larger organizations will either have more resources to combat problems (thus increasing their effectiveness), or will be more clumsy due to their bureaucratic nature (thus decreasing their effectiveness). However, since size was not found to be correlated with our research variables, it was eliminated from any further analyses.

RESULTS

The following subsections present the results of our various statistical procedures. First, we present Pearson correlation coefficients comparing the results of the IJV sample and those of the IA sample in regard to the correlation between our research variables and the effectiveness of IJVs/IAs (hypotheses 1-4). Next, we present regression analyses utilizing our research explanatory variables (the pre- and post-incorporation activity composite variables) in addition to IJV/IA age as a control variable in order to test for a possible interaction (hypotheses 5-6).

Correlations between Pre- and Post-Incorporation Activity Composite Variables and IJV/IA Effectiveness

We first present the relationships between our pre- and post-incorporation activity measures and IJV/IA effectiveness (see Tables 2a and 2b). With respect to hypothesis 1, we find a significant relationship between actually conducted (performed) pre-incorporation activities and effectiveness, for both IJVs ($r=0.54$, $p<0.01$) and IAs ($r=0.33$, $p=0.058$). While the relationship for IAs with the effectiveness index is somewhat marginally significant, there are significant ($p<0.05$) correlations between two of the four items that compose the index and actually conducted (performed) pre-incorporation activities. As for the IJVs, actually conducting (performing) pre-incorporation activities was also found to be significantly correlated with effectiveness for all four items that compose the index.

With respect to hypothesis 2, we find a significant relationship between the degree of importance assigned to pre-incorporation activities and effectiveness, for both IJVs ($r=0.49$, $p<0.01$) and IAs ($r=0.42$, $p<0.05$). For the IJVs, a significant ($p<0.05$) correlation was also found between the importance of pre-incorporation activities and two of the four items that compose

the index. For the IAs, two such significant correlations were also found.

With respect to hypothesis 3, we find a significant relationship between actually conducting (performing) post-incorporation activities and effectiveness, for both IJVs ($r=0.44$, $p<0.01$) and IAs ($r=0.35$, $p<0.05$). Similarly, with respect to hypothesis 4, we find a significant relationship between the degree of importance assigned to post-incorporation activities and effectiveness, for both IJVs ($r=0.48$, $p<0.01$) and IAs ($r=0.36$, $p<0.05$). For the IJVs, a significant correlation was also found between the importance and actual conduct of post-incorporation activities and three of the four items that compose the index. For the IAs, two such significant ($p<0.05$) correlations were found for the actual conduct of activities and one significant ($p<0.05$) correlation was found for the importance of post-incorporation activities.

Regression Analyses

Following our Pearson correlation analyses, we then proceeded to run stepwise regression analyses to test hypotheses 5 and 6. In order to test a model of IJV/IA effectiveness explained by pre-incorporation activities, post-incorporation activities and their interaction while controlling for age of the IJV/IA, we used the Gram-Schmidt orthogonalizing procedure (Draper and Smith 1966, 1981). By using this procedure, we get a set of explanatory variables that are completely orthogonal to each other and we avoid all difficulties and problems of multicollinearity. When using this procedure, we have the benefit of a single regression analysis that produces unambiguous results, in the sense that any variable that explains a significant amount of the variance of our dependent variable will have a significant regression coefficient. The orthogonalization process was done in such an order that the regression analyses results give us the effect of the pre-incorporation activity composite beyond the effect of age, the effect of post-incorporation activity composite beyond the effect of age and the effect of the pre-incorporation

activities, and the effect of the interaction beyond the effect of the other 3 variables.

The results of four regressions are summarized in Table 3 . With respect to hypothesis 5, for IJVs, we found that after controlling for IJV age, the actual conduct of pre-incorporation activities is very significant in explaining IJV effectiveness ($p=0.0019$), but the actual conduct of post-incorporation activities and the interaction between the actual conduct of pre- and post-incorporation activities are non-significant. That is, these terms do not contribute to the explanation of effectiveness beyond what is already explained by age and the pre-incorporation activity composite. As for the IAs, only the pre-incorporation activity actual conduct composite was found to be marginally significant ($p=0.07$). With respect to hypothesis 6, for the IJVs, we found that after controlling for IJV age, the importance of pre-incorporation activities is very significant in explaining IJV effectiveness ($p=0.0095$), the importance of post-incorporation activities is marginally significant ($p=0.08$), and the interaction between the actual conduct of the pre- and post-incorporation activities is non-significant. As for the IAs, the pre-incorporation activity importance composite was found to be significant ($p=0.018$), and none of the other terms were significant.

