"A Comparison of the Shareholder Wealth Effects of Firms Announcing Domestic and International Joint Ventures"

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Abstract

In this paper, we provide a comprehensive analysis and comparison of the shareholder wealth effects associated with announcements of domestic and international joint ventures in Australia. In addition, we attempt to determine the source of the wealth effects and how they vary across domestic and international joint ventures. The wealth effects are examined for a sample of 87 domestic and 90 international joint venture announcements made by publicly-listed Australian firms during June 1988 - May 1996. To the best of our knowledge, this is the first study that examines the valuation of joint ventures for Australian firms and provides a comprehensive comparison of the differences in wealth effects associated with domestic and international joint ventures. Our results support the proposition that, on average, shareholders of firms announcing domestic and international joint ventures earn positive abnormal return over a two-day announcement period. We also find that the wealth gains associated with domestic joint ventures cannot be traced to any of the hypothesized variables. However, for international joint ventures, the wealth gains are found to be influenced by firm size (smaller firms experience higher gains), the industrial sector of the firm (resource sector joint ventures provide higher gains), and the type of joint venture (unincorporated joint ventures provide higher gains). Finally, the institutional status of the joint venture partner and country risk do not play a role in explaining the positive wealth gains from international joint venture announcements.

Key words: Domestic joint ventures; International joint ventures; Shareholder wealth; Event study.

1. Introduction

Since the 1990s, the Australian market has progressed to become more dynamic, complex and competitive than it used to be in the 1980s and earlier. The removal of trade barriers and the continuing economic deregulation since the early 1980s has resulted in an increased foreign ownership of firms trading in Australia. This has led to several Australian firms turning to both domestic and international joint ventures to maintain their competitive edge. However, over the past few years, radical transformations have also taken place in world markets. For example, barrier-free trade agreements signed by Canada, Mexico and the US and among European Community countries have seen the evolution of new economic blocs in North America and Europe, respectively. In addition to this, the continuing economic deregulation in Asia and in eastern and central European countries has resulted in the privatization of industries that were previously government controlled. This has enabled several firms to access markets that might not otherwise be accessible, to exploit factor and product markets imperfections, and to export oligopolistic advantages gained in the domestic market[1]. However, coexisting with the potential for large gains and diversification benefits is the existence of various risks, such as political instability, social unrest, entrenched bureaucracies, exchange rate risk, and operating and financial risks.

Previous studies on the market's reaction to announcements of both domestic and international joint ventures have provided mixed results. In the context of domestic joint ventures, McConnell and Nantell (1985) analyze the effect on shareholder wealth of announcements of 136 such ventures made by 210 US-based firms during 1972-79 and find a statistically significant two-day abnormal return of +0.73%. They also find a negative relationship between the abnormal returns and the size of the joint venture partner. Subsequent studies have tried to identify factors

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[1] For more detailed discussions on these factors see, for example, Lee and Wyatt (1990) and Etebari (1993).

influencing the success of domestic joint ventures[1]. Koh and Venkatraman (1991) examine joint ventures in the information technology sector and find a positive market reaction which tends to be higher when the parent company comes from a related industrial sector. Conversely, Mohanram and Nanda (1998) find that the stock market reacts negatively to domestic joint ventures that are motivated by value-reducing managerial concerns. They also find that market participants factor in strategic considerations and signals about the participant firms when valuing such joint ventures. Johnson and Houston (2000) find that horizontal domestic joint ventures create synergistic gains that are shared by the partners, whereas vertical joint ventures generate gains only for suppliers.

A lot of the research on international joint ventures has focused on ventures initiated by US-based firms in overseas markets. These studies have focused on both the market's valuation of the joint ventures as well as the factors influencing the wealth effects associated with them. For example, Lummer and McConnell (1990) analyze 416 international joint ventures involving firms based in 55 countries during 1971-80. They find that announcements of joint ventures involving foreign firms positively affect the US partner's market value, and that this effect is directly related to the amount of foreign investment. In contrast, they do not find a significant market reaction to announcements of joint ventures involving foreign governments, or to joint ventures in less developed countries.

Lee and Wyatt (1990) examine the wealth effects of 109 international joint ventures announced by US-based firms during 1974-86. Contrary to Lummer and McConnell (1990), they find that while the overall market reaction to joint ventures with foreign firms is negative, joint ventures with firms in less developed countries result in positive abnormal returns. They argue that the negative market reaction is due to firms overinvesting in assets that expand corporate wealth and increase managerial entrenchment at the expense of shareholders' wealth. Consistent with these findings, Chung, Koford and Lee (1993) find that international joint ventures announced by US-based firms during 1969-89 are associated with negative abnormal returns for the US partner. Neither the location nor the industry of the joint venture are significant determinants of the market's negative response. They also find that joint ventures involving more than one foreign partner result in significant positive abnormal returns.

