

AUTONOMY IN CHINESE JOINT VENTURES

Summary

Because the level of uncertainty experienced by the two parties differs, operating autonomy in Chinese joint ventures (JVs) can be predicted with asymmetrical accuracy. Resource contributions, ownership structure, and strategic intent of partners all contribute to autonomy in their quality-, market-, and import/export- related decisions. Results indicate that the foreign partner's control tendency is easier to predict than the Chinese partner's control tendency which is consistent with the resource dependence framework. Although the strategic behavior perspective of each partner explains some of their autonomy decisions strategic importance is a less significant predictor of operating autonomy than equity and resources.

Keywords: autonomy, JV, resource dependence, strategic behavior

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INTRODUCTION

The autonomy of subsidiaries of multinational companies (MNCs) is an enduring and controversial topic. A change of perspective has emerged from viewing MNCs at the center of analysis to viewing subsidiaries as active players in the formulating and implementing MNC strategy [needs citation]. When the MNC subsidiary under observation shares equity with a local firm (to wit, is a JV) researchers have focused primarily on structural questions concerning organization forms (i.e. JV versus non-equity contracts) [needs citation]. Strategy questions – such as the operating autonomy of JVs – have attracted less attention. Determinants of operating autonomy in MNC JVs becomes a pertinent topic because it affects the way in which decisions are made and how the relationship between involved parties is different from relations between fully-owned subsidiaries.

By extending Pfeffer & Salancik's (1978) resource dependence theory to JV autonomy, we examine which factors affect JV decision-making autonomy by identifying (1) what is the typical autonomy of JVs and (2) how are decision-making rights on certain issues separated between JVs and their parents. Unlike Pfeffer & Salancik's perspective – which would see the formation of JVs as a means to internalize dependence on external parties – we recognize the extension of interdependence to the parent-JV relationship instead.

JV Autonomy

Autonomy of an affiliate is defined as the “authority to take by itself a wide range of decisions affecting its operations” (Garnier, et al. 1979: 79). We define JV auton-

omy as the degree to which the JV has decision-making authority. More recently, O'Donnell (2000: 528) defined autonomy as “the degree to which the foreign subsidiary of an MNC has strategic and operational decision-making authority.” Changes that give subsidiaries the authority needed to make strategic decisions divert subsidiary roles from mere strategy implementers (Bartlett & Ghoshal, 1986) to that of strategy controllers that implement strategy according to product segmentation and product lines based on subsidiary capabilities (Bartlett & Ghoshal, 1989; Roth & Morrison, 1992). They may even result in subsidiaries taking the initiative to develop themselves strategically (White & Poynter, 1984).

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During this transformation process, the corporate headquarters of an MNC should reduce its direct control over the strategic content of newly-autonomous subsidiaries to focus instead on developing capabilities to manage strategic processes across subsidiaries (Bartlett & Ghoshal, 1986; 1989). Going beyond discussions of headquarters control (Pralhad & Doz, 1981; Doz & Prahalad, 1981) and beyond debates concerning the centralization and formalization of decision-making processes (Gates & Egelhoff, 1986), we examine the role and subsequent strategy of a Chinese subsidiary when it is jointly-owned (Bartlett & Ghoshal, 1986; Gupta & Govindarajan, 1991; Birkinshaw, *et al.*, 1998; Taggart, 1997), and assess how that subsidiary develops (White & Poynter, 1984; D’Cruz, 1986).

The longitudinal research focus captures the evolution of subsidiary autonomy over time as well as the emphasis in academic studies on the strategic independence of subsidiaries. Extant research has considered the autonomy status of subsidiaries in general (in large, wholly-owned subsidiaries), while JV autonomy has not been separately examined. We hold this distinction to be important as each form of organizational subsidiary will have unique characteristics that influence the level and area of

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operating autonomy that it maintains.

We expect differences to exist between how parent companies manage JVs versus their wholly-owned subsidiaries (Otterbeck, 1981). Specifically we expect that the autonomy granted to JVs may not experience changes as dramatically over time as wholly-owned subsidiaries since operating within JVs involves constant high risks for the parents. *Ceteris paribus*, given the riskiness of the organizational form of jointly-owned subsidiary, we expect that parent firms will keep tight control over their JVs in order to reduce potential risks.

JVs have often been trapped by the reasons that led to the JV formation, for example, to utilize the partner's unique capabilities that cannot be obtained in the market place (Beamish & Banks, 1987; Brouthers, 2002; Hennart, 1988). The looming risks of partner's opportunistic behavior drive each side to impose control over the JV (Kogut, 1988; Hennart, 1988). However Robins, *et al.* (2002) have argued that certain types of independence of the venture can enhance its success. This raises a question: In what way should JVs and their parents divide the decision-making in order to maintain success? The missing gap in previous studies is to find the appropriate balance between dependence and independence on the parents and this is what our findings address. Adopting Robins, *et al's* (2002) three-party view of decision-making, we examine the inter-relationships between JVs and their Chinese and foreign parents. Following the research tradition on autonomy, this article adopts a dyadic view between subsidiary autonomy and headquarters control [citation needed]. This method captures the relative influence of the JV vis-à-vis the parents.

THEORETICAL BACKGROUND AND HYPOTHESES

Resource Dependence Perspective

Resource dependence theory – which was developed in research streams from sociology and political science – is highly pervasive and relevant to business disciplines, making it widely used to explain organizational issues. It views an organization's search for resources in relation to other organizations with which it competes for and exchanges resources (Aldrich, 1971). Since resource acquisition is the driving force behind inter-organizational transactions (Pfeffer & Salancik, 1978; Pfeffer, 1987), resource dependence theory assumes that organizations are re-shaping themselves through constantly acquiring and exchanging resources – such as products and services, information and capital – with other parties. When the organizational characteristics of differentiation and specialization determine that an entity cannot be self-sufficient, it must rely on other organizations – e.g., its JV parents – to achieve its goals (Aldrich, 1976). Resource dependence is also caused by external pressures such as those from stakeholders, the competition, regulation and social forces (Boyd, 1990).