DISCUSSION AND CONCLUSION

In summary of the study results, within the analyses of Pearson correlations, both the pre-incorporation activities and the post-incorporation activities (hypotheses 1 through 4) were found to be significantly correlated with IJV/IA effectiveness. However, when these two sets of activities were put into regression analyses, the post-incorporation activities contributed little to the explanation of IJV/IA effectiveness over that of the pre-incorporation activities (although the coefficient sign of the variables was in the predicted direction). An interaction between the two

sets of activities was not found to be significant.

When examining the results of the correlation and regression analyses as a whole, along with the details of the activity composite indices contained within Appendices 1 and 2, it becomes apparent that although both effective IJVs and IAs must perform both pre- and post-incorporation activities, some of these activities are different (as expected), while others were found to be similar. Within the pre-incorporation stage, the activities that are common to both IJVs and IAs are ones related to learning about potential IJV partners or acquisition candidates. For IJVs, the data also suggest that examining the reputation of potential IJV partners is also very important in the pre-incorporation stage, an activity which is less important within IAs.

Within the post-incorporation stage, the activities that are common to both IJVs and IAs are ones associated with granting autonomy to the acquired firm and/or the IJV. While post-incorporation activities for both IJVs and IAs relate to integration, the focus of integration is somewhat different. For IJVs, the activities emphasize coordination amongst the parent firms and their IJVs to ensure that everyone is working towards common goals. Within IJVs, there is also a perceived need to implement structural arrangements to guard against potential opportunistic behavior of partner firms. Within IAs, post-incorporation integration tasks involve bringing the acquired firm's policies and employees in line with those of the overall corporation. Within IAs, there also appears to be a much earlier emphasis upon providing products and services of a high quality. This probably occurs because there is generally a much greater set-up time required with an IJV before products/services can be brought to market.

The lack of a significant interaction term within the regression analyses is also interesting with respect to the study results, as it indicates that while conducting (performing) both pre- and post-incorporation activities individually is important, combining the two together does not

provide any additional synergies. This might occur because the activities occur at different times within the timeline of an IJV/IA. It might also be a function of the broad level of our composite variables. If the interaction term had been measured with respect to specific, related pre- and post-incorporation activities, there might have been a greater chance for a significant prediction.

As noted in the introduction to this manuscript, comparative examinations of IJVs and IAs are rare, despite the fact that MNCs managers are commonly involved in both activities. Moreover, because of the subtle nature of differences in managing the two activities, it is possible for managers to forget about these differences. This might be a contributing factor to the high failure rates for both of these FDI forms. This manuscript has demonstrated that the factors related to IJV/IA effectiveness differ for each of these activities, thus providing a preliminary guide to assist in the management of IJVs and IAs.

While the manuscript provides a contribution in being the first known side-by-side empirical examination of the IJV and IA pre- and post-incorporation phases, it should be recognized that much empirical work is still needed to better understand the finer distinctions between how to successfully manage these two business entities. Further studies are necessary to more fully understand the interaction between pre- and post-incorporation activities in both investment forms. Moreover, further studies are necessary to understand whether the results of this particular study generalize beyond the case of Israel.