In addition to the broader studies cited above, some previous researchers have focused on the wealth effects of joint ventures with partners from specific countries. For example, Chen, Hu, and Shieh (1991) analyze joint ventures announced by 73 US-based firms in China during 1979-90 and find significant positive abnormal returns earned by the US partner. They also find that the abnormal returns are inversely related to the level of foreign investment, and not related to firm size or to the US partner's prior presence in China. These results differ from what Frohls, Keown, McNabb, and Martin (1998) find in their more recent examination of 320 international joint ventures involving at least one US partner and one partner from an emerging country or an industrialized G7 country. They find that the joint ventures are wealth creating when the partner comes from an emerging country, but wealth neutral when the partner comes from an industrialized country. Also, the positive wealth effects are the highest for joint ventures involving Chinese partners. Crutchley, Guo, and Hansen (1991) examine joint ventures between US and Japanese firms and find that the US partner earns significant positive abnormal returns. Contrary to Chen, Hu, and Shieh (1991), they find that a size effect exists with higher abnormal returns observed for smaller US partners entering into joint ventures with larger Japanese partners. Consistent with these findings, Borde, Whyte, Wiant, and Hoffman (1998) find that in 100 joint ventures involving US firms the wealth effects are positive for joint ventures into Asia.

As with domestic joint ventures, more recent research has examined the market's reaction to international joint venture announcements by firms located in countries other the US. For example, Burton, Lonie, and Power (1999) examine 82 UK joint ventures and find significant announcement day abnormal returns of 1.6%. They also examine the cross-sectional correlations between abnormal returns and firm size, announcement return size, the market-to-book value, and

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[1]Previous research on domestic joint ventures has not only focused on the US market. For example, Chang and Chen 2002) examine domestic joint ventures by Taiwanese firms and find that their announcements are associated with negative abnormal returns. The market's negative reaction is most profound when the two firms operate in related industries, while firm size has no explanatory power on these negative wealth effects.

a prior funding dummy variable, but find no statistical significance[1]. Jones and Danbolt (2004) examine 158 joint ventures by UK-based firms and find significant positive abnormal returns of 0.5% on the announcement date. Unlike Burton, Lonie, and Power (1999) they find that the abnormal returns are significantly lower when the joint venture is undertaken by large firms and when the joint venture is located in Asia. Janakiramanan, Lamba, and Bailey (2005) examine 92 international joint ventures undertaken by Australian firms and find a two-day abnormal return of 1.65%. They also find that the projects undertaken in high-risk (emerging) countries result in significantly higher abnormal returns when compared to the abnormal returns for the joint ventures undertaken in low-risk countries.

The purpose of this paper is to examine whether investors view international joint ventures as being superior to domestic joint ventures in wealth creation for Australian firms. With world markets becoming more integrated both in trade and capital, the question arises as to whether the market has any particular preference for international joint ventures over domestic joint ventures. This is particularly true for Australian firms planning to expand their operations. In a relatively small country like Australia, firms need to expand into foreign markets and international joint ventures would provide these firms with quicker access to foreign markets. Thus, for Australian firms, expansion through international joint ventures is likely to provide scope for growth when compared to domestic joint ventures. Also, given that the factors explaining the wealth effects of joint venture announcements vary from country to country, we attempt to determine: (a) which factors explain these wealth effects in Australia, and (b) whether different factors explain the wealth effects of domestic versus international joint ventures.

Our main contribution to the previous literature is as follows. First, to the best of our knowledge, this is the first study to provide a comprehensive examination and comparison of the wealth effects of domestic and international joint venture announcements by Australian firms. Such a comparison has also not been conducted in the previous literature for other countries. Second, we provide a comprehensive examination of the factors that explain the wealth effects of domestic and international joint ventures by Australian firms. Third, we examine whether the factors that explain the wealth effects of domestic versus international joint ventures differ from each other, a comparison that has not been conducted for other countries.

Our main findings can be summarized as follows. First, shareholders of firms announcing domestic and international joint ventures earn positive abnormal returns over a two-day announcement period. Second, for domestic joint ventures we do not find any of the hypothesized factors as having any explanatory power on the announcement period abnormal returns. Third, for international joint ventures we find that the wealth gains are influenced by firm size (smaller firms experience higher gains), industrial classification (resource sector joint ventures provide higher gains), and the type of the joint venture (unincorporated joint ventures provide higher gains). Finally, the institutional status of the joint venture partner and country risk do not play a role in explaining the positive wealth gains from international joint venture announcements.

In the next section we motivate and develop the main testable propositions, while in Section 3 we provide details of the data and method used. The empirical results are presented and analyzed in Section 4, while Section 5 concludes the paper.