In some situations, organizations have to rely on a small number of parties for key resources. This increases the intensity of dependence of an organization on parties that provide those resources, which limits the organization's flexibility and self-determination capacity while it increases uncertainties related to the environment (Pfeffer & Salancik, 1978). Under these conditions, the power to influence decisions favors the external parties that control resources. External parties will consequently extract profit from their power advantages unless they are counterbalanced by the resources provided by the organization (Burt, 1980). Apart from suppliers, a variety of interacting parties (such as competitors) in aggregate form an external environment

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for an organization to exchange favors and erect a power position. In response, organizations seek to reduce dependencies through managing their environment (Child, 1972; Aldrich, 1976). Emerson (1962) argues that the power-less party can use various strategies to change its power status. For example, it can either reduce its reliance on the powerful party or create alternative sources to achieve its goals.

Organizations can also choose to absorb organizational interdependence through a JV (Pfeffer & Salancik, 1978). Pfeffer & Nowak (1976) examined the conditions under which an organization makes the choice to establish a JV with other horizontally- and vertically-related organizations. The authors maintained that JVs are formed to link, stabilize and manage a focal organization's resource dependence on other organizations. To this end JVs enable the exchange of information and pooling of personnel and resources (Killing, 1983; Harrigan, 1986). JVs are therefore used to absorb resources from both parents, thus reducing competition and uncertainty for each parent company. Pfeffer & Nowak (1976) explicitly stated that JV is a response to environmental requirement (i.e. to manage interdependence), while the JV itself does not create organizational interdependence. That is to say, the center of discussion is the parent company, while the inter-relationship between the JV and the parent companies is either non-existent or unimportant. As previously discussed, we hold that research on interdependence between the JV and the parent companies is critical in understanding the JV's roles and responsibilities for achieving the parents' strategies.

Within a broader theoretical layout, Doz & Prahalad (1991) assessed the contribution of power and dependence theory to the development of research on diversified MNC and recognized its richness in analytical capacity and extensiveness of application. More explicitly, a player is seen to be involved in a network of relationships in which the player gains power through controlling resources instead of hierarchical

positions (Crozier & Friedberg, 1980). The player adapts to environmental changes in the presence of self-interest, information asymmetry and differences in goals with other players (Doz & Prahalad, 1991: 152). By understanding the networks of relationships and the strategies of relevant parties, in the MNC context, researchers can structure mechanisms to modify their strategies and to influence outcomes between organizations (Doz & Prahalad, 1991: 153). Casciaro & Piskorski (2005) further emphasized the strong explanatory power of the resource dependence theory for inter-firm relationships. In particular, they distinguished two theoretical dimensions: mutual dependence and power imbalance.

Mutual Dependence

Mutual dependence between parties is a property of social relations (Emerson, 1962). While party *B* depends on party *A* to achieve *B*'s goals, *A* simultaneously depends on *B*'s actions to achieve *A*'s goals. Interdependence between organizations is not only a consequence of transaction (Pfeffer & Salancik, 1978) but also a structure that maintains the transaction relationship. The latter point indicates that, in lack of interdependence (i.e. lack of incentives staying in the transaction for at least one party), either the independent party itself will leave the transaction or it will squeeze the counter-party to leave. JVs act as a channel between the parents and build up interdependence between the two parties. A JV is a potentially stable form as the parents have made the upfront investment (Heide & John, 1988). Shared equity sets up a platform for both parents to relate their goals within one organizational context. Interdependence between two parents can grow or diminish, develop or shrink within the JV, which reflects success or failure of their relationship.

On the other hand, the JV itself has more straightforward interdependence with each parent, again, through exchanges of resources – JV parents invest capital, and other tangible and intangible resources in the JV in exchange for equity ownership, dividends, JV outputs and improved knowledge. Robins, *et al* (2002) found general support that, in order for JVs to gain competitive advantage, parent companies would contribute strategic resources (such as brand name and trademark, managerial skills and advanced technical knowledge) and key local resources (such as channel of distribution, local brand and labor), supplemented by the operating resources sourced externally (such as raw material) or developed from within the venture itself (such as operating procedure and routine).

According to Pfeffer & Salancik (1978: 44), “organizations will tend to be influenced by those who control the resources they require”. The extent of influence should be related to the resources concerned (Martinez & Ricks, 1989; Edwards, *et al*, 2002). The party that contributes to the resources may have greater power to determine their usage. The contributing party may also have the best knowledge of the resources, thus it is capable of determining how to effectively use them. Based on an extensive review of previous studies on sharing decision responsibilities between headquarters and subsidiaries, Martinez & Jarillo (1989) summarized that all studies found “... finance and R&D were the most centralized functions, personnel was the least, and production and marketing were in between” (p. 497). Previous studies also found that JV parents tend to centralize strategic decisions while their subsidiaries had the freedom of making operational decisions. Therefore, we have:

H1a: In the Chinese JV context, strategic decisions (such as production technology, royalty payment, quality standard, export market, capital expenditure, financing source, dividend distribution, and selection,

promotion & compensation of executives) are centrally made by the parent companies.

H1b: In the Chinese JV context, operational decisions (such as production schedule, product pricing, advertising and promotion, channel of distribution, import sourcing, import pricing, export pricing, and annual budget & business plan) are de-centrally made by the JV.

Going beyond categorizing decisions as strategic and operational decisions, or into functional areas and making a generalization of their tendency, we also want to know how equity and resources are related to each decision and to what extent JVs can gain (or lose) autonomy in each decision made. Another dimension of the resource dependence theory – power imbalance – provides these inquiries theoretical support.

Power Imbalance

Emerson (1962) develops a perspective of power-dependence relations between interactive players. In presence of mutual dependence, as previously discussed, the extent to which each party can control or influence the things the other values determines the power status of that party (Emerson, 1962). In the situation when party *A* has control over key resources that party *B* desires, while *B* does not have equal capabilities to control and influence *A*'s outcomes, *A* is called the 'power-advantage' party. Consequently, *A* will have superior legitimacy in making decisions that affect *B*'s welfare. The power-advantage party must be able to increase dependence of others on him, while meanwhile decreasing his dependence on others to preserve his power advantage (Emerson, 1972).

