

The Wealth Effects of Domestic vs International Joint Ventures: The Case of Real Estate

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Abstract. This study examines the wealth effect of international versus domestic real estate joint ventures on the U.S. participating firm's shareholders. This is done using traditional event study methodology for real estate joint venture announcements. The results suggest that domestic real estate joint ventures generally result in a significant increase in the firm's value, while international real estate joint ventures usually have a much less significant to nonsignificant wealth impact. This may be due to the immovability of real properties in foreign countries and the large amount of initial investment in real estate that increase both political and economic risks for international real estate joint ventures. This study also finds that hotel joint ventures generally have a weaker wealth effect than non-hotel real estate joint ventures.

Introduction

The joint venture is a widely used method of corporate expansion in general business, as well as in the real estate area. The international joint venture provides U.S. companies with opportunities to access overseas markets. This is especially true in countries that prohibit acquisitions of real estate by foreign investors or have related restrictions for direct foreign investment.

However, despite their importance, joint ventures in general, and international real estate joint ventures in particular, have not been rigorously examined thus far. The purpose of this study is to investigate the impact of both domestic and international real estate joint ventures on the value of U.S. firms, and to analyze the factors that may explain any abnormal returns. To be consistent with the literature, an international real estate joint venture is defined as one in which at least one partner is from a foreign country and the real estate properties involved in the joint venture are located in the foreign country. Because of the immovability of real estate, international real estate joint ventures bear more political and economic risk than the normal foreign direct investment. However, as with foreign investment in general, there may be diversification benefits.

Conflicting results about the wealth effects of joint ventures have been previously reported in the literature. Therefore, this study will provide new evidence on this important issue by expanding the joint venture analysis into the international area and by extending the time period of the analysis.

The remainder of this paper is organized as follows. Section two reviews the previous

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studies on the impacts of domestic general business joint ventures on shareholders' wealth. Section three discusses international general business joint ventures. The fourth section reports on the previous studies about the wealth effect of real estate joint ventures. The fifth section describes the methodology and data used in this study. Section six presents the results, and the final section contains a summary and conclusions.

Domestic Joint Ventures

Joint ventures are the pooling of resources by two or more firms to form a new legal entity. The original management of the parent firms remains intact under a joint venture (McConnell and Nantell, 1985). Darrough and Stoughton (1989) conclude that the two most important features of joint ventures are joint control of resources by investors and synergies based on the strategic exploitation of comparative advantages. Harrigan (1985) presents three basic motives for joint ventures: 1) to augment internal strengths by concentrating resources in areas where the firm is a leader; 2) to enhance the competitive ability of the firm; and 3) to focus on strategic benefits. However, Hennart (1988) argues that the motive for joint ventures is to minimize transaction costs. In the studies of domestic real estate joint ventures, acquisition of capital would seem to be one of the primary motives (Berger and Friedman, 1977).

Research results on the wealth effects of joint ventures support the synergy hypothesis. The synergistic gains are the value created by the combination due to economies of scale, more efficient management, the combination of complementary resources, the exploitation of market power, etc. McConnell and Nantell (1985) examined 210 joint ventures over the 1972–79 period and find a significantly positive two-day cumulative abnormal return (CAR) of 2.15%. They conclude that these premiums are similar to those in mergers.

The empirical results on the announcement effect for real estate joint ventures are mixed. Ravichandran and Sa-Aadu (1988) report that the two-day announcement period return for a sample of seventy-two firms over the period 1972 through 1983 is 0.76%. The authors pointed out that three basic characteristics of real estate markets might contribute to the significant abnormal returns: 1) the existence of asymmetric information and the lack of a standardized product in real estate markets caused by the local nature of the markets; 2) the importance of the sparse managerial expertise in real property management; and 3) the presence of anchor tenants for commercial real properties. Elayan (1993) finds even higher abnormal returns of 1.183% (significant at the 1% level) for the two-day announcement period. However, Corgel and Rogers (1987) identified twenty-four real estate joint ventures occurring from January 1979 through December 1985 and find that the announcement of real estate development joint ventures was not linked to significantly positive or negative price reactions, but there were substantial variations across firms.