2. Testable Propositions

2.1. Magnitude of Differences in Abnormal Returns

As mentioned above, the competitive environment for joint ventures has changed since the 1980s. Since then, several developing countries have begun offering incentives for foreign firms to set up joint ventures in their markets, which has brought about intense competition among firms to enter these markets. So, it is not clear whether the wealth gains associated with undertaking an international joint venture have been lowered, thus resulting in international joint venture

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[1] These results differ from US-specific studies such as McConnell and Nantell (1985) and Keown, Laux and Martin (1999), among others, who find that firm size is an important determinant of the wealth gains around international joint venture announcements.

announcements not being valued significantly differently from domestic joint venture announcements. Thus, the central proposition tested in this paper is as follows.

Proposition 1: Firms announcing domestic joint ventures will not earn significantly greater abnormal returns compared to firms announcing international joint ventures.

2.2. Firm Size

It is not unusual to find small and large firms combining their resources to form a joint venture. It is likely that small firms would tend to bring new methods and techniques to a joint venture, while larger firms are more likely to provide the capital and marketing expertise and distribution channels, etc. However, if the wealth gains from a joint venture are distributed evenly then the proportion of wealth gains to smaller firms will be greater than the wealth gains to larger firms, implying that shareholders of smaller firms are likely to realize higher returns[1]. Thus, the testable proposition related to firm size is as follows.

Proposition 2A: The abnormal returns for small firms announcing joint ventures will be significantly greater than the abnormal returns for large firms announcing joint ventures.

When comparing small firms undertaking domestic joint ventures with those undertaking international joint ventures the abnormal returns would not be expected to be significantly different from each due to the reasoning provided in Proposition 1 above. The same should hold true for large firms as well. Hence, the testable propositions relating to firm size are as follows.

Proposition 2B: The abnormal returns for small firms undertaking domestic joint ventures will not be significantly different from the abnormal returns for small firms undertaking international joint ventures.

Proposition 2C: The abnormal returns for large firms undertaking domestic joint ventures will not be significantly different from the abnormal returns for large firms undertaking international joint ventures.

2.3. Industrial Classification of Joint Ventures

As mentioned previously, it is presumed that joint ventures will be undertaken if they are associated with positive net present values. With firms in the resource sector this expectation is based on the premise that some natural resource would be discovered and exploited with the benefits being shared among the joint venture parties. However, due to the probability of there being no discovery, the risk-return trade-off associated with firms in the resource sector undertaking joint ventures is expected to be much greater than industrial sector firms who usually undertake joint venture agreements that are related to the production of goods and services. Hence, the testable proposition relating to industrial classification can be stated as follows.

Proposition 3A: The abnormal returns associated with announcements of joint ventures by resource sector firms will be significantly greater than the abnormal returns associated with announcements of joint ventures by industrial sector firms.

Since joint ventures by resource sector firms are typically explorative in nature, such joint ventures undertaken internationally are expected to be riskier than those undertaken domestically. Specifically, international joint ventures mostly require the expert knowledge of foreign partners in exploration and mining, whereas domestic resource sector joint ventures are likely to be driven by a pooling of monetary resources rather than expert knowledge. Hence, international resource sector joint ventures are expected to yield greater abnormal returns than domestic resource sector joint ventures.

With international industrial sector joint ventures, foreign partners would need to have in-depth knowledge of the foreign market, technology, tastes and preferences of foreign consumers, government regulations, etc. Even if the foreign partner is from the host country of the joint venture, the foreign partner's knowledge about the market and manufacturing and production may be minimal and, hence, the additional costs associated with going overseas may be unjustified. Hence, domestic industrial sector joint ventures are expected to be more value enhancing to the firm than

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[1] This argument is based on reasoning presented by Asquith, Bruner and Mullins (1983) as to why previous studies have not found significantly positive wealth effects for acquiring firms during mergers.

international industrial sector joint ventures. Consequently, the remaining testable propositions relating to industrial classification can be stated as follows.

Proposition 3B: The abnormal returns associated with announcements of international joint ventures by resource sector firms will be significantly greater than the abnormal returns associated with announcements of domestic joint ventures by resource sector firms.

Proposition 3C: The abnormal returns associated with announcements of domestic joint ventures by industrial sector firms will be significantly greater than the abnormal returns associated with announcements of international joint ventures by industrial sector firms.

