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Abstract

Using data from a web-survey of Danish partner firms engaged in international strategic alliances, this study explores the factors that drive alliance formation between two specific firms across national borders. The relative importance of a set of partner selection criteria is identified and related to extant theory. By means of exploratory factor analysis, a more parsimonious set of selection criteria is provided and their relationships to a number of characteristics of the sample – prior international alliance experience, administrative governance form, nationality of foreign partner and motives for alliance formation analyzed. The findings indicate that partner choice is a function of strategic motivation and varies significantly with governance mode and partner nationality.

Keywords: International strategic alliance, Partner selection, Strategic motivation

INTRODUCTION AND PURPOSE OF THIS STUDY

Sparked by a dramatic increase in the frequency of inter-firm collaboration, across organizational, industry and national borders, the phenomenon of international strategic alliances has received growing interest in the literature during the last several years. The increase in international inter-firm collaboration has been attributed to increased globalization and rapid changes in competitive environments (Harrigan, 1986; Glaister & Buckley, 1994). Prior research on alliance formation has identified a host of motives for forming these strategic collaborations explained from a variety of theoretical perspectives, including transaction cost (Williamson, 1985; Hennart, 1991), resource dependency (Pfeffer & Nowak, 1976), organizational learning (Hamel, 1991; Grant, 1996), strategic positioning (Porter & Fuller, 1986) and institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

The question of how and why firms select a certain partner for an alliance has, however, received less attention in the literature. Summarizing prior research on partner selection, Geringer (1991) notes that success has been limited in identifying the relative importance of the various selection criteria used by firms engaging in interfirm collaboration. Moreover, as Geringer (1991) points out in his analysis of alliances oriented toward developed countries, identification of variables that might explain why or how the importance of partner selection criteria can be expected to differ among alliances seems to be missing in the extant literature. In addition, the criteria used for selecting a specific partner seem to vary extensively depending on the specific strategic context of the venture and the parent firm, suggesting that the variables facing decision-makers in international strategic alliances should be included.

Despite this lack of clarity and solid empirical evidence, Geringer (1988, 1991) and others (e.g. Glaister, 1996) maintain that partner selection is an important variable in the formation and operation of alliances. Moreover, alliance performance is determined, in part, by the characteristics of the partner chosen and the mix of skills and resources this partner brings to the collaboration, combined with the overall strategic objectives of the venture. In addition, partner selection appears to be a distinct decision within the alliance formation process. Hence, it seems possible to identify and classify the selection criteria

employed as well as their relative importance. Building on prior research on partner selection, the main goals of this paper are thus:

1. To identify the relative importance of the partner selection criteria in the context of some of the factors facing the decision makers: prior international alliance experience, administrative governance form, nationality of foreign partner and the motive for alliance formation.
2. To provide a parsimonious set of partner selection criteria for the sample under investigation by means of exploratory factor analysis.
3. To formulate and test hypotheses about the relationship between partner selection criteria and the factors mentioned above.

Although the literature does provide some clue as to how a firm selects a particular partner for an alliance, less is known about this decision pertaining to international strategic alliances involving small and medium-sized firms.

The reminder of the paper is set out as follows. The next section offers a review of the relevant literature pertaining to partner selection in alliances and develops the hypotheses of the study. Following that is a discussion of the methodology used and the characteristics of the sample reported. The main part of the paper presents the results and discusses the implications of the empirical investigation. Building on the results, the concluding section offers suggestions for further conceptual developments and empirical analysis of international strategic alliances.

THEORY AND HYPOTHESES

The importance of partner selection in determining IJV performance has been well established in the literature, since it influences the availability and access to skills and resources for the venture (Killing, 1983; Harrigan, 1985). Early studies were concerned with selecting the 'right' or 'proper' partner (e.g. de Hoghton, 1966; Reynolds, 1979). Although most authors then and now seem to agree about the importance of partner selection, determining what constitutes the 'right' or 'proper' partner has proved rather difficult. Some researchers have linked partner selection to complementarity of skills or resources, however, few studies have attempted to identify which specific criteria predicts a good partner fit or the relative importance of these criteria.

It is widely assumed that firms establish joint ventures only when the perceived additional benefits from joint venturing outweigh expected extra costs (Beamish and Banks, 1987; Geringer, 1991). These additional benefits will accrue, however, only through the selection and retention of a partner that can provide skills, competencies, capabilities, and knowledge that assist the focal firm in accomplishing its strategic objectives (Buckley and Casson, 1988; Hamel, 1991). From this perspective, partner selection determines the right mix of resources of an IJV. Thus, partner selection is an important variable in the formation and operation of IJVs. The importance of partner selection to the success of the joint venture is even more significant in dynamic and complex markets, because the right partner can spur the joint venture's adaptability, improve the strategy-environment configuration for both parent firms and the joint venture, and reduce uncertainty in the venture's operation (Teagarden and Von Glinow, 1990; Zeira and Shenkar, 1990). Hence, partner selection involves the matching of knowledge related resources and capabilities, across firms, settings, and time.

Recent research on partner selection has focused on distinguishing different dimensions of partner selection criteria and determining their relative importance (Geringer, 1991; Glaister, 1996). For instance, Geringer (1988) classified partner selection criteria according to their relatedness to either 1) operational skills and resources which a venture requires for its competitive success (task-related criteria) or 2) the efficiency and effectiveness of the partner (partner-related criteria) and concluded that task-related complementarity is important for successful collaboration. Furthermore, Geringer (1991) suggested that management must identify which task-related capabilities that are necessary for future access and establish priorities among these. Although Geringer (1991) does succeed in establishing a useful typology, his paper only considers task-related criteria while recognizing the importance of both task-related and partner-related criteria in the partner selection process. Glaister (1996) used the typology suggested by Geringer (1991) for a sample of UK firms and established a relationship between task-related criteria and motivation for alliance formation. Other scholars advocate factors concerning cultural (both corporate and national), strategic, organizational, and financial traits of the partners (Yan and Luo, 2001), however, the extant literature has failed to identify and agree on a comprehensive list of the criteria

used by firms for selecting partners for IJVs, reflecting the complexity and dynamism of the social and strategic context in which these IJVs and firms are embedded. This view is supported by Geringer (1991: 46), who suggested that 'the relative importance of partner selection criteria may be determined, on a contingency basis, by the variables associated with the strategic context of the IJV and the parent firm'.

Except for very few studies, the literature gives little *a priori* indication of what to expect in terms of the relative importance of different criteria for partner selection. Glaister (1996), in his study of alliances between UK firms and Western European firms, found little variation among the top four task-related criteria for EJVs and NEJVs and both had knowledge of local market as top ranked task-related selection criteria. For partner-related selection criteria, his study also showed great similarity among the top six criteria for EJVs and NEJVs, however, with trust between top management teams ranked one for EJVs and reputation ranked one for NEJVs. Hitt *et al*. (2000) reported a difference between emerging market firms and developed market firms and found that emerging market firms emphasized financial assets and technological capabilities more than developed market firms, whereas developed market firms placed more importance on access to unique competencies and local market knowledge. Hence, although prior research helps shed light on the relative importance of partner selection criteria in specific contexts (contractual form, motivation and type of market) it provides only limited evidence as to how these criteria may differ with key characteristics of the sample. Hence this study seeks to identify the main criteria used when selecting a foreign partner while taking into account the underlying characteristics of the sample. Based on prior research, the key characteristics used in this study as contingency variables have been identified as prior international alliance experience, administrative governance form of the alliance, nationality of foreign partner and motivation for alliance formation.

Prior international alliance experience

International alliance experience is accumulated from prior engagements in international strategic alliances. When selecting a partner for an international strategic alliance, prior experience with international collaboration on the part of the focal firm may influence the relative importance of the selection criteria. For instance, firms with no

prior experience from prior international alliances may favor a partner with international experience, favorable reputation and ability to negotiate with foreign governments. In contrast, firms with experience in international strategic alliance activities may place more value on a partner with potential for development of new technology/knowledge and learning. In similar fashion, Johanson and Vahlne (1977), in their highly celebrated internationalization process (IP) model, suggest a relationship between international experience and foreign investment behavior and stress that the present state of international experience is one important factor in explaining subsequent internationalization. The IP model furthermore assumes lack of knowledge to be an obstacle to international operation and that international investment decisions are incremental. Alliances are often viewed (from resource-based and organizational learning perspectives) as vehicles to acquire knowledge and learn new skills (Mothe & Quelin, 1998) and the experience gained from prior international alliances may influence subsequent international strategic decisions. Hence, as a contingency variable, prior international alliance experience may influence the criteria for partner selection:

Hypothesis 1: The relative importance of criteria for partner selection in international strategic alliances will differ with prior international alliance experience.