Results from the previous studies on domestic real estate joint ventures suggest that further evidence on the wealth impact generated by real estate joint venture announcements is definitely needed.

International Joint Ventures

International joint ventures are those that involve at least one foreign partner. U.S. firms

can use international joint ventures to access markets that might not otherwise be accessible, to exploit the imperfections in factors and product markets, and to exploit oligopolistic advantages gained in the domestic market (Lee and Wyatt, 1990). There are several empirical studies on the value of international asset diversification through joint ventures and the evidence provided by these studies is conflicting. Lummer and McConnell (1990) report synergistic gains to U.S. partners in international joint ventures and discuss how international joint ventures generally increase the value of the firm. However, after the examination of 110 international joint ventures, Finnerty, J Owers and Rogers (1986) do not find evidence supporting the synergy effect hypothesis. Furthermore, Lee and Wyatt (1990) report significant negative abnormal returns to 109 U.S. firms involved in international joint ventures during the period 1974 through 1986 and their results indicate that only joint ventures with firms from less developed countries have non-negative effects on shareholders' wealth. Jensen's agency cost of free cash flow was hypothesized as explaining this phenomenon. That is, international joint ventures may represent overinvestment that expands the manager's control over real properties in foreign countries at the expense of shareholders' wealth.

However, two recent studies indicate that U.S. companies may realize significant positive abnormal returns from establishing international joint ventures with either less developed countries or developed countries. In a study of Japan–U.S. joint ventures by Crutchley, Guo and Hansen (1991), both U.S. and Japanese shareholders benefit, on average, from forming international joint ventures. The average percentage gain in stock price is about 1% at the announcement. The gains are larger when the home currency is relatively strong, which indicates that overcoming restrictions on cross-border flows of goods and services may be a motive for international joint ventures. Similarly, Chen, Hu and Shieh (1991) report significant positive abnormal returns (0.52%) on the announcement day for U.S. firms in eighty-eight U.S.–China joint ventures from 1979 to 1990. The positive wealth gains are found to be negatively related to the size of the foreign investment (firms making small investments in China have the option of expansion if future opportunities arise). Meanwhile, these firms' losses are limited to the small size of their investments. Therefore, the developmental risk for these firms is reduced.

However, none of the previous studies regarding international joint ventures is restricted to the real estate assets. Some unique characteristics of real estate might change the wealth effect of international joint ventures. For example, the immovability of real property and the large size of initial investment required in real estate markets bring more political as well as economic risks to international real estate joint ventures, compared to international joint ventures in general. These disadvantages might reduce or even outweigh the benefits from international diversification. The relevant empirical evidence might be helpful to understand this important issue.

Data and Methodology

Data

This study covers the period from 1975 through 1990. Announcements of real estate joint ventures were found in the *Wall Street Journal Index*, *Funk & Scott*, and the *Yearbook of Corporate Mergers, Joint Ventures, and Corporate Policy*. Observations were included in the sample if sufficient data were available on the CRSP NYSE/AMEX or OTC tapes for

Exhibit 1
Joint Ventures by Classification and Property Type

Year	Domestic Hotel	Domestic Non-Hotel	Int'l Hotel	Int'l Non-Hotel
1975	1	0	0	0
1976	0	0	0	0
1977	0	1	0	1
1978	0	3	1	1
1979	4	3	1	2
1980	4	0	0	1
1981	2	4	1	0
1982	2	1	1	0
1983	1	4	1	0
1984	2	2	0	0
1985	0	0	3	0
1986	0	2	3	0
1987	1	5	1	0
1988	1	4	2	4
1989	0	2	4	0
1990	0	4	0	1
Total	18	35	18	10

Exhibit 2
Foreign Countries Involved in the JVs

Bahamas	1
China (Mainland)	3
Egypt	1
Hong Kong	1
Japan*	5
Mexico	5
Philippines	1
Saudi Arabia	2
South Africa*	1
Switzerland*	1
U.K.	5
Soviet Union*	2
Total	28