JV structure creates two forms of power imbalance. First, the two parents may not have equal power in the JV. This can result from the parents' asymmetric investment in equity stake and unequal contribution of resources. Second, in comparison to the parent companies, the JV is in a power-disadvantage position. This imbalance stands out especially at the initial stage of the JV, as it is dependent on the parents for most resources – the JV may only acquire some basic resources and develops some capabilities as it grows. Therefore, even though the JV's reliance on the parents may change over time (Prahalad & Doz, 1981), we, adopting a static view, suggest that ownership structure and resource contribution determine the parents' decision capabilities and thus affect the JV's autonomy. In the following, we focus on the JV-parent relationship.

Equity structure

Empirical results showed that equity ownership was an effective predictor of concentration of decision-making for multinational companies (Garnier, 1982; Gates & Egelhoff, 1986). Researchers argued that decreasing an MNC's ownership in subsidiaries, which accompanies increase of outside ownership, decreases the MNC's centralization in decision-making. Dividing ownership with other companies will translate to sharing decision rights with the partners, as shown in the JV context.

Environmental differences between the subsidiary and the parents enhance the risks for the parents in achieving its set goals (Hedlund, 1984). In order to reduce the risks, the parent tends to impose tighter control in main decisions of the subsidiary (Garnier, 1982) through increasing its equity ownership. Both MNCs and local parents can be interested in pursuing sole or majority ownership in order to gain power

for critical decisions. Geographical and cultural distance between JVs and MNC parents provides MNCs high incentives for tighter control, especially in such an important but very different market (China), where proprietary rights are of concern. Thus, we have

H2a: In the Chinese JV context, an increase in the foreign parent's equity in the JV weakens the JV autonomy in decisions of production technology, import sourcing, import pricing, and export pricing.

In contrast, as the Chinese parent has been familiar with the environment in which the JV is operating, they have a good base of knowledge of local situations and thus are more comfortable to leave the decision-making to the JV managers. Outcome-based performance evaluation can be potentially more attractive to the Chinese parent than behavior-based performance evaluation.

H2b: In the Chinese JV context, an increase in the Chinese parent's equity in the JV enhances the JV autonomy in decisions of production technology, import sourcing, import pricing, and export pricing.

Resource contribution

A precondition of power-dependence is that "power is a property of the social relation; it is not an attribute of the actor" (Emerson, 1962: 32). Transposing this notion to the context of the parent-subsidiary relationship, the parent company does not automatically hold superior power over the subsidiary, or vice versa; rather, the party that gains more power through interaction is able to exert more influence on the other. By Brooke's (1984: 58) definition, power "refers to the attributes or resources which enable the authority to be exercised". This is what Birkinshaw & Ridderstrale (1999)

regarded as the resource-based power, rather than structural power that is related to corporate hierarchies. By controlling and allocating key resources, parent companies can impose decisions on subsidiaries.

Garnier's (1982) work provides empirical support to the negative relationship between autonomy and interdependence between the affiliate and the parent. In particular, the higher percentage of the purchased resources coming from the parent and the higher percentage of sales going to the parent, the lower autonomy of the affiliate. Using multi-phased, multi-methodological approaches suggested by Harrigan (1983), Ghoshal & Bartlett (1988) showed that companies of high parent concentrated decision-making created few innovations on the subsidiary level than loose concentrated decision-making. As resources are key to innovation, tight control of resources by the parent company limits the subsidiary's capacity for innovation (Ghoshal & Bartlett, 1988). Prahalad & Doz (1981) argued that as subsidiaries become more self-reliant on seeking and developing strategic resources, the parents' ability to control the strategies of subsidiaries is severely weakened.

To summarize, JV parents influence JV decisions by controlling resource inflow and outflow. We hypothesize that the party that withholds resources has power in voicing its decisions relevant to the contributed resources. However, as previously discussed, a difference exists between the Chinese and the foreign parents – while the Chinese parent relinquishes decision-making to JV management, the foreign parent exercises influence in decision-making through adjusting resources.

H3a: Higher contribution of product and process technology by the Chinese parent to the JV leads to higher JV decision-making autonomy in quality standard; the opposite is true for the foreign parent.

H3b: Higher contribution of brand name and trademark and target market knowledge by the Chinese parent to the JV leads to higher JV decision-making autonomy in product pricing; the opposite is true for the foreign parent.

H3c: Higher contribution of channel of distribution by the Chinese parent to the JV leads to higher JV decision-making autonomy in distribution; the opposite is true for the foreign parent.

H3d: Higher contribution of product and process technology and material and component by the Chinese parent to the JV leads to higher JV decision-making autonomy in import sourcing; the opposite is true for the foreign parent.

Strategic Behavior Perspective

Kogut (1988) elaborated the strategic behavior perspective on MNCs. The essence of strategic behavior is to maximize “profits through improving a firm’s competitive position vis-à-vis rivals” (Kogut, 1988: 322). Harrigan (1985, 1988) extended this perspective and argued that industrial conditions influence the choice of JVs as a competitive strategy alternative. Constrained by demand and competitor traits, a firm must select the appropriate cooperative form to win over their competitors (Harrigan, 1985; 1988). JVs facilitate MNCs to gain key local resources in a faster pace than those competitors that develop internally. The collaborative, accumulated business experience and enhanced local knowledge help MNCs to build up local capabilities that can drive its competitive positioning.

A subsidiary can be seen as an outreach of the parent company’s global strategy (Kogut, 1985). A foreign subsidiary has distinctive roles and responsibilities depend-

ing on the significance of its national environment to the parent's global strategy (Bartlett & Ghoshal, 1986), geographical localization of its functional activities (Jarillo & Martinez, 1990), degree of integration of its functional activities with other subsidiaries (Bartlett, 1986; Jarillo & Martinez, 1990), and contribution of its technological capabilities to headquarters (Hedlund, 1981). Martinez & Ricks (1989) found that the affiliate importance to the MNC parent enhanced the MNC's decisions on human resources of the affiliate. JVs are used to attain both the foreign parent and local parent's diverse goals, which reversely determine the JV's significance to the parents. Depending on the area and extent of JV importance to both the local and MNC parents, they may impose different levels of influence on different JV decisions. We hold that the parents will try to control those decisions they consider most critical to their success.