Administrative governance form of the alliance

As noted by several authors (Geringer, 1991; Saxton, 1997; Gulati, 1995), the administrative governance form of a collaborative arrangement may testify as to the intent of the partner companies and hence have an impact on partner selection criteria as well as performance. The underlying assumption is that there is a correlation between alliance form and resource commitment since EJVs typically involve considerable financial investment and managerial time and hence are assumed to represent a longer-term commitment than NEJVs. The distinction between a non-equity joint venture (NEJV) and an equity joint venture (EJV) is made in order to emphasize the difference in level of integration and degree of control, which may have an impact on the selection criteria utilized to select a partner for such alliances. A non-equity joint venture (NEJV)

is an agreement between partners to cooperate in some way without creating a new, joined entity. In contrast, an equity joint venture (EJV) involves the establishment of a newly incorporated entity in which each of the partners has an equity position. Partners involved in an EJV normally expect representation on the board of directors and a proportional share of dividends as compensation (Contractor and Lorange, 1988). Most empirical studies of alliances deal with one type of alliance within a single industry. Although studying multiple alliance types across industries arguably increases unobserved heterogeneity, I argue that the distinction between EJVs and NEJVs should not be left out when investigating partner selection criteria for alliances, since firms forming EJVs may have used different selection criteria than firms forming NEJVs.

Hypothesis 2: The relative importance of criteria for partner selection in international strategic alliances will differ with the governance form of the alliance.

Nationality of foreign partner

The literature on international strategic alliances and joint ventures has been dominated by studies of alliances between firms from two countries (e.g. China and the U.S.). More recent studies have grouped firms into cultural or financial regions (e.g. Glaister & Buckley, 1996; Hitt *et al*., 2000), however, very few studies have looked at the specific nationality of the partner selected for the joint venture.

While Hitt *et al*. (2000) established the importance of cultural context in their analysis of partner selection in emerging and developed markets, their study provides limited insight into the impact of particular nationalities on partner selection. The findings that developed market firms attempt to leverage their resources to gain competitive advantage by searching for partners with unique competencies and local market knowledge and access is hardly surprising given the sample countries (Canada, France and the U.S.). Similarly, the findings that emerging market firms are looking for partner firms with financial capabilities seems somewhat biased by the fact that these firms were from transitional economies (Poland and Romania) and Mexico, which all share a lack of financial stability and infrastructure.

Glaister and Buckley (1996) focused on Western Europe, U.S. and Japan in their study of strategic motives for international strategic alliance formation, however, they found no significant difference according to nationality of partner. This suggests that the underlying motivation for alliance formation is not directly related to partner nationality, however, perhaps the selection of a particular partner is contingent upon the nationality of the foreign partner, since partner choice presumably hinges on the particular characteristics required from the partner. To the extent that firms may perceive partners from particular foreign nationalities to provide access to specific markets or technology, these partners will be chosen in preference to potential partners of a different nationality. Thus, selecting a particular partner for an international strategic alliance can be expected to differ according to the nationality of the foreign partner:

Hypothesis 3: The relative importance of criteria for partner selection in international strategic alliances will differ with the nationality of the foreign partner.

Motive for alliance formation

The literature on motivation for alliance formation is rich yet fragmented. This literature has produced an impressive list of reasons for why organizations enter into an alliance, including categorizations such as "scale alliances", in which partners contribute similar capabilities in an attempt to maximize the utilization of similar assets and "link alliances", where partners contribute different capabilities in an effort to learn from each other (Dussauge *et al.*, 2000). Fundamentally, alliances are motivated by the desire to achieve some benefits of a global strategy or the need to compensate for the absence of- or weakness in a (perceived) needed asset or competency. Specific motives include economies of scale, sharing R&D costs, conforming to government policies and facilitating international expansion (for a thorough review of motives see Glaister & Buckley, 1996). The specific motive for alliance formation is likely to have an impact on the partner selection process as firms are likely to value differently the capabilities of a potential partner based on this initial motive. For instance, if the main motive for forming an alliance is to reduce costs by expanding output (economies of scale), selection criteria associated with access to materials and natural resources and (cheap) labor may be most

important. Conversely, if the main motivation for alliance formation is international expansion or market entry, selection criteria pertaining to knowledge about the local, foreign market, such as local market knowledge and/or regulatory knowledge, may be valued higher. The relationship between motivation for alliance formation and selection criteria is supported by Glaister (1996) in his study of UK-Western European alliances, where he reports a high level of consistency between the main task-related selection criteria and the leading strategic movies for alliance formation. This leads to the fourth hypothesis:

Hypothesis 4: The relative importance of criteria for partner selection in international strategic alliances will differ with the relative importance of strategic motives for alliance formation.

METHODS

Data collection

This study involves Danish partner firms in international strategic alliances with partner firms from a variety of countries from Europe, North America, South America and Asia. All alliances were still in existence up until 1995, however, the respondents were asked to select the most recent alliance when filling out the web-based survey. Since no publicly available database of Danish firms engaging in international strategic alliances exist, a list of potential firms was generated from the KOB database[1]. Through a targeted reduction of the initial database, consisting of all Danish firms and organizations, both public and private, I created a target sample base of 1851 private firms[2]. The reduction criteria were based on interviews with firms engaged in international strategic

[1] The KOB database is a comprehensive database of all registered Danish firms. The database is updated continuously by Kobmandstandens OplysningsBureau A/S. KOB is Denmark's largest credit agency and data for the database comes from a variety of sources, including TDC (Teledenmark), CVR (Danish state register of firms) and each local municipality. In addition, KOB conducts more than 200,000 interviews per year and co-operate with the largest international credit agencies, who are all approved by Berne Union and members of the ICIA. KOB is a member of FEBIS, BIGNet and is connected with Eurogate. Additional information can be found at www.kob.dk.

[2] The original reduction resulted in 1859 firms. Although the KOB database is updated regularly I cross-checked with other sources and this led to omission of 8 firms due to miscoding (i.e. out of business or parent firm not Danish).

alliances (of which several had fewer than 30 employees), press announcements and research on how the database is constructed. As it was impossible to determine *a priori* which firms engage in international strategic alliances and since my definition of international strategic alliances is broad, I decided to survey a rather large sample of private, Danish firms, with at least 20 employees and a high degree of internationalization (evidenced by activities in more than one foreign country). Consequently, the sample consisted of a large subset of firms for whom the survey was not relevant. However, the idea behind this sampling method was to capture as many of the firms engaged in international strategic alliances as possible. As mentioned later, the first question on the survey was designed to identify membership of the desired sample (i.e. "has your firm engaged in an international strategic alliance – as defined..). Respondents were encouraged to log on to the web page even if their firm did not engage in an international strategic alliance as defined, since this would help identify the actual size of the sample. If respondents answered "No" to the first question regarding their involvement in an international strategic alliance, they only had to fill out one more question regarding preferred survey methodology for future questionnaires.

While the KOB database provides some financial indicators and industry information, it is less useful when attempting to identify motivational factors and critical sociological dimensions pertaining to the management of these alliances. As the database is merely capturing firm specific information, no indication of alliance activity and/or management is reported. Hence, in order to obtain the requisite level of detail on strategic issues pertaining to partner selection it was necessary to approach the Danish partners directly. To generate data from a fairly large sample and given time and cost restraints it was decided to administer a web-based survey. Since target firms were engaged in international activities and 91% (Statistics Denmark, 2001) of private Danish enterprises with more than 10 employees are reported to have access to the Internet, the survey was conducted in English through a secure web page. A preliminary test indicated that language was not a significant barrier to target respondents as well as the convenience and time reducing aspects of a web survey were highly appreciated.