2.4. Incorporation of Joint Ventures

For the purposes of keeping accounting records and reports, incorporated joint ventures are under the same obligations in terms of disclosure of financial statements as are other corporate entities. In addition, the foreign partner is required to treat the incorporated joint venture similar to a subsidiary for the purposes of its consolidated accounts. On the other hand, unincorporated joint ventures do not need to keep accounting records, but instead under AASB 1006.10 and 1006.20-22 the Australian partner is required to record the assets and liabilities of the joint venture and the expenses incurred in its financial statements. Since the regulations governing unincorporated joint ventures are not as stringent as incorporated joint ventures it is much easier to "conceal" profits/losses and assets/liabilities of the joint venture. Further, an unincorporated joint venture is not a taxable entity. Instead the costs associated with the joint venture can be immediately used to generate tax deductions. Conversely, the benefits associated with tax losses from incorporated joint ventures have to be deferred until such time that the joint venture partner earns profits against which these tax losses can be offset. In addition, with an unincorporated joint venture, the partners are free within the constraints of accounting standards to formulate their own accounting policies regarding their share of joint venture resources. Given this, the testable proposition relating to the incorporation of joint ventures can be stated as follows.

Proposition 4A: The abnormal returns associated with unincorporated joint venture announcements will be significantly higher than the abnormal returns associated with incorporated joint venture announcements.

When comparing unincorporated domestic and international joint ventures the abnormal returns would not be expected to be significantly different from each due to the reasons proposed in the first proposition. The same should be the case for incorporated joint ventures. Hence, the two remaining testable propositions relating to the incorporation of joint ventures are as follows.

Proposition 4B: The abnormal returns associated with unincorporated domestic joint ventures will not be significantly different from the abnormal returns associated with unincorporated international joint ventures.

Proposition 4C: The abnormal returns associated with incorporated domestic joint ventures will not be significantly different from the abnormal returns associated with incorporated international joint ventures.

2.5. Location of Joint Ventures

Given that there may not be any benefits associated with undertaking joint ventures overseas as opposed to domestically, it is interesting to examine if there are any benefits associated with entering the less developed and riskier markets in the Asia-Pacific region compared to remaining in the domestic market. In recent years, the proximity and relative underdevelopment of Asian markets have made them attractive to Australian firms for overseas investments. However, as mentioned earlier, the minimization of restrictions imposed on foreign investment by Asian countries leading towards intense competition has meant that expansion into Asian countries may not be associated with significantly greater growth opportunities than expansion domestically and into non-Asian countries which tend to be more developed. Hence, the testable propositions relating to the location of joint ventures can be stated as follows.

Proposition 5A: The abnormal returns associated with joint ventures with Asian partners will not be significantly different from the abnormal returns associated with joint ventures with domestic partners.

Proposition 5B: The abnormal returns associated with joint ventures with Asian partners will not be significantly different from the abnormal returns associated with joint ventures with non-Asian partners.

2.6. Joint Venture Partners

International joint ventures can be established with government partners, which is quite often the case with joint ventures in developing countries, or with publicly-traded local firms, or with privately held local firms. Governments often have monopoly power in their home country and can exploit this power to gain a substantial share of the incremental value from the joint venture, thus resulting in a lower share from the incremental value of the joint venture to the foreign partner. Further, there may be a divergence in objectives between the government and the foreign partner. Governments may use their monopoly power to promote their own objectives which may adversely affect the foreign partner's objective of maximizing market value since it may lead to operating inefficiencies which could adversely affect the joint venture's value. Thus, while foreign partners undertaking joint ventures may be expecting to maximize the wealth of their shareholders through the profitable operation of the joint venture, the government partner may not share this expectation but may in fact have other intentions which are more in line with its public policy. On the other hand, government partners may be able to provide better regulatory protection, which may be value-enhancing, since it may protect the interests of the joint venture. Further, if the government has monopolized an industry in which firms want to invest then the only way to exploit these business opportunities would be through partnerships with the government. Since the involvement of government partners can be both detrimental and beneficial to international joint ventures we do not have any *a priori* expectation of the relationship between the type of joint venture partner and the wealth effects associated with the joint venture's announcement. Thus, the testable proposition relating to joint venture partners can be stated as follows.

Proposition 6: The abnormal returns associated with international joint ventures with government partners will not be significantly different from the abnormal returns associated with international joint ventures with non-government partners.

2.7. Country Risk

Chen, Hu and Shieh (1991) indicate that previous studies have found wealth gains to be due to the host countries' level of development, tax heaven status, the efficiency of their financial markets and other factors that augment the synergy and expansion effects of joint ventures. Some researchers have found that in high-risk host countries the wealth effects associated with announcements of joint ventures are also higher (see, for example, Janakiramanan, Lamba and Bailey, 2005). This finding can be explained by the potential diversification benefits associated with investing in high-risk countries. Since the capital markets of high-risk countries are usually underdeveloped, investors wishing to take advantage of the diversification opportunities in these markets may not be able to do so because of high trading costs, barriers to entry, etc. Thus, the existence of barriers among capital markets can increase the market value of firms that are able to invest there[1]. Based on the above discussion, the testable proposition relating to country risk can be stated as follows.