REFERENCES

- Anderson, E. 1990. Two Firms, One Frontier: On Assessing Joint Venture Performance, *Sloan Management Review*, 31(2): pp. 19-29.
- Arabic News, Sept. 2nd, 1997
- Argyris, C. and C. Schon. 1978. *Organizational Learning: A Theory of Action Approach*, Reading, MA: Addison-Wesley.
- Arino, Africa. 1998. Veracity and commitment: Cooperative behavior in first-time collaborative ventures. In: P.W. Beamish and J.P. Killing (Eds.), *Cooperative strategies: European perspectives*. San Francisco: The New Lexington Press, pp. 215 – 241.
- Bartlett, C. A. and S. Ghoshal. 1987. Managing Across Borders: New Organizational Responses, *Sloan Management Review*, 29(1): 43-52.
- Beamish, P. W. 1984. Joint venture performance in developing countries. Unpublished doctoral dissertation. The University of Western Ontario.
- BenDaniel, D. J. and A. H. Rosenbloom. 1990. *The Handbook of International Mergers and Acquisitions*. New York: Prentice-Hall.
- Beard, M. J. 1999. Developing an effective strategy for international mergers & acquisitions. *Columbia Journal of World Business*, 20(3): 3-19.
- Chowdhury, J. 1992. Performance of International Joint Ventures and Wholly Owned Foreign Subsidiaries: A Comparative Perspective, *Management International Review*, 32(2): 115-133.
- Deloitte and Touche 1999. Israel : High tech's latest promised land. Deloitte and Touche, Third Quarter.
- Deresky H. 2000. International Management. New York : Prentice Hall.
- Dess, G. G. and R. B. Robinson. 1984. Measuring organizational performance in the absence of objective measures: The case of private-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3): 265-273.
- Dobkin, J. A., J. A. Burt, K. J. Krupsky and M. J. Spooner. 1994. *Joint Ventures with International Partners: Structure and Negotiation with Forms*. Washington, D.C.: Butterworth.
- Draper, N. and H. Smith 1966. Applied regression analysis. (Revised ed., 1981). New York: John Wiley & Sons.
- Dymsza, W. A. 1988. Success and Failures of Joint Ventures in Developing Countries: Lessons from Experience, in Contractor, F. J. and P. Lorange, (eds.), *Cooperative Strategies in*

International Business. Lexington MA: Lexington Books.

Ernst & Young. 1994 *Mergers & Acquisitions* (2nd ed.). New York: John Wiley & Sons.

Geringer, J. M. 1988. *Joint Venture Partner Selection: Strategies for Developed Countries*. New York: Quorum Books.

Geringer, J. M. and L. Hebert 1989. Control and Performance of International Joint Ventures, *Journal of International Business Studies*, 20(2): 235-54.

Geringer, J. M. and L. Hebert 1991. Measuring performance of international joint ventures. *Journal of International Business Studies*, 22(2): 249-265.

Gray, B. and A. Yan. 1998. Formation and evolution of international joint ventures. In: P.W. Beamish and J.P. Killing (Eds.), *Cooperative strategies: Asian Pacific perspectives*. San Francisco: The New Lexington Press, pp. 57 – 88.

Harrigan, K. R. 1988. Strategic Alliances and Partner Asymmetries, in Contractor, F. J./Lorange, P. (eds.), *Cooperative Strategies in International Business*. Lexington MA: Lexington Books.

Haspeslagh, P. C. and D. B. Jemison, D. B. 1991. *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York: The Free Press.

Hennart, J-F., Zeng, M. 1997. Is cross-cultural conflict driving international joint venture instability ? A comparative study of Japanese-Japanese and Japanese-American IJVs in the United States. Paper presented at 1997 Academy of Management Meeting. Boston, Ma.

Hill, R. C. and D. Hellriegel. 1994. Critical contingencies in joint venture management: Some lessons from managers. *Organization Science*, 5(4): 594-607.

Hunt, J. W. 1990. Changing Patterns of Acquisition Behaviour in Takeovers and the Consequences for Acquisition Processes, *Strategic Management Journal*, 11(1): 69-77.

Israeli Statistical Yearbook 1999. Israel Central Bureau of Statistics.

Israeli Statistical Yearbook 2000. Israel Central Bureau of Statistics.

Jackson, T. 1998. Financial Times, June 29, p.29.

Jemison, D. B. and S. B. Sitkin. 1986. Acquisitions: The Process Can Be a Problem, *Harvard Business Review*, 64(2): 107-116.

Killing, J. P., *Strategies for Joint Venture Success*. New York: Praeger 1983.

Kitching, J. 1967. Why do Mergers Miscarry?, *Harvard Business Review*, 45(6): 84-101.