Instrument

The questionnaire was compiled from several sources. First of all, a series of semi-structured interviews with key managers of two Danish partner firms were conducted over a period of 4 months in order to identify relevant issues pertaining to the formation and management of international strategic alliances. One firm was at the negotiation stage when the first set of interviews was conducted; the other had been engaged in the alliance for several years, yielding a somewhat broad perspective of relevant issues. Secondly, a comprehensive literature review of strategic alliance and international joint venture literature yielded an impressive list of questions deemed relevant. On the basis of the semi-structured interviews and the literature review a suitable questionnaire was devised and published on a web page. The questionnaire and web design was tested for language and design issues by MBA and Ph.D. students at a large West Coast (U.S.) research institution and for content by faculty at both a large West Coast (U.S.) research institution and a Danish Business School. Finally, the survey was tested on site at the two Danish partner firms. This final stage allowed the researcher to observe the behavior of the respondents as they filled out the web survey and confusions, both in terms of content and design, were eliminated[3]. This final test indicated that the questionnaire was an appropriate instrument to obtain the data required.

From prior literature and the discussion based on the semi-structured interviews with key managers, a list of 23 selection criteria was generated. The 23 selection criteria were separated into two categories according to the typology (task-related versus partner-related) suggested by Geringer (1991) and discussed above. The questions relating to selection variables were *ex post* measures of manager's perceptions of the relative value of the criteria at the time of partner selection. Hence, the questions associated with task-related criteria were formulated in terms of the relative importance of *access* to certain resources when forming the alliance. With respect to partner-related criteria, respondents were asked about the relative importance of certain *skills* possessed by the partner when selecting the partner. Responses to both sets of questions were assessed using 7-point

[3] I am indebted to Dr. Don Dillman for his patience and help in the early stages of designing the web survey.

Likert-type scales, ranging from 1 = 'Low level of importance' to 7 = 'High level of importance'. Appendix A shows all items from the original survey instrument.

Web Survey and Reliability

In order to increase reliability and response rate a formal letter was sent out to the managing director of all firms in the sample. Given the relatively small size of many of the firms in the sample and lack of an identified alliance manager in the database, letters were sent directly to the managing director with the hope that he would forward it to a potential alliance manager. The letter served two functions: to direct the target person to the web site and to ensure authenticity of the survey. The letter furthermore indicated a password (an 8 digit tax filing number that respondents would be familiar with) to be used in accessing the survey thereby limiting access only to members of the sample. Since the respondents were managing directors the length of the questionnaire was held at a minimum and the web page designed to make responding easy (through the use of drop-down menus, radio buttons and check-boxes) and quick. Only few questions were open-ended and most responses were assessed using 7-point Likert-type scales. Prior research indicates that ordinal classification of perception is a more realistic task for respondents than use of interval or ratio measures (Geringer, 1991). Likert-type scales appeared to be more feasible than potentially more precise yet more complex scaling methods, especially given the limited amount of time the respondents were likely to devote to the questionnaire. In order to be able to discriminate and capture some of the complexity in the responses a 7-point, rather than a five-point or three-point, Likert scale was chosen. In order to further increase reliability and reduce survey error, particular attention was paid to principles for designing the web questionnaire in such a way as to reduce different types of error[4].

A total of 1851 letters were sent out in the spring of 2001. In exchange for their participation in the study and to provide motivation and accurate responses, the respondents were assured of anonymity, security in data collection method (i.e. password protection and the host server belonged to a renowned university) and were promised a summary report of the findings. After two reminders 362 firms had filled out the online

[4] See Dillman *et al.* (1998) for a discussion of error-reducing principles for designing web questionnaires.

survey of which 119 were usable (i.e. they had indicated engagement in an international strategic alliance). There were no missing data since the online survey was designed in a way that did not allow respondents to submit without filling out all relevant questions, however, all questions included a "not in a position to answer" option in order to allow respondents an "out"[5]. The initial response rate was about 20 per cent, however, due to the sampling technique a more realistic response rate was derived by reducing the sample by the number of non-respondents for whom the survey was not relevant. Hence, after the percent-wise reduction, the net response rate was 33 per cent (120 of 364).

Non-response Analysis

The main problem with mailed, as well as web-based, surveys is the possibility of bias resulting from low response rates (Fox, Robinson & Boardley, 1998). In order to test for possible non-response bias, respondents and non-respondents were compared in terms of size and turnover. No statistically significant differences were found. Another method for testing for non-response bias is to compare early respondents to late respondents, since it has been argued that late respondents, especially after repeated follow-ups, are similar in composition to non-respondents (Armstrong & Overton, 1977; Churchill, 1991). Although time consuming, however, it seems more appropriate to contact non-respondents in order to establish the reason for not responding. Hence, following the survey, I contacted 50 randomly selected non-respondents. There was no statistically significant difference between this sample and the other non-respondents or this sample and the respondents in terms of overall composition (size and turnover). Of the 50 firms contacted, 42 (84%) did not engage in international alliance activity in the period specified in the survey. Of the 8 (16%) that did indicate international alliance activity, 50 percent (4) said they had no time to fill out the survey, 37.5 percent (3) would not participate due to company policies and the reminding 12.5 percent (1) filled out the survey after several phone calls. These findings are consistent with the respondents to the survey of which 65.9 per cent (243) indicated no alliance activities as specified in the survey. Furthermore, 5 firms contacted the author and gave "company policies" as reason for not responding, whereas representatives from 2 firms took the time to contact the

[5] "Not in a position to answer" was coded as missing data during data analyses.

author and tell him that they did not have time to fill out the survey. The results suggest that non-response bias does not pose a problem for the interpretation and generalizability of the findings of the study[6]. Consequently, the sample can be considered representative of the target population.

Sample Characteristics

The sample is composed of 120 international strategic alliances of which 48 are equity joint ventures (EJVs) and 70 are non-equity joint ventures (NEJVs). Two respondents did not indicate alliance form. The time dimension of the study runs from 1985 to 2001 with the majority of the alliances (94.2%) formed in the period 1995-2001. Due to the dyadic nature of the study, where the alliance had more than one foreign partner, the Danish respondent was asked to identify the 'most important' foreign partner. As a result, the data set comprises 73 alliances (60.8% of total) with partners in Western Europe, predominantly with EU members (94.5%); 15 alliances (16.7% of total) with North American, mostly United States, partners; and 10 alliances (8.3% of total) with Asian, primarily Indian and Chinese, partners. The rest of the alliances were formed with partners from Australia, Eastern Europe, the Baltic States or South America. Table 1 below shows a breakdown of partner nationality.

[6] It is important to note that although the non-response bias test did not show significant differences in terms of the sample characteristics systematic variation in the answers provided may exist. It is possible that only firms involved in successful alliances filled out the survey. Similarly, it is possible that firms utilizing a certain partner selection strategy were more likely to respond to the survey than other firms, however, given the relative large sample involving a variety of industries and types of alliances, the risk of this type of bias seems rather low.

Table 1: Nationality of Partner Firm

Nationality	**# of cases**
Sweden	19
Norway	4
Finland	9
Poland	7
Czech Republic	1
Germany	21
U.S.A	15
China	3
Australia	2
U.K.	3
Netherlands	6
Belgium	3
Luxemburg	1
France	4
Spain	2
Greece	1
Brazil	1
Argentina	1
Canada	3
Mexico	2
Peru	1
Columbia	1
Latvia	2
Lithuania	1
India	6
Bangladesh	1
TOTAL	**120**
Western Europe	73
Eastern Europe (including Baltic States)	11
European Union	69
Scandinavia	32
Asia	10
North America	20
South America	4

In terms of degree of international experience, the Danish firms were asked about the year of their first export, first foreign subsidiary and first international strategic alliance. 98 firms (81.7%) responded to the question about export experience with the lowest number of years (reported year subtracted from 2001) being 2 and the highest being 113.

The mean and standard deviation for export experience is 23.41 and 18.21. 69 firms (57.5%) reported on year of establishment of first foreign subsidiary with the lowest number of years (reported year subtracted from 2001) being 3 and the highest being 97. The mean and standard deviation for establishment of first foreign subsidiary is 16.81 and 16.75. 91 firms (75.8%) reported on international strategic alliance experience ranging from 0 years to 89 years of experience (reported year subtracted from 2001). The mean and standard deviation for international strategic alliance experience is 10.57 and 12.67. Prior international strategic alliance experience was coded as a dichotomous variable (0 or 1) according to whether or not the firm had prior international alliance experience. This was found by comparing the year of the first international alliance to the year of the alliance used to fill out the survey. 56 firms had prior international alliance experience and 34 had no prior international alliance experience. For the reminding 30 firms it could not be determined whether or not they had prior international strategic alliance experience due to lack of information.