Proposition 7: The abnormal returns associated with international joint ventures in high-risk countries will be significantly higher than the abnormal returns associated with international joint ventures in low-risk countries.

3. Data and Method

3.1. Data

Our initial sample includes all announcements of joint ventures made by firms listed on the Australian Stock Exchange (ASX) during June 1988 - May 1996. The data are obtained from the ASX DataDisc, which contains detailed information on announcements made by publicly-

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[1] For further details on this argument see, for example, Stapleton and Subrahmanyam (1977).

listed firms. The selection criteria used yielded a final sample of 87 domestic joint ventures and 90 international joint ventures, which comprises a total of 177 joint venture announcements made by 121 publicly-listed Australian firms[1]. Data on dividends and capitalization-adjusted prices for individual firms and data on the market proxy, the All Ordinaries Accumulation Index, are obtained from IRESS. Firm-specific data are obtained from company financial statements, while data relating to the joint venture are obtained from the joint venture announcements. Data on country-specific risk are based on the country credit ratings published by Institutional Investor's Semi-annual Survey of Bankers[2].

Table 1 shows the frequency distribution of the sample of joint venture announcements. We find that the time period of 1993-95 accounts for over 70% of the total sample with most of the domestic (international) joint venture announcements being made in 1993 (1994). Over 75% of the international joint ventures are with Asian partners with China and Indonesia dominating the sample. We also find that resource sector firms, especially gold miners, are more likely to undertake joint ventures than other firms. Table 2 presents some summary statistics on the total assets, market capitalization and the level of Australian investment for the domestic and international joint venture samples. We find that most of the firms undertaking international joint ventures are much larger than firms undertaking domestic joint ventures.

3.2. Event Study Analysis

We use the standard event study method as described in Brown and Warner (1985) to measure the abnormal returns earned by firms announcing domestic and international joint ventures. The date of the joint venture announcement is taken as the event date and defined as day 0. Given that the exact event date is not always accurately known, we base our analysis on a two-day announcement period of days (-1, 0). In addition, we also examine the behavior of the average abnormal returns over a longer 41-day event window of days (-20, +20). For each firm, the market model parameters are estimated using monthly returns over months (-49, -1) relative to the announcement month. We use monthly data to estimate the market model parameters since monthly data minimize any nonsynchronous trading bias[3]. Each firm's abnormal return is computed as the difference between the observed day t return and the estimated expected return obtained from the market model. The abnormal returns are then averaged across all firms with non-missing returns on day t. We also compute the cumulative abnormal returns over days (-20, +20). To check whether outliers may be influencing our results we also use a binomial sign test, which examines whether the proportion of positive abnormal returns is statistically different from those during the estimation period.

3.3. Multivariate Analysis

Since the event study method examines the hypothesized relationships in a univariate setting, we also conduct a multivariate analysis using cross-sectional regressions. Two regression models are estimated using the stepwise linear regression method. The first regression is for domestic joint venture announcements, while the second regression is for international joint venture announcements. The dependent variable in both regressions is the two-day cumulative abnormal

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[1] The selection criteria used are as follows. The firm making the joint venture announcement must be traded on the ASX over a period of four years before the event date. The firm must not have more than 10 consecutive missing returns over the estimation period and have no missing returns over days (-5, +5). The announcement must be distinct from other announcements and firms with other major announcements around days (-20, +20) relative to the announcement day are excluded from the analysis. The announcement must be the first announcement conveying information about the joint venture including a specific announcement date. The information provided in the announcement must specify the partner(s) involved, the nationality of the partner(s), whether the partner is a government entity or not, and the location of the joint venture. The firm participating in the joint venture must become a partner in the joint venture by acquiring an interest in the joint venture as opposed to selling a percentage of the interest in a pre-existing joint venture to a new participating firm. If the joint venture is executed via a subsidiary, the parent firm must have "control" of the subsidiary, where control is defined according to accounting standards.

[2] Erb, Harvey and Viskanta (1995) suggest that the country credit ratings can be an effective proxy for country risk factors.

[3] The monthly estimate of αj is converted to a daily estimate as $\alpha_{daily} = (1 + \alpha_{monthly})^{1/30} - 1$.