- Lane, H. W. and P. W. Beamish. 1990. Cross-Cultural Cooperative Behavior in Joint Ventures in LDCs, *Management International Review*, 30: 87-102.
- Lerner, M. and Y. Avrahami. 1999. Global Entrepreneurship Monitor – 1999 Isreal Executive Report.
- Li, J., Tusi, A., Xin, K.R. and Hambrick, D.C. 1999. Building effective international joint venture leadership teams in china. *Journal of World Business*, 34(1): 52-66.
- March, J. 1991. Exploration and Exploitation in Organizational Learning. *Organization Science*, 2(1): 71-87.
- Markides, C. and Oyon, D. 1998. International acquisition: Do they create value for shareholders. *European Management Journal*, 16(2): 125-135.
- McKinsey Quarterly 1998, Winter, No. 1 : 56-66.
- Mohr, J. and R. Spekman. 1994. Characteristics of Partnership Success: Partnership Attributes, Communication Behavior, and Conflict Resolution Techniques, *Strategic Management Journal*, 15(2): 135-152.
- Nam-Hoon, K. and Kentaro, S. 2000. International Strategic Alliances: Their role in Industrial Globalization. STI Working Paper, 2000/5.
- Newburry, W. and Y. Zeira. 1999. Autonomy and Effectiveness of Equity International Joint Ventures: A Comparative Analysis of Hungary and Britain. *Journal of Management Studies*, 36(2): 263 – 285.
- Norberg, M., A. Campbell and A. Verbeke. 1998. Can market-based contracts substitute for alliances in high-technology markets. In: P.W. Beamish and J.P. Killing (Eds.), *Cooperative strategies: European perspectives*. San Francisco: The New Lexington Press, pp. 356 – 375.
- Olk, P. 1998. The effect of partner differences on the performance of R&D consortia. In: P.W. Beamish and J.P. Killing (Eds.), *Cooperative strategies: North American perspectives*. San Francisco: The New Lexington Press, pp. 133 – 159.
- Park, S.H. and Russo, M.V. 1996. When competition eclipses cooperation: An event history analysis of joint venture failure. *Management Science*, 42(6): 875-890.
- Parker, B. 1998. Globalization and Business Practice. Sage Publication.
- Parkhe, A. 1991. Interfirm Diversity, Organizational Learning, and Longevity in Global Strategic Alliances, *Journal of International Business Studies*, 22(4): 579-601.
- Reuer, J. 1998. The dynamics and effectiveness of international joint ventures. *European Management Journal*, 16(2): 160-168.

Rosenzweig P. M. and N. Nohria. 1994. Influence on Human Resource Management Practices in Multinational Corporations, *Journal of International Business Studies*, 25(2): 229-251.

Sarkar, M, S. T. Cavusgil and C. Evirgen, 1998. In: P.W. Beamish and J.P. Killing (Eds.), *Cooperative strategies: North American perspectives*. San Francisco: The New Lexington Press, pp. 255 – 285.

Schaan, J. L. 1983. Parent control and joint venture success: The case of Mexico. Unpublished doctoral dissertation, University of Western Ontario.

Shenkar, O. and Y. Zeira. 1987. Human Resources Management in International Joint Ventures: Directions for Research, *Academy of Management Review*, 12(3): 546-557.

Sudarsanan, P. S. 1995. *The Essence of Mergers and Acquisitions*. Prentice Hall.

UNCTAD 1999. Foreign Direct Investment and the challenge of development. World Investment Report 1999, Ch.3.

UNCTAD 1999. Foreign Direct Investment and the challenge of development. World Investment Report 1999, Table 1.2, p. 9.

Weber, Y. 1996. Corporate culture fit and performance in mergers and acquisitions. *Human Relations*, 49(9): 1181-1202.

Zeira, Y. and W. Newbury. 1999. Equity International Joint Ventures (EIJVs) and International Acquisitions (IAs): Generic Differences in the Pre- and Post-Incorporation Stages, *Management International Review*, 39(4): 323-352.

Zeira, Y. and B. Parker. 1995. International Joint Ventures in the United States: An Examination of Factors Related to Their Effectiveness, *The International Executive*. 37(4): 373-393.