The motivational factors of the focal firms were reduced by the means of exploratory factor analysis from its original list of 13 motives. The strategic motives for alliance formation represented a number of overlapping perspectives and the result of the factor analysis produced 5 underlying factors. These factors make good conceptual sense and explained a total of 70.1 per cent of the observed variation. Table 2 below shows the result of the exploratory factor analysis and a short interpretation of the factors.

Statistical analysis

Due to the relatively large sample size and the reasonable assumption that the sample is from a close to normal distribution, I decided to use the differences in means of the importance of the selection criteria as basis for testing H1-H3 and two sample *t*-tests or Anova were conducted as appropriate. Multiple regression was used to test the predicted relationship between motivation for alliance formation and partner selection (H4).

Table 2: Factors of strategic motivation for alliance formation

Factors	Factor loads	Eigenvalue	% Variance explained	Cumulative per cent	Interpretation
Factor 1: Innovation		2.93	22.6	22.6	*Motive related to innovation and commercialization of innovation*
Sharing R&D costs	0.81				
Develop new technology	0.79				
Product diversification	0.79				
Payback on investment	0.64				
Factor 2: Market expansion		1.92	14.8	37.4	*Motive reflects inter-national market expansion not related to resource specialization*
Economies of scale	-0.78				
Market penetration/expansion	0.73				
International expansion	0.67				
Factor 3: Market defense		1.55	11.9	49.3	*Motive reflect intend to defend existing market position by means not related to risk reduction*
Maintain position in existing market	0.77				
Spreading risk of an investment	-0.75				
Factor 4: Technology transfer		1.48	11.3	60.6	*Motive related to transfer of existing technology not related to vertical ties*
Alliance with supplier/ distribution channel	-0.79				
Exchange existing technology	0.63				
Factor 5: Market power		1.24	9.5	70.1	*Motive reflects intend to gain market power while conforming to government regulations*
Alliance with competitor to reduce competition	0.89				
Alliance to conform to government policy	0.57				

Extraction method: Principal component factor analysis with varimax rotation.
K-M-O measure of sampling adequacy = .561, Bartlett's Test of Sphericity: 401.249: $p < .000$

RESULTS

Ranking

As mentioned earlier, the partner selection criteria were separated on the survey instrument according to the theoretical distinction suggested by Geringer (1991) in terms of relatedness to either task or partner. The rank order of selection criteria within each group for the sample, based on the mean measure of the importance of the criteria, is shown in table 3 and table 4. Since a seven-point Likert type scale was used, the midpoint of the scale for each criterion (4) was used as comparison. The results reported in table 3 below show that for the full sample, the midpoint is exceeded by the first three task-related criteria: 'access to local market knowledge' (4.75), 'access to links with buyers/suppliers' (4.22), and 'access to distribution channels' (4.14). Other relatively highly ranked criteria are 'access to local cultural knowledge' (3.83), 'access to product-specific knowledge' (3.77), and 'access to local regulatory knowledge' (3.51). Hence, for the sample under investigation, it seems clear that task-related selection criteria associated with knowledge related to local market development are of most importance. The reminding task-related partner selection criteria display various concerns with access to resources: financial as well as technological and human. Of these criteria, 'access to technology' was ranked the highest (7) and 'access to labor' the lowest (11).

Table 3: Task-related partner selection criteria for Danish firms involved in international joint ventures ranked by mean measure of importance.

Criterion:	**Rank**	**Mean**	**SD**
Access to local market knowledge	1	4.75	2.03
Access to links with major suppliers/buyers	2	4.22	2.05
Access to distribution channels	3	4.14	2.12
Access to local cultural knowledge	4	3.83	2.02
Access to product-specific knowledge	5	3.77	2.07
Access to local regulatory knowledge	6	3.51	2.15
Access to technology	7	3.45	2.24
Access to capital	8	3.29	2.14
Access to materials/natural resources	9	3.16	2.21
Access to production knowledge	10	3.06	2.02
Access to labor	11	2.88	2.08

N=120.
The mean is the average on a scale from 1= 'of no importance' to 7= 'of major importance'.
SD= standard deviation.

Table 4: Partner-related partner selection criteria for Danish firms involved in international joint ventures ranked by mean measure of importance.

Criterion:	**Rank**	**Mean**	**SD**
Trust between top management teams	1	5.60	1.26
Relatedness of partner business	2	5.26	1.49
Partner reputation	3	5.23	1.54
Partner financial status	4	4.99	1.51
Partner firm size	5	4.86	1.31
Degree of favorable past experience with partner	6	4.79	1.83
Access to marketing/distribution systems	7	4.52	2.20
Partner international experience	8	4.19	2.10
Experience in technology application	9	3.97	1.88
Potential for new technology development	10	3.78	2.04
Access to technology/knowledge	11	3.70	1.95
Partner ability to negotiate with local government	12	3.25	1.86

N=120.
The mean is the average on a scale from 1= 'of no importance' to 7= 'of major importance'.
SD= standard deviation.

Table 4 above reports the ranking of importance of partner-related selection criteria for the sample. As indicated by the mean scores, eight criteria exceed the midpoint measure. The top ranked criteria is 'trust between top management teams' (5.60) closely followed by 'relatedness of partner business' (5.26) and 'partner reputation' (5.23). The next three are 'partner financial status' (4.99), 'partner firm size' (4.86), and 'degree of favorable past experience with partner' (4.79). The two last criteria exceeding the midpoint measure are 'access to marketing/distribution systems' (4.52) and 'partner international experience' (4.19). All of these partner-related criteria indicate the importance of trust and confidence in the foreign partners abilities to assist in market development, which seems to support the findings of the task-related selection criteria. Firms depending on an international partner for access to a foreign market place great importance in the level of trust and legitimacy of the partner. The financial status, the reputation and the size of the partner firm are all indications of legitimacy and the relatedness of the business of the partner suggests that Danish firms are seeking to leverage their existing capabilities by collaborating with a complementary partner, confirming the widely accepted importance of complementary skills (cf. Harrigan, 1985) and absorptive capacity (Cohen & Levinthal, 1990) – that is firms will seek to collaborate with partners that possess skills and resources that they need but do not have themselves,

provided these skills and resources can be recognized and assimilated (necessitating a need for relatedness) into the focal firm. This is further supported by the relatively low importance of criteria related to 'potential for new knowledge development' (ranked 10) and 'access to Technology/ knowledge' (ranked 11). The least important criterion is 'partner ability to negotiate with local government' (ranked 12), which confirms Glaister's (1996) findings of low importance of this criterion in his study of UK firms partnering with firms from developed markets. In contrast, Tatoglu and Glaister (2000) found partner ability to negotiate with host government to be very important in their study of Western firms partnering with Turkish firms, attributing this to the emerging economy status of Turkey. My sample includes IJVs with firms from both developing and developed countries, however, the finding can perhaps be explained by subjectivity related to the criterion. It may be hard to accurately access a foreign partner's ability to negotiate with the local government, however, the importance of local regulatory knowledge (which depending on industry may be relevant in both developing and developed countries) seems apparent as indicated in the discussion of task-related criteria above.

Although Geringer's (1991) typology of task-related and partner-related selection criteria makes sense theoretically (and perhaps even intuitively), the above discussion indicates that these criteria represent overlapping perspectives. Hence, recognizing the problem of sustaining this theoretical distinction in practice, I followed Glaister (1996) and collapsed the task-related and partner-related criteria and identified (by means of exploratory factor analysis) a number of underlying factors explaining the majority of variation in the data set. 7 distinct, non-overlapping factors emerged, explaining a total of 75.6 % of the observed variation. Table 5 reports the result of the factor analysis of partner selection criteria.