return over the announcement period of days (-1, 0)[1]. For the domestic joint ventures sample the following regression is estimated:

$$CAR_j = \alpha_0 + \alpha_1 \, LSIZE_j + \alpha_2 \, IND_j + \alpha_3 \, INCORP_j + \varepsilon_j, \qquad (1)$$

where CAR_j is two-day announcement period cumulative abnormal return for firm j, $LSIZE_j$ is the natural log of the total book value of assets of firm j, IND_j is a dummy variable with a value 1 if the joint venture is in the resource sector and 0 if the joint venture is in the industrial sector, and $INCORP_j$ is a dummy variable that takes the value of 1 for an incorporated joint venture and 0 for an unincorporated joint venture. For the international joint ventures sample the following regression is estimated:

$$CAR_j = \beta_0 + \beta_1 \, LSIZE_j + \beta_2 \, IND_j + \beta_3 \, INCORP_j + \beta_4 \, ASIA_j +$$
$$+ \beta_5 \, GOVT_j + \beta_6 \, CRATE_j + \eta_j, \qquad (2)$$

where $ASIA_j$ is a dummy variable that takes the value of 1 for a joint venture located in the Asian region and 0 otherwise, $GOVT_j$ is a dummy variable that takes the value of 1 if the joint venture partner is a government entity and 0 otherwise, and $CRATE_j$ is the credit rating of the country where the international joint venture is located and takes a value between 0 and 100, with a lower credit rating implying higher country risk.

4. Empirical Results and Analysis

4.1. Results for the Full Sample of Joint Ventures[2]

Table 3 reports the average abnormal returns and cumulative abnormal returns (*CAR*s) for the full sample of domestic and international joint venture announcements during June 1988 - May 1996. We find that for domestic joint venture announcements the average abnormal returns over days -1 to +1 are all positive but not significantly different from zero. However, the cumulative abnormal return over the two-day announcement period of days (-1, 0) is +1.52% and is significant at the 5% level. Over the longer event window of days (-2, +2), (-5, +5) and (-10, +10) are +2.51%, +4.67% and +4.83% and are significant at the 5% level, or better. The sign test shows that over days (-1, 0) 51.7% of the firms experienced positive cumulative abnormal returns, which is not statistically significant. Only over the longer event window of days (-5, +5) is the percent of firms experiencing positive cumulative abnormal returns statistically significant at the 10% level.

Table 1

Annual Frequency Distribution of Domestic and International Joint Ventures Announced by Australian Firms During June 1988 - May 1996

Year	Domestic Joint Ventures	International Joint Ventures	Total	Percent
1988	0	0	0	0.0
1989	4	0	4	2.3
1990	5	5	10	5.6
1991	8	6	14	7.9
1992	9	5	14	7.9
1993	22	15	37	20.9
1994	17	34	51	28.8
1995	20	20	40	22.6
1996	2	5	7	4.0
Total	87	90	177	100.0
Percent	49.2	50.8	100.0	

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[1] We also estimated the regressions using the cumulative abnormal return over days (-2, +2) as the dependent variable. The results obtained were similar to those reported here.
[2] Although all our analysis is based on the event window of days (-20, +20), for brevity we only report the abnormal returns and cumulative abnormal returns for the shorter event window of days (-5, +5).

Table 2

Descriptive Statistics for Australian Firms Announcing Domestic and International Joint Ventures
During June 1988 - May 1996[a]

	N	Mean	Median
Total Assets			
Domestic Joint Ventures	87	1,517.5	32.6
International Joint Ventures	90	3,426.0	2,014.0
Full Sample	177	2,487.9	287.0
Market Capitalization			
Domestic Joint Ventures	87	1,707.5	51.0
International Joint Ventures	90	3,022.0	1,485.8
Full Sample	177	2,397.6	409.4
Australian Investment			
Domestic Joint Ventures	56	2.1	0.9
International Joint Ventures	26	46.5	19.0
Full Sample	82	18.2	2.0
Investment/Total Assets			
Domestic Joint Ventures	56	0.355	0.047
International Joint Ventures	26	0.324	0.008
Full Sample	82	0.344	0.018

[a] Total assets are obtained as the total book value of assets taken from the last annual report before the joint venture announcement. Total market capitalization is obtained as the market value of shares in the year of the joint venture announcement. The level of Australian investment is the total investment amount announced by the Australian partner. Investment/Total Assets is the ratio of the Australian investment amount to the total book value of assets. Figures for the level of Australian investment and the Investment/Total Assets ration are based on a sub-sample of 82 firms that gave information on the amount of investment in the original announcement. All figures, except the Investment/Total Assets ratio, are in millions of Australian dollars.