H4a: When the Chinese parent's goals are to gain profits and dividends and to extend product lifecycles, it will enhance its decision-making capacity in export pricing.

H4b: When the foreign parent's goals are to gain profits and dividends and to extend product lifecycles, it will enhance its decision-making capacity in export pricing.

METHODOLOGY

Sample and Data Collection

The observations reported in this study were based on personal interviews carried out during 2007 in 45 Sino-foreign JVs. The JV general managers and senior execu-

tives (including both expatriates and locals) were interviewed with the guidance of a structured questionnaire. Interviews were superior to survey questionnaires in that interviews can provide us in-depth knowledge and guide our interpretation of certain phenomena. It can also capture some insights that may be confined by the structure of the questionnaire. The original questionnaire was developed and used by Sim & Ali (1998, 2000). We slightly modified the questionnaire to accommodate the needs of this research.

The JVs were partnerships of at least one foreign and one Chinese parent firms. With regard to parent nationality, 26 JVs were Sino-Europe, 6 Sino-U.S., and 13 Sino-Asia (Japan and Singapore). Due to cost constraints, the research was based in Beijing; therefore, 33 of the JVs were located in Beijing, 2 in Shanghai, and 10 in other parts of the country. The JVs represented a range of industries, including pharmaceutical, machinery, electric technology and mechanical products, and vehicle and airplane construction.

Measures

Dependent Variable

Subsidiary autonomy. Autonomy is measured at the level of the individual decision. Previous studies used a number of variables to measure autonomy (Garnier, 1982; Gates & Egelhoff, 1986; Ghoshal & Bartlett, 1988). Based on Garnier (1982), 16 decisions were selected to evaluate the degree of autonomy of the subsidiary. JV top executives were asked to assess the extent to which the decisions were made by the JV and the parent(s) (ranging from '1 = exclusively made by the JV' to '5 = exclusively made by the parent(s)'). Items included: production technology; royalty payment; quality standard; production schedule; product pricing; advertising and

promotion; channel of distribution; import sourcing; import pricing; export pricing; export market; capital expenditure; financing source; dividend distribution; selection, promotion and compensation of executives; annual budget and business plan.

Independent Variables

Equity structure. Measured by the percent of equity held by the Chinese parent and the foreign parent at the time of the present research.

Resource contribution of the parents. JV top executives were asked to assess (1) the percentage of contribution (ranging from 0% to 100%) made by the Chinese parent and the foreign parent on 13 resource areas (however, the combined percentage of the two parties cannot exceed 100%); and (2) the importance level (ranging from '1 = not important at all' to '5 = very important') of each of the 13 resource areas. The response to question (2) was transformed by dividing the response by the total of responses to all the 13 resource areas. Then this weighted importance level is multiplied by question (1) as the level of contribution of the Chinese parent and the foreign parent separately. The 13 items included: plant and equipment; product and process technology; brand name and trademark; technical personnel; management personnel; channel of distribution; material and component; capital and finance; access to target market; target market knowledge; inexpensive labor; national identity; government relation.

Strategic intent. JV top executives were asked to assess the importance level (ranging from '1 = not important at all' to '5 = very important') of each of the 13 market, operational, and profitability goals for both the major Chinese and foreign parents. Items included: local market development; foreign market access; acquisition of manufacturing skills; acquisition of marketing skills; acquisition of technical skills;

sales growth; market share; profit and dividend; acquisition of managerial know-how; access to capital; extending product lifecycles; improving R&D potential; low labor cost.

Model Specification

A regression model was chosen to estimate the effects of equity structure, resource contribution of the parents, and strategic intent on venture autonomy. An alternative treatment of the data could be a factor analysis procedure producing scalings that could be used in subsequent regression models (Hambrick, 1983). But because the individual contributions of each class of predictor variable (indicated by their standardized beta coefficients) were of interest, factor analysis was not used. Also, a factor analysis procedure might create interpretive difficulties.

The model could be expressed as:

$$y = a + bx_j + e$$

where y equals the dependent variable – JV autonomy. x_j equals the independent variables, where j corresponds to Equity, Resource Contribution and Strategic Intent.

RESULTS

Strategic versus Operational Decisions

Insert Table 1
(Strategic and Operational Decisions in JVs)
about here

As previously stated, a 16-item index was used to measure the level of autonomy of JV companies. Decisions that have an average score of above 3 can be seen more centralized, while those scoring an average of below 3 can be seen to be more autonomous. The *t test statistic* shows that several strategic decisions¹ (i.e. Financing Source, Dividend Distribution, and Selection, Promotion & Compensation of Executives) were centrally made by the parent companies at a statistically significant level ($p < 0.053$ or less). Thus, H1a is partly supported – only some of the strategic decisions, as mentioned above, were made by the parents, while other strategic decisions (i.e. Production Technology, Royalty Payment, Quality Standard, Export Market, and Capital Expenditure) were made likely through mutual consultation.

On the other hand, most operational decisions (i.e. Production Schedule, Product Pricing, Advertising & Promotion, Channel of Distribution, and Import Sourcing) were de-centrally made by the JV at a statistically significant level ($p < 0.05$ or less). The remaining operational decisions did not show statistically significant difference with the medium point 3. Thus, H1b is partly supported – whereas most operational decisions, as mentioned above, were made by the JVs, several operational decisions (i.e. Import Pricing, Export Pricing, and Annual Budgets & Business Plan) were made likely through mutual consultation.