Table 5: Factors of Partner Selection Criteria

Factors	Factor loads	Eigenvalue	% Variance explained	Cumulative per cent	Interpretation
Factor 1: Technological expertise		4.04	17.5	17.5	*Selection based on partner's ability to offer product-specific technology*
(T) Access to technology	0.84				
(P) Experience in tech. application	0.84				
(P) Potential for new tech. development	0.83				
(P) Access to tech/knowledge	0.80				
(T) Access to product-specific knowledge	0.69				
Factor 2: Marketing system and status		3.11	13.6	31.1	*Selection based on partner's embeddedness in marketing/ distribution systems and overall status and legitimacy*
(T) Access to distribution channels	0.87				
(P) Access to marketing/distribution system	0.82				
(P) Partner financial status	0.61				
(P) Partner reputation	0.60				
Factor 3: Local operation expertise		2.63	11.4	42.5	*Selection based on partner's ability to offer local operational knowledge*
(T) Access to local cultural knowledge	0.92				
(T) Access to local regulatory knowledge	0.88				
(T) Access to local market knowledge	0.63				
Factor 4: Competitive strength		2.01	8.7	51.2	*Selection based on partner's ability to offer competitive capabilities in terms of size access to capital and international experience*
(P) Partner firm size	0.82				
(T) Access to capital	0.77				
(P) Partner international experience	0.56				
Factor 5: Production efficiency		1.92	8.3	59.5	*Selection based on partner's ability to offer access to efficiency enhancing production input*
(T) Access to materials/natural resources	0.77				
(T) Access to production knowledge	0.68				
(T) Access to links with major suppliers	0.46				

Table 5 (Continued): Factors of Partner Selection Criteria

Factors	Factor loads	Eigenvalue	% Variance explained	Cumulative per cent	Interpretation
Factor 6: Positive prior experience		1.89	8.2	67.7	*Selection based on prior experience with partner and trust between top managers*
(P) Past experience	0.80				
(P) Trust between top management	0.69				
Factor 7: Labor negotiation expertise		1.81	7.9	75.6	*Selection based on partner's ability to negotiate labor-related issues with local government in unrelated business*
(P) Partner ability to negotiate with gov.	0.79				
(T) Access to labor	0.67				
(P) Relatedness of partner business	-0.57				

Extraction method: Principal component factor analysis with varimax rotation.
K-M-O measure of sampling adequacy = .479, Bartlett's Test of Sphericity: 1499.977: $p < .000$.
(T) indicates task-related criteria; (P) indicates partner-related criteria.

Test of hypotheses

In order to test the first three hypotheses developed above, the relevant sample characteristics and the identified selection factors were compared in terms of differences in mean. Although the task-related criteria and the partner-related criteria are treated as factors, I keep them separate in terms of mean differences and ranking when testing the hypotheses. Table 6 and table 7 show the results of the parametric tests. The following sections will discuss the results in terms of each hypothesized relationship.

Partner selection and prior international alliance experience

The first hypothesis predicted that the relative importance of selection criteria in international strategic alliances would differ with the relative level of international experience. Table 6 indicates little difference in ranking of the task-related selection criteria between the sub-sample of EXP and the full sample. For NEXP, however, access to product-specific knowledge and local regulatory knowledge make the top four ranking. Other notable differences in rank order between the NEXP sub-sample and the full sample include access to links with suppliers (dropped from 2 to 11 in ranking), access to materials/natural resources (went from 10 to 6 in ranking) and access to technology (dropped from 7 to 10 in ranking). Although the top ranked task-related selection criterion (access to local market knowledge) stays the same, there seems to be some evidence that the relative importance of the task-related selection criteria varies with prior international alliance experience, lending some initial support to hypothesis 1.

Further testing of H1 for each of the 11 task-related selection criteria also offers some support for H1 since access to technology, access to local cultural knowledge, access to capital and access to links with major suppliers all were found to differ with prior international alliance experience. Table 6 shows that for all four task-related selection criteria the mean score of importance is higher and significantly different for EXP compared to NEXP. Of particular interest is the difference in the Access to technology criterion and the Access to links with major suppliers criterion, since this seems to indicate that firms with prior international alliance experience place more importance on technological capabilities and the structural embeddedness of the partner. This, in turn, lends support to both the internationalization process model (Johanson & Vahlne, 1977)

Table 6: Partner selection by Danish firms forming ISAs: prior international alliance experience and governance form

	Prior ISA experience					Governance form				
Selection criteria	*Group*[a]	*Rank*[c]	*Mean*	*SD*	*t-value*	*Group*[b]	*Rank*	*Mean*	*SD*	*t-value*
Technological expertise	EXP		0.16	1.10		EJV		-0.25	1.00	
	NEXP		-0.30	0.90	2.09**	NEJV		0.17	0.97	-2.23**
(T) Access to technology	EXP	5	3.95	2.28		EJV	10	3.14	2.18	
	NEXP	10=	2.68	1.85	2.89***	NEJV	5	3.66	2.27	1.26
(P) Experience in technology application	EXP	9	4.20	1.96		EJV	10	3.45	1.54	
	NEXP	9=	3.56	1.80	1.55	NEJV	9	4.31	2.02	2.63***
(P) Potential for new technology development	EXP	10	4.09	2.32		EJV	9	3.53	2.19	
	NEXP	11	3.38	1.83	1.59	NEJV	11	3.94	1.92	1.04
(P) Access to technology/ knowledge	EXP	11	4.07	2.00		EJV	12	3.19	1.72	
	NEXP	12	3.03	1.75	2.55**	NEJV	10	4.04	2.04	2.45**
(T) Access to product-specific knowledge	EXP	7=	3.71	2.09		EJV	9	3.18	1.83	
	NEXP	3	3.47	1.81	0.58	NEJV	3	4.17	2.14	2.70***
Marketing system and status	EXP		0.09	0.98		EJV		-0.19	1.05	
	NEXP		-0.18	0.91	1.27	NEJV		0.13	0.95	-1.69*
(T) Access to distribution channels	EXP	4	4.16	2.27		EJV	3	4.35	1.73	
	NEXP	2	4.03	1.82	0.30	NEJV	4	4.00	2.36	-0.93
(P) Access to marketing/ distribution system	EXP	7	4.54	2.22		EJV	5	4.63	1.90	
	NEXP	8	4.32	2.09	0.45	NEJV	8	4.44	2.40	-0.47
(P) Partner financial status	EXP	3	5.18	1.47		EJV	7	4.49	1.53	
	NEXP	6	4.68	1.41	1.62	NEJV	4	5.35	1.39	3.12***

(P) Partner reputation	EXP	2	5.48	1.44		EJV	6	4.59	1.67	
	NEXP	4	5.03	1.62	1.34	NEJV	1	5.68	1.29	3.83***
Local operation expertise	EXP		0.20	0.96		EJV		0.33	0.80	
	NEXP		-0.15	0.85	1.77*	NEJV		-0.23	1.06	3.27***
(T) Access to local cultural knowledge	EXP	3	4.45	1.77		EJV	2	4.73	1.58	
	NEXP	5	3.27	1.91	2.88***	NEJV	6	3.21	2.06	-4.51***
(T) Access to local regulatory knowledge	EXP	7=	3.71	2.22		EJV	4	4.10	1.84	
	NEXP	4	3.36	1.85	0.80	NEJV	9	3.11	2.26	-2.63***
(T) Access to local market knowledge	EXP	1	4.96	2.14		EJV	1	5.00	1.71	
	NEXP	1	4.70	1.57	0.68	NEJV	1	4.59	2.22	-1.14
Competitive strength	EXP		0.20	1.01		EJV		-0.10	1.00	
	NEXP		-0.03	0.83	1.16	NEJV		0.07	1.00	-0.91
(P) Partner firm size	EXP	5	5.04	1.22		EJV	4	4.78	1.28	
	NEXP	5	4.76	1.08	1.10	NEJV	5	4.92	1.33	0.58
(T) Access to capital	EXP	6	3.75	2.20		EJV	7	3.43	1.85	
	NEXP	6=	3.00	1.83	1.75*	NEJV	7	3.20	2.33	-0.61
(P) Partner international experience	EXP	8	4.40	2.09		EJV	8	3.67	2.05	
	NEXP	7	4.55	1.97	-0.33	NEJV	6	4.57	2.08	2.31**
Production efficiency	EXP		0.14	1.02		EJV		0.02	0.93	
	NEXP		-0.40	0.76	2.78***	NEJV		-0.01	1.05	0.17
(T) Access to materials/ natural resources	EXP	10	3.20	2.13		EJV	5	3.82	2.21	
	NEXP	6=	3.00	2.05	0.44	NEJV	10	2.70	2.11	-2.77***