Table 1a. Summary Statistics for IJV Sample

<u>Variables</u>	<u>Mean</u>	<u>Std. Dev</u>	<u>Min.</u>	<u>Max.</u>
Effectiveness	4.2	0.77	1.75	5.0
Achieve Expected Growth	4.1	1.05	1.0	5.0
Parents Satisfisfaction with Operations	4.1	0.88	2.0	5.0
IJV Mgmt. Satisfisfaction with Operations	4.3	0.82	2.0	5.0
Customer Satisfisfaction with Performance	4.3	0.93	1.0	5.0
IJV Age	9.5	10.29	1.0	37
IJV Size	509.1	741.3	14	3000
Pre-Incorporation Activities – Actual Conduct	4.18	0.67	2.5	5
Pre-Incorporation Activities – Importance	4.67	0.40	3.5	5
Post-Incorporation Activities – Actual Conduct	3.74	0.77	1.5	4.75
Post-Incorporation Activities – Importance	4.37	0.56	2.0	5.0

Table 1b. Summary Statistics for IA Sample

<u>Variables</u>	<u>Mean</u>	<u>Std. Dev</u>	<u>Min.</u>	<u>Max.</u>
Effectiveness	3.86	0.67	2.25	4.75
Achieve Expected Growth	3.67	1.04	1.0	5.0
Parent Satisfaction with Operations	3.82	0.87	2.0	5.0
IA Mgmt. Satisfaction with Operations	4.0	0.85	2.0	5.0
Customer Satisfaction with Performance	3.94	0.81	1.0	5.0
IA Age	19	18.6	1	66
IA Size	253	455	20	2312
Pre-Incorporation Activities – Actual conductance	3.26	0.77	1.0	4.7
Pre-Incorporation Activities – Importance	3.75	0.78	1.2	4.9
Post-Incorporation Activities – Actual conduct	4.0	0.81	1.43	5.0
Post-Incorporation Activities – Importance	4.54	0.54	2.28	5.0

Table 2a: Correlations Between Effectiveness Measures and Pre-Incorporation Activities Composite Variables

	IAs		IJVs	
	Actual Conduct	Importance	Actual Conduct	Importance
Effectiveness	0.33*	0.42**	0.54***	0.49***
Achieve Expected Growth	0.05	0.12	0.53***	0.56***
Parent Satisfaction with Operations	0.46***	0.51***	0.34**	0.33*
IJV Management Satisfaction with Operations	0.34**	0.36**	0.41**	0.42**
Customer Satisfisfaction with Performance	0.17	0.29*	0.51***	.33*

*=significant at the .10 level; **=significant at the .05 level; ***=significant at the .01 level;

Table 2b: Correlations Between Effectiveness Measures and Post-Incorporation Activities Composite Variables

	IAs		IJVs	
	Actual Conduct	Importance	Actual Conduct	Importance
Effectiveness	0.35**	0.36**	0.44***	0.48***
Achieve Expected Growth	0.15	0.098	0.44***	0.55***
Parent Satisfaction with Operations	0.19	0.33*	0.54***	0.49***
IJV Management Satisfaction with Operations	0.38**	0.48***	0.34**	0.41**
Customer Satisfisfaction with Performance	0.36**	0.22	0.15	0.14

*=significant at the .10 level; **=significant at the .05 level; ***=significant at the .01 level;

Table 3: Summary of the Regression Results Relating Pre- and Post-Incorporation Activities to IJV/IA Effectiveness

	<u>IJV Effectiveness</u>		<u>IA Effectiveness</u>	
	Actual Conduct of Activities	Importance of Activities	Actual Conduct of Activities	Importance of Activities
Age	0.31**	0.29*	-0.10	-0.005
Pre-Incorporation Activities	0.48***	0.41***	0.318*	0.42**
Post-Incorporation Activities	0.21	0.26*	0.288	0.12
Pre- and Post-Incorp. Activities Interaction	0.03	0.12	-0.016	-0.08
R-square	0.427	0.399	0.180	0.199

*=significant at the .10 level; **=significant at the .05 level; ***=significant at the .01 level;

APPENDIX 1

EQUITY INTERNATIONAL JOINT VENTURE (IJV) COMPOSITE VARIABLES

Pre-Incorporation Activities – Importance (Cronbach Alpha=0.67)