*country classified as *developed* by the IMF (1984) economic status classification

the estimation of abnormal returns, and there were no conflicting events that took place during the event period, such as dividend announcements, senior management changes, etc. However, most announcements of real estate joint ventures did not provide information about transaction size. To exclude the announcements without transaction size information would substantially reduce the sample size. A total of eighty-one U.S. firms participating in real estate joint ventures were identified: fifty-three with domestic

joint ventures and twenty-eight with international joint ventures (thirty-six with hotel joint ventures and forty-five with non-hotel joint ventures). A breakdown of events by year and domestic versus international/hotel versus non-hotel status is contained in Exhibit 1 and the countries of foreign partners are shown in Exhibit 2.

Methodology

Abnormal returns for the joint venture partner were computed using the standard event study methodology defined in Brown and Warner (1985) with market model-adjusted returns. The pre-event period was taken to be days (-244, -21) and the event period was taken to be days (-20, +5). The sample was split into two different subsamples. One is domestic versus international joint ventures. Because of the unique characteristics of real estate investment (immovability of real property and large amount of initial investment), international real estate joint ventures bear more risks than other types of international joint ventures. Thus, it is hypothesized that the wealth effect of international real estate joint ventures is weaker than that for domestic real estate joint ventures.

The other subsample is hotel versus non-hotel joint ventures. Although hotels own and use real properties, some researchers and many institutional real estate investors feel that hotels are more like an operating business, and not representative of real estate in general. Hotels are generally classified into the lodging industry rather than the typical real estate industry. In addition, from an operations point of view, hotel managers have few similarities with real estate asset managers. Therefore, two of the three sources of economic gain for real estate joint ventures suggested by Ravichandran and Sa-Aadu (1988), that is, sparse managerial skills and anchor tenants, are not quite as relevant for hotel joint ventures. Therefore, it is hypothesized that the wealth effect of hotel joint ventures is weaker than that for non-hotel joint ventures.

Further Tests

In order to examine the factors that may contribute to the cumulative abnormal returns (CAR), if any, for the entire sample (all real estate joint ventures) and international real estate joint ventures, the following variables were used in a second-stage cross-sectional regression analysis:

- **Type of partner.** Kau and Sirmans (1985) describe a real estate joint venture as a financing agreement in which the borrower is typically a real estate developer with considerable technical knowledge and the lender has the capital that the developer usually lacks. A financial institution, as a partner, involved in a real estate joint venture might indicate the combination of complementary resources and have positive impact on shareholders' wealth.
 - **Type of property.** If a property involved in a joint venture is a hotel property, it may not have a significant positive impact on CAR, because of reasons stated previously.
 - **Type of joint venture.** The immovability of real property and the large amount of initial investment normally required indicate that international real estate joint ventures may contribute much less to the CAR for the entire sample than the domestic real estate joint ventures contribute to the entire sample's CAR.
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- **Type of country.** As mentioned above, Lee and Wyatt (1990) report that only international joint ventures with less developed countries have non-negative wealth effects. However other studies suggest that the type of country (developed or less developed) the partners come from does not matter. Usually less developed countries lack political and economic stability, thus an international real estate joint venture associated with a less developed country is hypothesized to have a less significant positive impact on the wealth of U.S. shareholders.
- **Tax considerations.** The 1986 U.S. tax law revision substantially changed the depreciation rules and the tax treatment for capital gains. Scholes and Wolfson (1990) argue that after 1986 tax reform foreign investors should find investment in the U.S. more attractive than before. Therefore, it may have a significant impact on the CAR for international real estate joint ventures.
- **Exchange rates.** Chen et al. (1991) report that the economic gains for international joint ventures are larger when the home currency is relatively strong. The same kind of relationship between economic gains and the strength of U.S. currency is assumed for international real estate joint ventures.