(T) Access to production knowledge	EXP	9	3.22	2.11		EJV	11	2.92	1.72	
	NEXP	9	2.76	1.62	1.16	NEJV	8	3.16	2.21	0.67
(T) Access to links with major suppliers	EXP	2	4.57	1.92		EJV	6	3.75	1.87	
	NEXP	11	2.67	1.53	5.15***	NEJV	2	4.55	2.12	2.15**
Positive prior experience	EXP		0.09	0.97		EJV		0.20	0.87	
	NEXP		0.37	0.71	-1.49	NEJV		-0.13	1.06	1.76*
(P) Favorable past association between partners	EXP	6	4.91	1.76		EJV	2	5.31	1.49	
	NEXP	3	5.25	1.67	-0.86	NEJV	7	4.45	1.96	-2.55**
(P) Trust between top management	EXP	1	5.72	1.20		EJV	1	5.65	1.17	
	NEXP	1	6.06	0.70	-1.67*	NEJV	2	5.57	1.34	-0.37
Labor negotiation expertise	EXP		0.06	0.99		EJV		0.14	1.02	
	NEXP		0.07	1.08	-0.04	NEJV		-0.10	0.98	1.23
(P) Partner ability to negotiate with government	EXP	12	3.02	1.84		EJV	11	3.32	1.94	
	NEXP	9=	3.56	1.98	-1.26	NEJV	12	3.19	1.82	-0.35
(T) Access to labor	EXP	11	3.16	2.18		EJV	8	3.19	1.94	
	NEXP	6=	3.00	2.09	0.35	NEJV	11	2.68	2.16	-1.35
(P) Relatedness of partner business	EXP	4	5.07	1.43		EJV	3	5.02	1.44	
	NEXP	2	5.35	1.35	-0.94	NEJV	3	5.43	1.51	1.51
N			EXP = 56; NEXP = 34					EJV = 48; NEJV = 70		

The mean for the factors is the mean of the factor scores; the mean of the individual selection criteria is the average on a scale of 1 to 7.
* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
(T) = Task-related criteria; (P) = Partner-related criteria.
[a] EXP = Prior international strategic alliance experience; NEXP = No prior international strategic alliance experience.
[b] EJV = Equity joint venture; NEJV = Non-equity joint venture.
[c] The task-related and partner-related criteria are listed according to factors, however, the ranking of means is kept separate for the two types of criteria.

and the organizational learning perspective of alliance formation. As firms gain more international experience they become more focused on exploiting technological complementarities and downstream value-chain activities in order to speed up international market penetration.

Testing H1 for the 12 partner-related selection criteria reveals less support for the hypothesized relationship. With few minor exceptions (most notably partner financial status and favorable past association) the rank order is generally consistent across the sub-samples as well as compared to the full sample. One interesting and predictable difference is that partner ability to negotiate with government becomes more important (from 12 to 9) when no prior international alliance experience is present. In terms of partner-related selection criteria, only Access to technology/knowledge and Trust between top management show significantly different mean scores. Although not particularly importance to either sub-sample, Access to technology/knowledge shows a higher mean score for EXP than NEXP, whereas Trust between top management remains the most important criterion for both sub-samples, however, slightly more for NEXP as would be predicted.

Testing of H1 for each of the seven factors provides moderate support for the hypothesis, since three of the seven factors differ significantly with prior international alliance experience (at the $p < 0.1$ level). Particularly Production efficiency and Technological expertise show a significant difference in the mean of the factors scores (at the $p < 0.05$ level or better), with the mean factor score of both being significantly higher for firms with prior international alliance experience. The third factor showing a significant difference in the mean of the factor scores (at the $p < 0.1$ level) is local operation expertise, with the mean factor score being significantly higher for firms with prior international alliance experience. Adding to the strength of the support for H1 is the fact that all three of these factors are comprised of at least one individual selection criterion that shows significant difference in the mean. Interpreting these findings it may be argued that firms with prior international alliance experience are likely to select a partner with technological expertise and local operational and production knowledge. This provides some support to the IP model (Johanson & Vahlne, 1977) since firms with prior international alliance experience have overcome the initial problems pertaining to early stages of internationalization (particularly in terms of partner-related criteria) and focus more on task-related criteria associated with technology development and local production (latter stages of internationalization).

Partner selection and administrative governance form

The rank order of selection criteria according to the administrative governance form of the alliance (equity or non-equity) is shown in table 6. As is evident from this table, there are considerable differences in ranking of the selection criteria (both for task-related and partner-related criteria) according to the governance form of the alliance. In terms of the mean, five of the eleven task-related criteria and six of the twelve partner-related criteria differ significantly with governance form, providing strong support for hypothesis 2. Furthermore, four of the seven factors – Technological expertise, Marketing system and status, Local operation expertise and Positive prior experience - show significant differences in the mean of factors scores (at the $p < 0.1$ level or better), with the mean of the factor scores of Local operation expertise and Positive prior experience being significantly higher for equity joint ventures and the mean of the factor scores of Technological expertise and Marketing system and status being significantly higher for non-equity joint ventures. All of these factors are comprised of at least two individual selection criterion with means that are significantly different (at the $p < 0.1$ level or better) except for the Positive prior experience factor, which is made up of only two selection criteria of which one exhibits significant difference in the mean (at the $p < 0.05$ level). These results indicate that partner selection criteria differ according to administrative governance form and provide strong support for H2.

Partner selection and nationality of foreign partner

The partner selection criteria by nationality (regions) of foreign partner shown in table 7 portrait a high degree of inconsistency in terms of rank order concerning nationality of the foreign partner. Although Trust between top management and Access to market knowledge is highly ranked for all four geographic regions, major differences exist with regard to most criterions. For instance, Favorable past association between partners is ranked relatively high (3) for Western Europe and Rest of the World (4), but near the bottom for the US (11) and Asia (10). Similarly, Access to local regulatory knowledge is ranked very low (11) for Western Europe, perhaps because the majority of countries in this region (69 of 73) are members of the European Union, whereas it ranks somewhat low for the US (7) but high for both Asia (3) and Rest of World (1), attesting to the regulatory convergence between Western Europe and the US and conversely the regulatory divergence between Western Europe and Asia and the rest of the world.

Table 7: Partner selection by Danish firms forming ISAs: nationality of foreign partner

Selection criteria	*Group*[a]	*Rank*[c]	*Mean*	*SD*	*F-ratio*
Technological expertise	WE				
	US				
	Asia				
	RoW				6.86***
(T) Access to technology	WE	5	3.34	2.20	
	US	2	5.20	2.31	
	Asia	11	3.30	2.36	
	RoW	8	2.68	1.73	4.33***
(P) Experience in technology application	WE	11	3.99	1.95	
	US	6=	5.00	1.81	
	Asia	8	3.90	1.97	
	RoW	9	3.23	1.41	2.76**
(P) Potential for new technology development	WE	9=	4.07	1.93	
	US	8	4.87	1.81	
	Asia	11=	3.10	2.33	
	RoW	11	2.41	1.68	6.39***
(P) Access to technology/ knowledge	WE	9=	4.07	2.00	
	US	10	4.33	1.40	
	Asia	11=	3.10	1.91	
	RoW	12	2.36	1.50	5.74***
(T) Access to product-specific knowledge	WE	4	3.89	1.95	
	US	4	5.13	2.30	
	Asia	4=	4.60	1.58	
	RoW	11	2.05	1.36	9.59***
Marketing system and status	WE				
	US				
	Asia				
	RoW				4.34***
(T) Access to distribution channels	WE	2	4.33	2.04	
	US	5	4.93	2.58	
	Asia	6=	3.60	2.68	
	RoW	6	3.23	1.51	2.56*