The results lend support to previous research that subsidiaries had more freedom to make operational decisions, while decisions on the strategic level were made by the parents. Also, in support of previous studies, JVs had more autonomy in decisions on production and marketing functions. Nevertheless, not all operational decisions were made by the JV management, nor all strategic decisions were made by the parents. Results show that the parents tended to also participate in operational decisions that

¹ Based on previous research [citation needed], we designated decisions as either strategic or operational decisions from the parent's view point.

had strategic implications, whereas the JV was involved in strategic decisions that had strong operational linkage. For example, decisions related to production technology were sensitive especially to the parent that brought in the technology. Thus, imposing tight control on production technology could prevent the counterpart from opportunistic behavior. On the other hand, as production technology concerned day-to-day operations of the JV, JV management's involvement in retaining current technology and introducing new technology could make full use of JV's knowledge of the local market. In the circumstances when both the local situations and the parent's overall strategy needed to be considered, the three parties were exposed to continuous "bargaining" for decision-making.

Equity Structure

Insert Table 2
(Regression Model for Equity Structure - Autonomy Causal Relationship)
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For the foreign parent, positively signed coefficients between equity and JV autonomy suggest that an increase in equity owned by the foreign parent will decrease JV autonomy in Production Technology and Export Pricing decisions. See Table 2. Conversely, for the Chinese parent, negatively signed coefficients suggest that an increase in equity owned by the Chinese parent will increase JV autonomy in Production Technology and Export Pricing decisions. Table 1 shows these two decisions are "in-between" decisions that may require consultation of the JV and the parents. Table 2 indicates that equity changes do affect decision capabilities of the parents. Thus, the extent to which the JV is involved in deciding for production technology and export

pricing depends on the equity ownership structure.

Moreover, for the Chinese parent, equity changes will also affect JV decision-making autonomy in Import Sourcing and Import Pricing. Negatively signed coefficients between equity and JV autonomy suggest that an increase in equity of the Chinese parent leads to higher JV autonomy in Import Sourcing and Import Pricing decisions. In Table 1, it shows that decision-making in Import Sourcing tends to be de-centrally made by JVs. Table 2 indicates that an increase in the Chinese parent’s equity strengthens the decentralization. But when the Chinese parent decreases its equity, accompanying an equity increase of the foreign parent, it does not weaken the JV autonomy with respect to import sourcing. Thus, we conclude that import sourcing decision was stably decentralized in our sample companies.

In summary, H2a is partly supported. That is, an increase in equity owned by the foreign parent will decrease JV autonomy in Production Technology and Export Pricing decisions, but it will not affect JV autonomy in import pricing and import sourcing decisions. H2b is fully supported – an increase in the Chinese parent’s equity in the JV enhances the JV autonomy in Production Technology, Import Sourcing, Import and Export Pricing decisions.

Resource Contribution

Insert Table 3
(Regression Model for Resource Contribution - Autonomy Causal Relationship)
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Based on Table 3, we discuss individual decisions (Quality Standard, Import

Sourcing, Product Pricing, and Channel of Distribution) separately.

Quality Standard Decision. For the Chinese parent, the relationship between parent contribution in Product & Process Technology and decision on JV Quality Standard is negatively signed and statistically significant, suggesting that increasing contribution of product and process technology of the Chinese parent will increase autonomy of JV management in setting quality standard. In contrast, for the foreign parent, the relationship between Product & Process Technology contribution and Quality Standard of JVs is positively signed and statistically significant, suggesting that an increase in the foreign parent's contribution in product and process technology will decrease JV decision-making capacity in setting quality standard. The foreign parent was more concerned than its Chinese counterpart with setting quality standard when their technology inputs were high. This implies that maintaining product quality and reputation for international production was crucial for the foreign parent. Thus, H3a is supported.

Technology investment of one party can cause risks of opportunistic behavior of the cooperative partner. The foreign parent, in this respect, would need to safeguard from opportunism through tight control. In contrast, the Chinese parent was not as concerned with potential loss of technology when its contribution was high. This implies that JV technology provided by the Chinese parent was either non-proprietary technology, or it was just intended to meet indigenous needs. Thus, the Chinese partner did not encounter the risks of its technology being utilized to decrease its competitive advantage.

Product Pricing Decision. Both Brand Name & Trademark and Target Market Knowledge could be good predictors of the Product Pricing decision made by the foreign parent. Due to the multicollinearity problem between these two variables, a com-

plex independent variable (multiple of Brand Name & Trademark and Target Market Knowledge) was used to explain the Product Pricing decision. The complex variable shows a positively signed, statistically significant result, suggesting that by increasing the contribution of brand name & trademark and target market knowledge, the foreign parent would enhance its control of product pricing of the JV. But no statistically-significant result was found on this dimension for the Chinese partner. Thus, H3b is partly supported.

Channel of Distribution Decision. The foreign parent's contribution of the Channel of Distribution was tested against their control over the decision of the Channel of Distribution. A positively signed, statistically significant result indicates that as the foreign parent increased its knowledge contribution to the channel of distribution, it would increase its control. But no statistically-significant result was found on this dimension for the Chinese partner. Thus, H3c is partly supported.

As Table 1 shows that decisions on Product Pricing and Channel of Distribution are decentralized to a statistically significant degree, this is contradictory to our immediately above findings. It seems to indicate that the decentralization was not stable – when increasing resource contribution of the foreign parent, decisions on product pricing and channel of distribution become more centralized with the foreign parent.

Import Sourcing Decision. For the foreign parent, the two explanatory variables, Product & Process Technology and Material & Component, had a multicollinearity problem. Therefore, we used the interaction of the two variables as a complex variable to explain their combined effects on Import Sourcing. Positively-signed and statistically-significant results suggest a strong positive effect whereby a high contribution of product & process technology and material & component by the foreign parent enhances its control capacity in deciding the JV's import sourcing. But no statisti-

cally-significant result was found on this dimension for the Chinese partner. Thus, H3d is partly supported.

Strategic Intent

Insert Table 4
(Regression Model for Strategic Intent - Autonomy Causal Relationship)
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Export Pricing Decision. For the Chinese parent, Profits & Dividends and Extending Product Lifecycles in relation to Export Pricing are positively signed and statistically significant, suggesting that when the Chinese parent used JVs to gain profits and dividends and when JVs were important to extend the Chinese parent's product lifecycles, the Chinese parent would impose more control over the JV's export pricing decision. Thus, H4a is supported.