The second-stage cross-sectional regression analysis has the following form:

$$CAR_i = \alpha_i + \beta_{i1}F + \beta_{i2}H + \beta_{i3}I + \varepsilon_i, \quad (1)$$

where the CAR_i is the cumulative abnormal return on days $(-1, 0)$ associated with announcement i , F is a dummy variable that takes on the value of 1 if a financial institution is involved in the joint venture and the value 0 otherwise. F is to estimate the effect of participation by financial institutions; as suggested by Berger and Friedman (1977), acquisition of capital is one of the primary motives for domestic real estate joint ventures. H is a dummy variable that takes the value of 1 if the property involved in the joint venture is a hotel and 0 otherwise. I is a dummy variable that takes the value of 1 if one partner in the joint venture is a foreign company and 0 otherwise, and ε_i is a random term.

For the international joint ventures, the regression model includes the following additional independent variables: I is replaced by D , a dummy that takes the value of 1 if the foreign partner is from a developed country and 0 otherwise. T is a new dummy that takes the value of 1 if the joint venture is formed after the U.S. 1986 tax reform act and 0 otherwise; T would measure the impact of the 1986 tax reform on the abnormal returns for international real estate joint ventures. Finally, E , is an exchange-rate variable that measures the strength of U.S. currency. Similar to Harris and Ravenscraft (1991), E is calculated by the following:

$$E = \frac{(\bar{e} - e)}{\bar{e}}, \quad (2)$$

where e represents how much foreign currency one U.S. dollar is worth, and is \bar{e} the mean of e over the sample period.

Results

Exhibit 3 presents the average abnormal returns (AR) for the U.S. firms in the various types of real estate joint ventures examined in this study. For the all real estate (hotel and

Exhibit 3
CARs for Various intervals

Interval	All	Domestic	Int'l	Hotel	Non-Hotel
(-20, -2)	.0095 (.74)	-.0077 (-.46)	.0398 (1.67)	.0390 (1.85)	-.0144 (-.80)
(-2, -2)	.0023 (.79)	-.0006 (-.16)	.0079 (1.45)	.0053 (1.10)	-.0001 (-.01)
(-1, -1)	.0088** (2.97)	.0112** (2.92)	.0042 (.76)	.0087 (1.81)	.0088* (2.12)
(-1, 0)	.0082* (1.95)	.0111* (2.05)	.0026 (.33)	.0070 (1.02)	.0091 (1.55)
(0, 0)	-.0006 (-.21)	-.0001 (-.03)	-.0016 (-.29)	-.0018 (-.37)	.0003 (.08)
(1, 5)	-.0156* (-2.36)	-.0204* (-2.38)	-.0064 (-.52)	-.0168 (-1.55)	-.0146 (-1.57)

t-statistics for the CARs are given in parentheses.

*indicates significance at the 5% level; **indicates significance at the 1% level

non-hotel combined) joint ventures, the two-day (-1, 0) CAR of 0.82% is larger than that found by Ravichandran and Sa-Aadu (1988) and significant at the 5% level. The AR of day -1 is 0.88% (significant at the 1% level). The results of this study thus support the conclusions of McConnell and Nantell (1985) that shareholders reap the wealth gains from joint ventures. However, the results do not support Corgel and Rogers' (1987) findings that deny the wealth effects of real estate joint ventures. Their findings may be limited due to their small sample size.

The domestic real estate joint ventures in this study had an AR for day -1 of 1.12% (significant at the 1% level) and a two-day (-1,0) CAR of 1.11% (significant at the 5% level) to partners, whereas the international real estate joint ventures had an insignificant positive two-day CAR of 0.26%. The results, therefore, support the hypothesis that international real estate joint ventures generally have a smaller wealth impact on the value of U.S. participating firms than domestic real estate joint ventures do. But the results are inconsistent with findings reported in Lee and Wyatt (1990) that international joint ventures generate negative abnormal returns to U.S. partners.

The AR of day -1 for non-hotel joint ventures was 0.88% (significant at the 5% level), whereas for hotel joint ventures it was 0.87% (significant at the 10% level). The two-day (-1,0) CAR for non-hotel joint ventures was 0.91%, while for hotel joint ventures was only 0.70%, and both were insignificant.