(P) Access to marketing/ distribution system	WE	5	4.90	1.98	
	US	6=	5.00	2.54	
	Asia	9	3.60	2.63	
	RoW	8	3.45	2.09	3.38**
(P) Partner financial status	WE	6	4.87	1.34	
	US	3=	5.67	1.95	
	Asia	3	5.20	1.32	
	RoW	3	4.82	1.71	1.33
(P) Partner reputation	WE	2	5.62	1.06	
	US	5	5.33	1.84	
	Asia	4	5.00	2.00	
	RoW	6	4.00	1.88	7.27***
Local operation expertise	WE				
	US				
	Asia				
	RoW				8.71***
(T) Access to local cultural knowledge	WE	7	3.23	1.88	
	US	8	4.20	2.31	
	Asia	1	6.30	0.48	
	RoW	2	4.41	1.62	9.63***
(T) Access to local regulatory knowledge	WE	11	2.75	1.92	
	US	7	4.27	2.37	
	Asia	3	5.80	0.92	
	RoW	1	4.45	1.87	11.12***
(T) Access to local market knowledge	WE	1	4.61	1.98	
	US	2=	5.20	2.31	
	Asia	2	6.20	0.92	
	RoW	3	4.27	2.14	2.56*
Competitive strength	WE				
	US				
	Asia				
	RoW				5.86***
(P) Partner firm size	WE	7	4.79	0.94	
	US	2	5.87	0.83	
	Asia	6	4.80	1.03	
	RoW	5	4.41	2.18	4.24***

(T) Access to capital	WE	6	3.27	2.06	
	US	6	4.60	2.69	
	Asia	8=	3.50	2.01	
	RoW	10	2.36	1.65	3.49**
(P) Partner international experience	WE	8	4.40	1.96	
	US	9	4.73	2.37	
	Asia	7	4.60	2.41	
	RoW	10	3.00	1.88	3.21**
Production efficiency	WE				
	US				
	Asia				
	RoW				3.10**
(T) Access to materials/ natural resources	WE	9	2.89	2.05	
	US	10	3.73	2.71	
	Asia	8=	3.50	2.42	
	RoW	5	3.50	2.28	0.95
(T) Access to production knowledge	WE	8	2.94	1.96	
	US	9	3.87	2.56	
	Asia	6=	3.60	1.96	
	RoW	9	2.64	1.79	1.45
(T) Access to links with major suppliers	WE	3	4.03	2.03	
	US	1	6.20	1.27	
	Asia	8=	3.50	1.90	
	RoW	4	3.82	1.94	6.32***
Positive prior experience	WE				
	US				
	Asia				
	RoW				2.66*
(P) Favorable past association between partners	WE	3	5.15	1.58	
	US	11	4.07	2.20	
	Asia	10	3.50	2.27	
	RoW	4	4.73	1.79	3.47**
(P) Trust between top management	WE	1	5.73	1.24	
	US	3=	5.67	1.50	
	Asia	2	5.33	1.80	
	RoW	1	5.27	0.88	0.88

Labor negotiation Expertise	WE US Asia RoW				 3.60**
(P) Partner ability to negotiate with government	WE US Asia RoW	12 12 5 7	2.90 3.33 4.90 3.50	1.79 2.06 1.73 1.66	 3.85**
(T) Access to labor	WE US Asia RoW	10 11 4= 7	2.78 1.93 4.60 3.09	1.94 1.79 2.59 2.11	 3.67**
(P) Relatedness of partner business	WE US Asia RoW	4 1 1 2	5.08 6.13 5.50 5.14	1.42 0.83 1.84 1.73	 2.26*
N	WE = 73; US = 15; Asia = 10; RoW = 22				

The mean for the factors is the mean of the factor scores; the mean of the individual selection criteria is the average on a scale of 1 to 7.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

[a] WE = Western Europe; US = The United States; Asia = Asia; RoW = Rest of World.

[c] The task-related and partner-related criteria are listed according to factors, however, the ranking of means is kept separate for the two types of criteria.

Scheffe test: Significant difference between all groups.

A similar pattern emerges from the ranking of Access to local cultural knowledge, however, when looking at Access to technology it is interesting to see that Danish firms look to the US (2) first, then Western Europe (5) and Rest of the world (8) before Asia (11).

Testing for differences in mean scores there is strong support for H3 as reflected by the fact that nine of eleven task-related criteria and ten of twelve partner-related criteria show significantly different mean scores (at the $p < 0.1$ level or better) between the regional partner groups. Furthermore, all of the seven factors have mean factor scores that are significantly different (at the $P < 0.1$ level or better) between the regional partner groups and the Scheffe test shows significant differences between all groups (at the $p < 0.05$ level). Hence, based on these results it can be concluded that partner selection criteria differ significantly with foreign partner nationality, thereby supporting hypothesis 3.

Partner selection and motive for alliance formation

To examine the relationship between the selection criteria and the strategic motives for alliance formation a multiple regression analysis was undertaken in an attempt to identify the main predictors of the selection criteria. Seven regression equations were estimated with the dependent variable being each of the factors of the selection criteria identified above. The Pearson correlation matrix is shown in table 8. The independent variables in each regression equation were the five factors of strategic motives for alliance formation identified earlier and reported in table 9. The variance inflation factor (VIF) was used to assess multicollinearity among independent variables. The VIF scores (all less than 1.6) suggested that while multicollinearity does exist, it will not significantly influence the stability of the parameter estimates (Dielman, 1991).

The results of the regression analysis, shown in table 9, indicate that all the regression equations have a relatively high explanatory value, with moderate R squares and significant F values (at the $p < 0.05$ level or better). At least one (and often two) of the coefficients on the strategic motive factors in each of the seven regression equations is significant. The regression on Factor 1 (Technological expertise) has significantly positive coefficients on the Innovation and the Market defense factors and has a

TABLE 8: Means, Standard Deviations and Correlations

Variable		Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11
1.	Motive: Innovation	3.37	1.49											
2.	Motive: Market expansion	5.10	0.83	0.36**										
3.	Motive: Market defense	4.27	1.10	0.17	-0.05									
4.	Motive: Technology transfer	3.73	1.26	0.41**	0.26**	-0.02								
5.	Motive: Market power	2.31	1.42	0.08	-0.02	0.04	0.04							
6.	Selection: Tech. expertise	3.71	1.70	0.58**	-0.01	0.28**	0.36**	0.11						
7.	Selection: Marketing & status	4.72	1.42	0.05	0.22*	-0.17	0.28**	-0.06	0.04					
8.	Selection: Operation expertise	4.03	1.79	0.15	0.25**	-0.22*	0.28**	0.07	-0.06	0.37**				
9.	Selection: Comp. strength	4.10	1.41	0.45**	0.34**	0.12	0.32**	0.01	0.21*	0.45**	0.33**			
10.	Selection: Prod. efficiency	3.46	1.55	0.23*	0.11	0.13	0.39**	0.05	0.57**	0.15	0.17	0.21*		
11.	Selection: Prior experience	5.19	1.33	-0.01	-0.06	0.01	0.19	-0.25*	-0.04	0.41**	0.04	0.22*	0.03	
12.	Selection: Labor negotiation	3.78	1.11	0.02	-0.03	0.18	-0.08	0.28**	0.08	-0.05	0.47**	0.19*	0.27**	-0.17

[a] Equity or non-equity; [b] number of employees; * $p < 0.05$, two-tailed test; ** $p < 0.01$, two-tailed test.

Table 9: Multiple Regression of Factors of Motivation on Factors of Partner Selection Criteria

	Factor 1	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**	**Factor 6**	**Factor 7**
Constant	2.81***	2.94***	2.17	0.19	0.38	5.48***	3.26***
Innovation	0.67***	-0.16	0.02	0.28**	0.01	-0.07	0.06
Market expansion	-0.29***	0.17	0.12	0.24**	0.05	-0.16	-0.10
Market defense	0.14*	-0.01	-0.15	0.12	0.12	0.13	0.21**
Technology transfer	0.13	0.32***	0.28**	0.15	0.40***	0.30***	-0.09
Market power	0.01	-0.04	0.10	-0.03	0.03	-0.24**	0.25**
R^2	0.49	0.13	0.15	0.29	0.19	0.16	0.13
Adjusted R^2	0.46	0.08	0.11	0.25	0.14	0.11	0.09
F value	17.45***	2.59**	3.33***	7.40***	4.16***	3.21**	2.82**
N	97	96	98	97	95	90	97

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

significant negative coefficient on the Market expansion factor. These findings make sense intuitively and seem to support the finding reported above: firms prioritizing highly a partner with technological expertise are likely to be motivated by long-term innovation and learning rather than short-term market expansion. This objective, in turn, requires stability and hence the positive correlation with the Market defense factor. The regression on Factor 2 (Marketing system and status), Factor 3 (Local operation expertise) and Factor 5 (Production efficiency) all have a significantly positive coefficient on the Technology transfer factor only. Recalling that the Technology transfer factor is transfer of existing technology/knowledge not related to vertical ties, these results can be interpreted as an attempt to gain access to partner expertise pertaining to operating and selling in the local market, without directly partnering with suppliers/distribution channels. The regression on Factor 4 (Competitive strength) has positive significant coefficients on the Innovation and the Market expansion factors. These result also seem intuitively appealing since firms selecting a partner with competitive strength are likely to be motivated by strategic concerns about both market expansion and innovation. The regression on selection Factor 6 (Positive prior experience) has a significant positive coefficient on Technology transfer and a negative significant coefficient on Market power. A reasonable interpretation of these relationships could be that firms concerned with legitimacy when selecting partners for international strategic alliances are seeking to establish a foundation for successful technology transfer and are not, initially, pursuing aggressive strategies to gain market power. The negative relationship between Positive prior experience (including trust) and Market power can furthermore be explained by the fact that Market power includes cooperation with a competitor. It seems unlikely that firms, for whom trust is most important, would attempt to ally with a competitor. The last selection factor, Factor 7 (Labor negotiation expertise), shows positive significant coefficients for the Market defense and the Market power factors, indicating a concern with conforming to local government regulations and spreading the risk of the investment.