For the foreign parent, Profits & Dividends alone shows negatively signed, statistically significant result in relation to the Export Pricing decision. This suggests that when the foreign parent placed importance on gaining profits and dividends through JVs, they would decrease control over JV export pricing. It seems counter-intuitive that the foreign parent was not concerned with controlling export pricing when its goal was to gain profits and dividends through JVs. This implies that the foreign parent may have used JVs to develop the Chinese local market rather than to develop the global market through export. In contrast, the Chinese parent might place a high significance in entering and developing the foreign markets through JVs, thus they had a higher tendency to control export pricing. Thus, H4b is not supported.

DISCUSSION

Our findings make several contributions to research concerning international cooperative strategies. *First* results extend resource dependence theory to address relationships between parents and subsidiaries (i.e. JVs) in the interdependence relationship, thus facilitating an enriched discussion of power and role changes of cooperative partners and their ventures. *Second* results introduce autonomy into the JV research stream by deconstructing how JV autonomy may be influenced by various parent-JV factors. *Third* results are based upon in-depth information gathered through interviews within an emerging economy – China, thereby offering insights on how the partners' different conditions affect their way of managing the JV.

Results suggest that the pattern of causal relationships for JV autonomy from Chinese and foreign partners was not symmetric in two ways. First, to explain a specific dependent variable (the index of autonomy), the signs of coefficient of the independent variables (the indices of equity and resource contribution) for the Chinese and foreign partners were opposite. This indicates that Chinese and foreign partners held opposite positions concerning whether to use equity and resources to leverage their influence over the JVs – while the foreign parent enhanced control through improving equity status and contributing more resources, the Chinese parent was less sensitive with these. Second, more explanatory variables of resources could influence decision-making of the foreign parent rather than that of the Chinese parent. It suggests that the foreign parent tends to use contribution of certain resources to enhance centralization.

Change of equity structure for MNC's subsidiaries especially directs our attention from looking at the MNC itself to looking at multiple parties. Division of equity between MNCs and local partners calls attention to such a question: Will a decrease in the Chinese parent's equity and an increase in the foreign parent's equity, or vice versa, leave the decision-making power of the JV unchanged? While MNCs decrease equity ownership and resource contribution in the JV, their decision capacity decreases. However, the decreased decision capacity was not identically transferred to the local Chinese parent; rather, it split between the JV and the Chinese parent. Thus, in the process of reducing the MNCs' equity and resource contribution, JVs improved their autonomy status. Nevertheless, an enhanced autonomy can be expected for the JVs than the wholly owned subsidiaries if MNCs intend to utilize the local knowledge rather than do everything on its own.

Equity and resources were more important indicators of parent control than JV importance to the parents. Results support Martinez and Ricks (1989) with respect to parent control over human resource decisions. Our examination of the relationship between a list of JV decisions and JV importance only found that making profits and dividends (and extending product lifecycle for the Chinese parent) were predictors of export pricing.

Pfeffer & Salancik (1978) have elaborated a variety of ways (such as mergers and acquisitions, JVs, and representation on the board of directors) to manage the external environment. Essentially, these structures are aimed at reducing environmental *uncertainty*. We extend this view to the JV context and maintain that the level of *uncertainty* is an important property in determining the parent's equity/ contribution- influence choice. Results suggest that as the level of environmental uncertainty was likely to be higher for the foreign parent, it tended to internalize JV control through enhanc-

ing equity ownership and resource transfer. In contrast, the local parents encountered a lower level of uncertainty; therefore, they were inclined to give the JV management more decision discretion, disregarding their equity status and resource contribution.

The reduced uncertainty for the local parents can be caused by the following factors. First, the host government's policies on foreign investment, ownership structure and domestic participation in equity, domestic and foreign purchases and sales, and so on (Singh, 1981), which aim at protecting national interests, provide an institutional protection for the domestic partners. Second, geographical and cultural proximity enables the local parents to supervise and monitor the JV closely. It may not seem as urgent for the local parents to practice immediate control. Third, as many foreign MNCs bring technological and management skills to the JV, it can be in the interests of the local partners to leave the foreign partners untapped with JV management.

Interviews provided us with richer information to explain our findings. Our interviewees stated that the Chinese partners were usually not keen on acknowledging details of the JV operations; they tended to leave operational decisions to JV management or the foreign partners. What they cared more about was performance improvement with respect to profitability. The lack of participation in JV management was caused by a lack of knowledge of the JV business, or that the JV only took an insignificant part of the Chinese partner's business, leaving little incentives for the Chinese parent to participate in management. In this respect, the Chinese partners were relying on the foreign partner's managerial and technological skills.

Martinez & Jarillo (1989) recommended that parent companies reach a consensus with managers for key strategic decisions. Our interview results suggest that even though key strategic decisions were often made by parent companies, having JV top managers' consensus was crucial for the JV to take in the parent strategies and ad-

vance them in day-to-day operations. Thus, involving JV managers in strategic decision-making was an effective means to gain their support and to integrate the parents' strategies with the managers' behaviors. Appointing JV managers as board members was a move to bring managers into strategic planning, which was exemplified by a number of our researched companies.

CONCLUSIONS AND LIMITATIONS

We provided empirical information to examine the explanatory capacity of the resource dependence theory to JV autonomy. That is, JV's resource dependency on the parents leads to parental power of decision-making. Depending on the level of uncertainties experienced by the different parents, they may choose differently to what extent they will exercise their respective influence in decision-making. The strategic behavior perspective also provides a theoretical foundation to explain the strategic importance of the JV to the parents and how it affects JV autonomy.

Research on autonomy of subsidiaries has mostly been concerned with those in Western countries. Autonomy of subsidiaries in China and other emerging economies has been seldom discussed. We provide field data to support our findings of international JV autonomy in China. It distinguishes the differences in JV decision autonomy endowed by the Chinese and foreign parents.

Previous research categorized decisions into functional areas and examined explanatory variables for the functional decisions aggregately. This research has been able to test relationships between explanatory variables and each individual decision. The advantage of our approach is that we are able to find a minimum number of predictors for some individual decisions.