Table 3

Summary and Comparison of the Average Abnormal Returns and Cumulative Abnormal Returns
Earned by Australian Firms Announcing Domestic and International Joint Ventures During June
1988 - May 1996

Event Day(s)	Domestic Joint Ventures (N = 87)			International Joint Ventures (N = 90)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.293	2.041	51.7	0.182	0.834	47.8	0.111	1.207
-4	0.892**	2.933*	54.0	-0.064	0.770	52.2	0.956**	2.163
-3	0.009	2.942	43.7	0.734	1.504	56.7	-0.725	1.437
-2	-0.095	2.847	51.7	0.515**	2.019	58.9*	-0.610	0.828
-1	0.571	3.418*	49.4	0.622***	2.641**	58.9*	-0.051	0.777
0	0.952	4.370**	55.2	0.489	3.129***	46.7	0.464	1.241
+1	0.797	5.168**	49.4	1.160*	4.290***	56.7	-0.363	0.878
+2	0.282	5.450**	46.0	-0.448	3.842**	44.4	0.730	1.608
+3	-0.514	4.936**	44.8	0.328	4.170**	57.8	-0.842	0.776
+4	0.466	5.401**	49.4	0.052	4.222**	53.3	0.413	1.179
+5	1.018**	6.419***	58.6	-0.226	3.997**	51.1	1.243*	2.422
(-1, 0)		1.524**	51.7		1.110**	52.2		0.414
(-2, +2)		2.508**	55.2		2.338***	61.1**		0.170

*, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

For international joint ventures, the announcement day abnormal return of +0.49% is not statistically significant. However, on days -2 and -1 we find average abnormal returns of +0.52% and +0.62% which are significant at the 5% level, or better. The abnormal return continues to be significant at 1.16% on day +1. The average abnormal return over the two-day announcement period of days (-1, 0) is 1.11% which is also significant at the 5% level. The *CAR*s over days (-2, +2), (-5, +5) and (-10, +10) are +2.34%, +3.34% and +3.21% and are significant at the 5% level, or better. The sign test shows that the percent of positive cumulative abnormal returns over the longer event windows of days (-2, +2) and (-5, +5) are statistically significant at the 5% level. This implies that a significant proportion of firms announcing international joint ventures experience positive cumulative abnormal returns.

The above results are similar to those reported by previous researchers for joint ventures announced by US and UK based firms. We also find that domestic joint ventures are associated with higher average abnormal returns over days (-5, +5) than international joint venture announcements. However, the differences in *CAR*s over days (-1, 0), (-2, +2) as well as longer event windows are all not significantly different from each other. Overall, these findings are consistent with our central proposition (Proposition 1) that there are no differences in the wealth effects associated with domestic versus international joint ventures.

4.2. Firm Size

To examine whether differences among the joint ventures exist based on firm size, we divide the domestic and international joint venture samples into large and small sized ventures based on the median of the total assets of the firms announcing them. The results for domestic and international joint ventures are presented in panels A and B of Table 4, respectively. For both types of joint ventures we find smaller firms earning higher average abnormal returns than larger firms. Over days (-1, 0) and (-2, +2) the differences in *CAR*s between large and small domestic (international) joint ventures are -2.17% and -3.87% (-1.89% and -3.31%), respectively. The differences are statistically significant for international joint ventures, but only moderately so for domestic joint ventures. Thus, at least for international joint ventures, this result is consistent with Proposition 2A where our expectation was that small joint ventures would tend to outperform large joint ventures. These findings are also consistent with those observed by previous researchers for international joint venture announcements by US and UK based firms.

We also compare the abnormal returns earned by small (large) firms announcing domestic joint ventures with the abnormal returns earned by small (large) international joint ventures. The results (not shown) indicate that the differences in the *CAR*s for both small and large joint ventures are not statistically significant. These results are consistent with our expectations as stated in Propositions 2B and 2C.

4.3. Industrial Classification of Joint Ventures

The results for the relationship between the wealth effects of joint ventures and their industrial classification appear in Table 5. Panel A presents the results for domestic joint ventures classified as resource and industrial sector firms, while Panel B does the same with international joint ventures. For domestic joint ventures we find that industrial firms generally outperform resource sector firms, although these differences are not statistically significant. Examining the *CAR*s, although industrial sector firms earn higher cumulative abnormal returns than resource sector firms, we do not find these differences to be statistically significant over days (-1, 0) and (-2, +2).

Conversely, we find that international joint ventures announced by resource sector firms consistently outperform those announced by industrial sector firms. The CARs over days (-1, 0) and (-2, +2) for resource sector firms are +2.57% and +4.13%, respectively, compared to +0.57% and +1.68% for industrial sector firms (Panel B). Although the difference in these CARs is not statistically significant, over the longer event window of days (-5, +5) the *CAR*s earned by resources sector firms are significantly higher than the *CAR*s earned by industrial sector firms at the 5% level. Overall, these results are consistent with Proposition 3A for international joint ventures, where we proposed that resource sector joint ventures would tend to outperform industrial sector joint ventures.