The result of the multiple regression analysis provides strong support for H4 since all seven regression equations have moderate to high R squares and significant F values and thus help explain the partner selection factors.

DISCUSSION

This study has identified the relative importance of a set of selection criteria when selecting a partner for an international strategic alliance. The relative importance of partner selection criteria is found to differ significantly with certain sample characteristics, most notably administrative governance form and foreign partner nationality. Furthermore, this study provides strong evidence of the relationship between motivational intent and partner selection criteria, emphasizing the importance of inter-partner fit along several dimensions simultaneously, including strategic intent, task- and partner-related criteria.

Considering the ranking of partner selection criteria in relation to existing international joint venture literature, it seems to confirm prior findings about strategic motivation for alliance formation. For instance, Glaister and Buckley (1996) found that motives related to relative competitive position in foreign markets were of most importance when forming international alliances. In addition, from a strategic positioning perspective, Kogut (1988) argues that alliances can be viewed in the context of competitive rivalry and collusive agreements to enhance market power. Hence, it seems hardly surprising that Danish firms place relatively high importance on criteria related to market development when selecting a foreign partner for an international strategic alliance. Denmark is a highly developed economy and although the alliances in this study span a variety of both emerging and developed economies, the findings confirm, by and large, the findings of Tatoglu and Glaister (2000) related to Western firms partnering with Turkish firms, suggesting that Western firms in general rate task-related partner criteria related to market development high.

There is moderate support for hypothesis 1, indicating a relationship between prior international alliance experience and certain partner selection criteria. In general, it seems that firms with prior international alliance experience focus more on task-related partner selection criteria pertaining for later stages in the internationalization process whereas firms with no prior international alliance experience pay more attention to partner-related criteria associated with complementarity and partner fit. It is important to note, however, that these results should be treated with caution due to the moderate support for hypothesis 1.

More notably is the strong support for hypothesis 2 and 3, providing evidence of significant difference in partner selection criteria according to administrative governance form and foreign partner nationality. The findings that selection criteria differ with governance form (H2) are consistent with intuitive expectations about differences in underlying motivational intent. Prior

research on strategic motivation for alliance formation has, however, failed to produce consistent results pertaining to the relationship between governance form and motivation for alliance formation (see for instance Glaister & Buckley, 1996). The strong support for the relationship between selection criteria and governance form can be interpreted in terms of resource commitment and risk. Assuming that equity joint ventures involve a higher level of resource commitment and risk, the finding that Positive prior experience (particularly favorable past associations) with a partner and Local operational expertise are more important in equity joint ventures than in non-equity joint ventures seems to support both the resource dependence perspective (Pfeffer and Salancik, 1978) and the transaction cost perspective (Williamson, 1981) in that the focal firm is seeking to reduce its resource dependency and uncertainty by acquiring access to local cultural and regulatory knowledge through the selection of a known partner. Consistent with both transaction cost economics (Williamson, 1991) and resource dependence theory (Pfeffer and Nowak, 1976) this suggests that the principal reason why firms transform pure exchange relations into power relations through alliances is that hierarchical controls help manage potential moral hazards arising from behavioral uncertainty. Perhaps an underlying motive for the equity joint ventures is to penetrate the foreign market via local production and prior experience and local knowledge is viewed as a source of legitimacy from an institutional perspective (DiMaggio and Powell, 1983). The finding that Technological expertise and Marketing system and status is more important for non-equity joint ventures than for equity joint ventures can be interpreted along the same lines as firms with less resource commitment are more likely to select a partner which offers the possibility of new technology development and knowledge transfer. At the same time, partners with access to a marketing system and with good status allows for quick market penetration without the high risk and commitment associated with joint operation.

The result of the test of hypothesis 3 shows that there are significant differences in partner selection criteria when selecting a foreign partner from various geographical regions. For instance, Danish firms partnering with fellow Western European companies rank relational embeddedness (i.e. access to distribution channels and links with major suppliers/customers) and legitimacy (i.e. favorable past association, trust between top management and partner reputation) relatively high compared to the other regions. However, when Danish firms select a partner from the U.S., the most important task-related criteria are associated with scale economies and complementarity (i.e. access to – and application of – technology, firm size and relatedness of partner business). If the partner

selected for an international strategic alliance is from Asia, or Rest of the world, access to local cultural knowledge (including regulatory and market knowledge) is of most importance. Furthermore, the fact that access to labor ranks relatively high for Asia reflects the region's comparative advantage originating from the differences in wages between Western Europe and Asia. Yet, despite these differences, the results provide strong evidence for the importance of trust in inter-firm relationships, regardless of cultural differences or regional economic affiliation, attesting to the universal significance of this concept.

The test of hypothesis 4 revealed a significant relationship between partner selection criteria and strategic motivation for alliance formation. The results indicate that Danish firms select partners for international strategic alliances based on, in part, the underlying strategic motives and hence this study offers valuable insight into the complex process of partner selection. Of particular importance is the mix of task-related and partner-related criteria pertaining to different strategic motives as this may help managers find potential partners for future alliances. Hence, selecting a partner for an international strategic alliance involves a thorough analysis of ones own organization in terms of current and potential future resources and capabilities required for ISA success. This internal analysis – combined with a clearly defined set of strategic motives – can help determine what additional resources and capabilities (both task-related and partner-related) are necessary to ensure a high probability of a successful joint venture. As few partners will possess all resources and capabilities deemed necessary, the desired task-related and partner-related capabilities should be prioritized according to importance in reaching the strategic objective of the alliance.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

While this study has succeeded in determining the relative importance of both task-related and partner-related selection criteria in the context of several important sample characteristics, future research should extend this context by looking at different types of alliances (i.e. distinguish between licensing agreements, R&D agreement, marketing alliances etc) and different types of control. Although the use of equity to indicate hierarchical control provides an effective means to address agency concerns it falls short of addressing differences across each type of structure and provides only a partial assessment of the original basis for classifying the governance structure of alliances, namely degree of hierarchical control. However, each governance structure not only presents distinct levels of hierarchical controls but how this control is exercised and what

implications this has on partner selection may also differ. Another important extension would be to investigate the influence of industry on the partner selection criteria. Although within-industry samples offer several advantages in terms of comparison and evaluation of certain variables (e.g. technology transfer and access to production knowledge) they lack attention to possible systematic variation across industry sectors. It is very likely that international strategic partner selection will vary with the industry of the alliance, particularly in light of the strong relationship between partner selection and motivation for alliance formation, as firms in different industries are likely to be driven by different strategic objectives. In addition, more research is needed on the match between strategic motives of partners engaging in international strategic alliances and how this may influence the partner selection process. Moreover, research on how different sized firms in different cultural and economic contexts (i.e. industrialized countries versus emerging economies) rank the importance of partner selection criteria seems a fruitful avenue for future research. Finally, establishing a strong relationship between partner selection and alliance performance is desirable, however, difficult due to the subjective nature of particularly the partner selection process and the time-lag between partner selection and observed performance. One possible method for investigating this relationship is to collect longitudinal data from both partners in the alliance. Preferably, the researcher would observe and record the process from the time where the partner was actually selected to the time where sufficient performance data were available. Perhaps such a study would be able to answer the important question of how firms select their partner in *successful* international strategic alliances.

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