Our focus of predictors is on those indicating inter-relationships between parents and JVs. Confined by our sample size, we did not look at industry groups separately, even though we realize the degree of autonomy may differ across industries (See Harigan (1985, 1988) for industry effects). Future studies should also consider such factors as the nationality of the MNC, the attributes of the MNC and local parents, the type of business and technology involved, the degree of diversification, size, international experience of the parents (Hedlund, 1981). Subsidiary related characteristics, such as the degree of integration into the total system, size, performance, and market structure (Hedlund, 1981), are also relevant. Future studies should look at multi-level variables, and evaluate their total and separate effects.

There are a number of other limitations. First, though the nationality of the interviewees (local employees versus expatriates) may lead to different views, we did not distinguish them because of the limited sample size. Second, the choice of decisions for the construction of the autonomy index may lead to significantly different results (Hedlund, 1981). A list of representative decisions should be scrutinized to formulate the index. Third, though acknowledging that the JV partners and the JVs are involved in constant 're-negotiation' of contractual terms (Lorange, 1996), this text adopts a static view, also confined by the available empirical information. Further research should examine the changes in the power of influence overtime and the division of responsibilities and benefits in an "evolutionary" manner.

REFERENCES

- Aldrich H. 1971. Organizational boundaries and interorganizational conflict. *Human Relations* **24**(4): 279-293.
- Aldrich H. 1976. Resource dependence and interorganizational relations: local employment service offices and social services sector organizations. *Administration & Society* **7**(4): 419-454.
- Bartlett CA. 1986. Building and managing the transnational: the new organizational challenge. In *Competition in Global Industries*, Porter ME (eds). Harvard Business School Press: Boston, MA; 367-401.
- Bartlett CA, Ghoshal S. 1986. Tap your subsidiaries for global reach. *Harvard Business Review* **64**(6): 87-94.
- Bartlett CA, Ghoshal S. 1989. *Managing across Borders: The Transnational Solution*. Harvard Business School Press: Boston, MA.
- Beamish PW, Banks JC. 1987. Equity joint ventures and the theory of the multinational enterprises. *Journal of International Business Studies* **18**(2): 1-16.
- Birkinshaw J, Hood N, Jonsson S. 1998. Building firm-specific advantages in multinational corporations: the role of subsidiary initiative. *Strategic Management Journal* **19**(3): 221-241.
- Birkinshaw J, Ridderstrale J. 1999. Fighting the corporate immune system: a process study of subsidiary initiatives in multinational corporations. *International Business Review* **8**(2): 149-180.
- Boyd B. 1990. Corporate linkages and organizational environment: a test of the resource dependence model. *Strategic Management Journal* **11**(6): 419-430.
- Brooke MZ. 1984. *Centralization and Autonomy: A Study in Organization Behavior*.

Holt, Rinehart and Winston: London and New York.

- Brouthers KD. 2002. Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* **33**(2): 203-221.
- Burt RS. 1980. Autonomy in a social topology. *American Journal of Sociology* **85**(4): 892-925.
- Casciaro T, Piskorski M. 2005. Power imbalance, mutual dependence, and constraint absorption: a closer look at resource dependence theory. *Administrative Science Quarterly* **50**(2): 167-199.
- Child J. 1972. Organizational structure, environment, and performance – the role of strategic choice. *Sociology* **6**(1): 1-22.
- Crozier M, Friedberg E. 1980. *Actors and Systems: The Politics of Collective Action*. University of Chicago Press: Chicago, IL.
- D’Cruz JR. 1986. Strategic management of subsidiaries. In *Managing the Multinational Subsidiary*, Etemad H, Delude LS (eds.) Croom Helm: London; 75-89.
- Doz YL, Prahalad CK. 1981. Headquarters influence and strategic control in MNCs. *Sloan Management Review* **23**(1): 15-29.
- Doz YL, Prahalad CK. 1991. Managing DMNCs: a search for a new paradigm. *Strategic Management Journal* **12**(Special Issue): 145-164.
- Edwards R, Ahmad A, Moss S. 2002. Subsidiary autonomy: the case of multinational subsidiaries in Malaysia. *Journal of International Business Studies* **33**(1): 183-191.
- Emerson RM. 1962. Power-dependence relations. *American Sociological Review* **27**(1): 31-41.
- Emerson RM. 1972. Exchange theory, part I: a psychological basis for social ex-

- change, and exchange theory. In *Sociological Theories in Progress*, Vol. 2, Berger J, Zelditch M, Anderson B (eds). Houghton-Mifflin: Boston; 38-55.
- Garnier GH. 1982. Context and decision making autonomy in the foreign affiliates of U.S. multinational corporations. *Academy of Management Journal* **25**(4): 893-908.
- Garnier GH, Osborn TN, Galicia F, Lecon R. 1979. Autonomy of the Mexican affiliates of U.S. multinational corporations. *Columbia Journal of World Business* **14**(1): 78-90.
- Gates SR, Egelhoff WG. 1986. Centralization in headquarters-subsidary relationships. *Journal of International Business Studies* **17**(2): 71-92.
- Ghoshal S, Bartlett CA. 1988. Creation, adoption, and diffusion of innovations by subsidiaries of multinational corporations. *Journal of International Business Studies* **19**(3): 365-388.
- Gupta AK, Govindarajan V. 1991. Knowledge flows and the structure of control within multinational corporations. *Academy of Management Review* **16**(4): 768-792.
- Hambrick DC. 1983. Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. *Academy of Management Journal* **26**(1): 5-26.
- Harrigan KR. 1983. Research methodologies for contingency approaches to business strategy. *Academy of Management Review* **8**(3): 398-405.
- Harrigan KR. 1985. *Strategies for Joint Ventures*. Lexington Books: Lexington, MA.
- Harrigan KR. 1986. *Managing for Joint Venture Success*. Lexington Books: Lexington, MA.
- Harrigan KR. 1988. Joint ventures and competitive strategy. *Strategic Management Journal* **9**(2): 141-158.