Exhibits 4 and 5 show the results of the cross-sectional regressions for days (-1,0), CARs for all joint ventures and international joint ventures, respectively. Although seven different regression models were employed for the all-real estate joint ventures and international joint ventures regressions, none of the variables were significant at even the 10% level. However, the hotel variable had negative coefficients in seven of eight cases (Models 1, 2 and 6 for all-real estate joint ventures (Exhibit 4), and Models 1, 3, 5 and 6 for international real estate joint ventures (Exhibit 5)) and the variable for international joint ventures had a negative coefficient in many cases (Models 1, 3, 4, and 7 for all real

Exhibit 4
All Joint Ventures
Regressions: CAR Days (-1, 0)

Model	Intercept	Finance Institut.	Hotel	Int'l Joint Venture	Adj. R^2	F
1	.0075 (.68)	.0134 (.85)	-.0003 (-.02)	-.0089 (-.57)	-.024	.372
2	.0055 (.53)	.0138 (.88)	-.0027 (-.19)	—	-.015	.400
3	.0076 (.76)	.0134 (.86)	—	-.0088 (-.60)	-.011	.565
4	.0113 (1.11)	—	.0010 (.07)	-.0095 (-.61)	-.021	.197
5	.0043 (.52)	.0137 (.88)	—	—	-.003	.773
6	.0091 (.96)	—	-.0022 (-.15)	—	-.012	.024
7	.0116 (1.30)	—	—	-.0092 (-.63)	-.008	.395

Exhibit 5
International Joint Ventures
Regressions: CAR Days (-1, 0)

Model	Intercept	Finance Institut.	Hotel	Developed Country	Ex Rate	After Tax	Adj. R^2	F
1	.0269 (1.03)	-.0005 (-.02)	-.0309 (-1.33)	.0246 (1.07)	-.0123 (-.47)	-.0286 (-1.24)	-.01	.947
2	.0223 (1.28)	.0080 (.28)	—	—	-.0010 (-.04)	-.0326 (-1.41)	.04	.700
3	.0104 (.46)	-.0025 (-.09)	-.0315 (-1.34)	.0292 (1.28)	-.0058 (-.23)	—	-.04	.779
4	-.0080 (-.43)	.0055 (.19)	—	.0250 (1.08)	.0025 (.10)	—	-.08	.423
5	.0096 (.47)	—	-.0311 (-1.39)	.0291 (1.30)	-.0048 (-.21)	—	.01	1.088
6	.0236 (1.36)	—	-.0272 (-1.21)	—	.0015 (.07)	—	-.02	.757
7	-.0068 (-.40)	—	—	.0251 (1.11)	.0005 (.02)	—	-.03	.645

estate joint ventures (Exhibit 4)). This is consistent with the above findings that these type of real estate joint ventures have less significant or insignificant positive wealth effects (Exhibit 3).

Summary and Conclusions

This study has investigated the impact of real estate joint ventures on the participating U.S. firm's shareholder wealth. The results for "all" and "domestic" joint ventures indicate that real estate joint ventures generally result in a significant increase in the firm's value. This finding is in agreement with that found by McConnell and Nantell (1985) and Ravichandran and Sa-Aadu (1988), but it is inconsistent with that found by Corgel and Rogers (1987).

The results of this study also suggest that international real estate joint ventures usually have a much less significant positive wealth impact on U.S. participating firms' shareholders than domestic real estate joint ventures do. The possible reason is that the immovability of real properties in foreign countries and the large size of initial investments required partially offset, even outweigh the benefits from international asset diversification. This finding is consistent with that reported by Lummer and McConnell (1990), Crutchley et al. (1991) and Chen et al. (1991), but it contradicts the results found by Lee and Wyatt (1990). The evidence that domestic real estate joint ventures generate significant positive abnormal returns while international real estate joint ventures fail to provide U.S. companies with significant abnormal returns indicates that investors perceive that investment in U.S. real estate may involve less political and economic risk than foreign real estate investment.