1. Examine financial risks involved with incorporation of an IJV in the host country
2. Examine host country tax and financing laws
3. Review the international reputation enjoyed by the potential partners
4. Investigate the trustworthiness of each potential partner with respect to fulfilling IJV obligations
5. Investigate the available financial resources of each potential partner
6. Study the industry culture of each potential partner

Pre-Incorporation Activities – Actual Conduct (Cronbach Alpha=0.61)

1. Analyze the potential partner stated corporate goals
2. Review the international reputation enjoyed by the potential partners
3. Investigate the available financial resources of each potential partner
4. Study the industry culture of each potential partner

Post-Incorporation Activities – Importance (Cronbach Alpha=0.78)

1. Develop a plan to coordinate IJV managerial activities with those of the parent firm
2. Develop open channels of communication between the IJV management and its employees
3. Grant autonomy to the IJV to formulate business strategy (within boundaries set forth in IJV legal incorporation agreements)
4. Grant autonomy to the IJV to implement business strategy (within boundaries set forth in IJV legal incorporation agreements)
5. Implement structural arrangements to protect each parent against potential opportunistic

behavior of another partner(s)

6. Allow top IJV managers to actively participate in most parents' meetings concerning the IJV

Post-Incorporation Activities – Actual Conduct (Cronbach Alpha=0.75)

1. Grant autonomy to the IJV to formulate business strategy (within boundaries set forth in IJV legal incorporation agreements)
2. Grant autonomy to the IJV to implement business strategy (within boundaries set forth in IJV legal incorporation agreements)
3. Implement structural arrangements to protect each parent against potential opportunistic behavior of another partner(s)
4. Allow top IJV managers to actively participate in most parents' meetings concerning the IJV

APPENDIX 2

INTERNATIONAL ACQUISITION (IA) COMPOSITE VARIABLES

Pre-Incorporation Activities – Importance (Cronbach Alpha=0.87)

1. Analysis of the cultural compatibility between the home country of the acquirer and the host country of the acquired firm
2. Survey the political attitudes, official and unofficial...
3. Investigation of the availability of financial resources in the host country
4. Examination of financial risks involved with international acquisitions in the host country
5. Review of the judicial system pertaining to the IAs in the host country
6. Analyze host country market potential
7. Search for similarities in management policies between the two firms
8. Examine the technological capabilities of the firm to be acquired
9. Investigate the trustworthiness of potential acquisition candidates
10. Analyze industry culture compatibility between the acquirer and the firm to be acquired

Pre-Incorporation Activities – Actual Conduct (Cronbach Alpha=0.76)

1. Analysis of the cultural compatibility between the home country of the acquirer and the host country of the acquired firm
2. Investigation of the availability of financial resources in the host country
3. Examination of financial risks involved with IAs in the host country
4. Examine the technological capabilities of the firm to be acquired
5. Analyze the compatibility between the organizational culture of the acquirer and the firm to be acquired
6. Analyze the compatibility of industry culture between the acquirer and the firm to be acquired

acquired

Post-Incorporation Activities – Importance (Cronbach Alpha=0.77)

1. Encourage cooperation among employees and units of the acquirer and the acquired firm
2. Check the extent of adherence to activities detailed in the acquisition document
3. Grant autonomy to the acquired firm to formulate business strategy
4. Grant autonomy to the acquired firm to formulate business plan in a limited number of functional areas
5. Ensure that the acquired firm develops business strategies consistent with those of the acquirer
6. Ensure that top acquired firm managers participate in most acquirer firm meetings regarding the acquired firm
7. Provide products/services to the customers with higher quality than the products and services developed by your competitors in the past years

Post-Incorporation Activities – Actual Conduct (Cronbach Alpha=0.85)

1. Grant autonomy to the acquired firm to implement business strategy
2. Grant autonomy to the acquired firm to formulate business strategy
3. Grant autonomy to the acquired firm to formulate business plans in a limited number of functional areas
4. Ensure that the acquired firm develops business strategies consistent with those of the acquirer
5. Build long-term relationships with customers
6. Provide products/services to customers with higher quality than the products and services developed by your competitors in the past years