- Hedlund G. 1981. Autonomy of subsidiaries and formalization of headquarters-subsidiary relationships in Swedish MNCs. In *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations*, Otterbeck L (ed). St. Martin's Press: New York; 25-78.
- Hedlund G. 1984. Organization in-between: the evolution of the mother-daughter structure of managing foreign subsidiaries in Swedish MNCs. *Journal of International Business Studies* **15**(2): 109-123.
- Heide JB, John G. 1988. The role of dependence balancing in safeguarding transaction-specific assets in conventional channels. *Journal of Marketing* **52**(1): 20-35.
- Hennart J-F. 1988. A transaction costs theory of equity joint ventures. *Strategic Management Journal* **9**(4): 361-374.
- Jarillo JC, Martinez JI. 1990. Different roles for subsidiaries: the case of multinational corporations in Spain. *Strategic Management Journal* **11**(7): 501-512.
- Killing JP. 1983. *Strategies for Joint Venture Success*. Praeger: New York.
- Kogut B. 1985. Designing global strategies: comparative and competitive value-added chains. *Sloan Management Review* **26**(4): 15-28.
- Kogut B. 1988. Joint ventures: theoretical and empirical perspectives. *Strategic Management Journal* **9**(4): 319-332.
- Lorange P. 1996. Interactive strategies: alliances and partnerships. *Long Range Planning* **29**(4): 581-584.
- Martinez JI, Jarillo JC. 1989. The evolution of research on coordination mechanisms in multinational corporations. *Journal of International Business Studies* **20**(3): 489-514.
- Martinez ZL, Ricks DA. 1989. Multinational parent companies' influence over human resource decisions of affiliates: U.S. firms in Mexico. *Journal of International*

Business Studies **20**(3): 465-487.

- O'Donnell SW. 2000. Managing foreign subsidiaries: agents of headquarters, or an independent network? *Strategic Management Journal* **21**(5): 525-548.
- Otterbeck L. 1981. The management of joint ventures. In *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations*, Otterbeck L (ed). St. Martin's Press: New York; 269-296.
- Pfeffer J. 1987. A resource dependence perspective on intercorporate relations. In *Intercorporate Relations: The Structural Analysis of Business*, Mizuchi MS, Schwartz M (eds). Cambridge University Press: Cambridge, New York; 25-55.
- Pfeffer J, Nowak P. 1976. Joint ventures and interorganizational interdependence. *Administrative Science Quarterly* **21**(3): 398-418.
- Pfeffer J, Salancik GR. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row: New York.
- Prahalad CK, Doz YL. 1981. An approach to strategic control in MNCs. *Sloan Management Review* **22**(4): 5-13.
- Robins JA, Tallman S, Fladmoe-Lindquist K. 2002. Autonomy and dependence of international cooperative ventures: an exploration of the strategic performance of U.S. ventures in Mexico. *Strategic Management Journal* **23**(10): 881-901.
- Roth K, Morrison AJ. 1992. Implementing global strategy: characteristics of global subsidiary mandates. *Journal of International Business Studies* **23**(4): 715-735.
- Sim AB, Ali MY. 1998. Performance of international joint ventures from developing and developed countries: an empirical study in a developing country context. *Journal of World Business* **33**(4): 357-377.
- Sim AB, Ali MY. 2000. Determinants of stability in international joint ventures: evidence from a developing country context. *Asia Pacific Journal of Management*

17(3): 373-397.

Singh RKDN. 1981. Policy issues and trends in parent-affiliate relationships in developing countries. In *The Management of Headquarters-Subsidiary Relationships in Multinational Corporations*, Otterbeck L (ed). St. Martin's Press: New York; 11-24.

Taggart JH. 1997. Autonomy and procedural justice: a framework for evaluating subsidiary strategy. *Journal of International Business Studies* 28(1): 51-76.

White RE, Poynter TA. 1984. Strategies for foreign-owned subsidiaries in Canada. *Business Quarterly* 49(2): 59-69.

APPENDICES

TABLE 1
Strategic and Operational Decisions in JVs

	Test Value = 3			
	Mean	Std. De- viation	t	Sig. (2-tailed)
Production Technology ^s	3.18	1.570	.665	-
Royalty Payment ^s	3.43	1.599	1.228	-
Quality Standard ^s	3.12	1.691	.412	-
Production Schedule	1.85	1.349	-4.903	.000***
Product Pricing	2.29	1.412	-3.101	.004**
Advertising & Promotion	2.09	1.463	-3.698	.001***
Channel of Distribution	2.14	1.508	-3.007	.006**
Import Sourcing	2.48	1.439	-2.057	.048*
Import Pricing	2.60	1.418	-1.668	-
Export Pricing	2.50	1.383	-1.771	-
Export Market ^s	3.25	1.294	.947	-
Capital Expenditure ^s	3.31	1.378	1.283	-
Financing Source ^s	3.47	1.319	2.010	.053*
Dividend Distribution ^s	4.13	1.185	5.372	.000***
Selection, Promotion & Com- pensation of Executives ^s	3.80	1.487	3.466	.001***
Annual Budgets & Business Plan	2.83	.881	-1.226	-

* p < 0.05; ** p < 0.01; *** p < 0.001

s indicates strategic decisions

TABLE 2								
Regression Model for Equity Ownership-Autonomy Causal Relationship								
	Dependent Variables							
	Production Technology		Export Pricing		Import Pricing		Import Sourcing	
Independent Variable	Foreign Parent	Chinese Parent	Foreign Parent	Chinese Parent	Foreign Parent	Chinese Parent	Foreign Parent	Chinese Parent
	0.503	-0.453	0.477	-0.449	-	-0.392	-	-0.364
Equity	(0.003)	(0.008)	(0.018)	(0.028)	-	(0.02)	-	(0.037)
	<i>0.229</i>	<i>0.18</i>	<i>0.192</i>	<i>0.165</i>	-	<i>0.128</i>	-	<i>0.104</i>

Note: Figures in bold are standardized regression coefficients; figures in parentheses are significance level of the coefficients; figures in italics are the adjusted R squares.