The type of property also seems to matter. This study finds that hotel joint ventures generally have weaker wealth effects than non-hotel joint ventures (compare the AR of day -1 for hotel and non-hotel joint ventures). It may be due to Jensen's "free cash" phenomenon, that is, investment in hotels simply means the further oversupply of hotels in this country, which affects the perceptions of potential investors, or to the perceived status of hotels as more of an operating business than a real estate investment. This finding is consistent with our hypothesis about hotel joint ventures.

In addition, this study does not find supportive evidence that the participation or non-participation of financial institutions has any significant wealth impact on real estate joint venture partners. This indicates that traditional financial institutions might not be the major funds providers for real estate joint ventures. The results of this study do not indicate any significant impacts of types of countries foreign partners are from, the strength of the U.S. dollar, and the 1986 U.S. tax law revision. However, the insignificantly negative regression coefficients of the hotel and international joint ventures are consistent with the findings that those types of joint ventures have less significant or insignificant positive wealth effects.

References

- Berger, S. V. and P. Friedman, Joint Ventures, Competition and Technological Complementarities: Evidence from Chemicals, *Southern Economic Journal*, 1977, 43, 1330-37.
- Brown, S. and J. B. Warner, Using Daily Stock Returns: The Case of Event Studies, *Journal of Financial Economics*, 1985, 14:1, 3-31.
- Chen, H., M. Y. Hu and J. C. P. Shieh, The Wealth Effect of International Joint Ventures: The Case of U.S. Investment in China, *Financial Management*, 1991, 4, 31-41.
- Corgel, J. B. and R. C. Rogers, Corporate Real Estate Joint Ventures and Security Price Performance, *Real Estate Issues*, 1987, 12, 1-4.
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- Crutchley, C. E., E. Guo and R. S. Hansen, Stockholder Benefits from Japanese–U.S. Joint Ventures, *Financial Management*, 1991, 4, 22–30.
- Darrough, M. N. and N. M. Stoughton, A Bargaining Approach to Profit Sharing in Joint Ventures, *Journal of Business*, 1989, 62, 237–70.
- Elayan, F. A., The Announcement Effect of Real Estate Joint Ventures on Returns to Stockholders: An Empirical Investigation, *Journal of Real Estate Research*, 1993, 8:1, 13–25.
- Finnerty, J. E., J. E. Owers and R. C. Rogers, The Valuation Impact of Joint Ventures, *Management International Review*, 1986, 2, 14–26.
- Harrigan, K., *Strategies for Joint Ventures*, Lexington, Mass.: Heath, 1985.
- Harris, R. S. and D. Ravenscraft, The Role of Acquisitions in Foreign Direct Investment: Evidence from the U.S. Stock Market, *Journal of Finance*, 1991, 46, 825–44.
- Hennart, J.-F., A Transaction Costs Theory of Equity Joint Ventures, *Strategic Management Journal*, 1988, 9, 361–74.
- International Monetary Fund (IMF), *World Economic Outlook*, Washington, D.C.: IMF, 1984.
- Kau, J. B. and C. F. Sirmans, *Real Estate*, New York: McGraw-Hill, 1985.
- Lee, I. and S. B. Wyatt, The Effects of International Joint Ventures on Shareholder Wealth, *Financial Review*, 1990, 25, 641–49.
- Lummer, S. L. and J. J. McConnell, in S. G. Rhee and R. P. Chang, editors, *Valuation Effects of International Joint Ventures, Pacific-Basin Capital Markets Research*, New York: Elsevier Science, 1990, 531–46.
- McConnell, J. J. and T. J. Nantell, Corporate Combinations and Common Stock Returns: The Case of Joint Ventures, *Journal of Finance*, 1985, 40, 519–36.
- Raveed, S. R. and W. Renforth, State Enterprise—Multinational Corporation Joint Ventures: How Well Do They Meet Both Partners' Needs? *Management International Review*, 1983, 1, 47–57.
- Ravichandran, R. and J. Sa-Aadu, Resource Combination and Security Price Reactions: The Case of Real Estate Joint Ventures, *AREUEA Journal*, 1988, 16, 105–22.
- Scholes, M. and M. Wolfson, The Effects of Changes in Tax Laws on Corporate Reorganization Activity, *Journal of Business*, 1990, 63, 141–64.