Table 4

Summary and Comparison of the Average Abnormal Returns and Cumulative Abnormal Returns
Earned by Large and Small Sized Australian Firms Announcing Domestic and International Joint
Ventures During June 1988 - May 1996

Panel A: Domestic Joint Ventures

Event Day(s)	Large Joint Ventures (N = 44)			Small Joint Ventures (N = 43)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	-0.031	0.045	52.3	0.624	4.083	51.2	-0.655	-4.038
-4	0.190	0.235	45.5	1.610**	5.693	62.8*	-1.420*	-5.458
-3	0.224	0.459	45.5	-0.211	5.482	41.9	0.435	-5.023
-2	0.067	0.526	52.3	-0.261	5.221	51.2	0.328	-4.695
-1	0.052	0.578	47.7	1.103	6.324*	51.2	-1.051	-5.746
0	0.397	0.975	61.4	1.521	7.845**	48.8	-1.124	-6.870*
+1	0.522	1.497	47.4	1.079	8.924**	51.2	-0.557	-7.427*
+2	-0.445	1.052	40.9	1.026	9.950**	51.2	-1.471	-8.898**
+3	-0.743*	0.309	43.2	-0.280	9.670**	46.5	-0.463	-9.361**
+4	0.480	0.789	50.0	0.450	10.120**	48.8	0.030	-9.331**
+5	-0.361	0.428	45.5	2.429***	12.549**	72.1***	-2.790**	-12.121***
(-1, 0)		0.449	50.0		2.623*	53.5		-2.174
(-2, +2)		0.593	50.0		4.468**	60.5		-3.874*

Panel B: International Joint Ventures

Event Day(s)	Large Joint Ventures (N = 45)			Small Joint Ventures (N = 45)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.192	-0.243	56.5	0.171	1.960	38.6	0.021	-2.203
-4	-0.133	-0.376	54.3	0.008	1.968	50.0	-0.141	-2.344
-3	0.110	-0.266	54.3	1.387	3.355	59.1	-1.277	-3.621
-2	0.256	-0.010	60.9	0.786**	4.141*	56.8	-0.530	-4.151
-1	0.493***	0.483	60.9	0.756	4.897**	56.8	-0.263	-4.414*
0	-0.305*	0.178	39.1	1.318	6.215**	54.5	-1.623*	-6.037**
+1	0.262	0.440	54.3	2.099	8.314***	59.1	-1.837	-7.874**
+2	0.014	0.454	50.0	-0.931	7.383**	38.6	0.945	-6.929**
+3	0.082	0.536	58.7	0.586	7.969**	56.8	-0.504	-7.433**
+4	0.121	0.657	56.5	-0.019	7.950**	50.0	0.140	-7.293**
+5	0.392*	1.049	60.9	-0.872	7.078**	40.9	1.264	-6.029*
(-1, 0)		0.188	50.0		2.074**	54.5		-1.886**
(-2, +2)		0.720**	58.7		4.029***	63.6*		-3.309**

*, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table 5

Summary and Comparison of the Average Abnormal Returns and Cumulative Abnormal Returns
Earned by Australian Firms Announcing Domestic and International Joint Ventures in the Re-
sources and Industrial Sectors During June 1988 - May 1996

Panel A: Domestic Joint Ventures

Event Day(s)	Resources Joint Ventures (N = 61)			Industrial Joint Ventures (N = 26)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.335	-0.214	50.0	0.178	6.448**	55.2	0.157	-6.662*
-4	1.456***	1.242	60.0	-0.321	6.127**	44.8	1.777***	-4.885
-3	-0.140	1.102	40.0	0.288	6.415**	51.7	-0.428	-5.313
-2	-0.251	0.851	53.3	0.207	6.622**	44.8	-0.458	-5.771
-1	0.496	1.347	50.0	0.669	7.291**	44.8	-0.173	-5.944
0	0.826	2.173	55.0	1.172	8.463**	58.6	-0.346	-6.290
+1	1.116	3.289	50.0	0.056	8.519**	44.8	1.060	-5.230
+2	0.369	3.658	51.7	0.105	8.624**	34.5	0.264	-4.966
+3	-0.831	2.827	38.3*	0.188	8.812**	58.6	-1.019	-5.985
+4	0.292	3.119	46.7	0.764*	9.576**	51.7	-0.472	-6.457
+5	0.924	4.043	58.3	1.119	10.695**	55.2	-0.195	-6.652
(-1, 0)		1.323	55.0		1.841	48.3		-0.518
(-2, +2)		2.557*	55.0		2.208	55.2		0.349

Panel B: International Joint Ventures

Event Day(s)	Resources Joint Ventures (N = 24)			Industrial Joint Ventures (N = 66)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.129	5.669**	58.3	0.203	-0.850	44.1	-0.074	6.519**
-4	0.137	5.806**	58.3	-0.130	-0.980	50.0	0.267	6.786**
-3	3.126	8.932**	70.8**	-0.104	-1.084	52.9	3.230	10.016***
-2	1.256**	10.188**	62.5	0.270	-0.814	58.8	0.986*	11.002***
-1	0.636	10.824**	54.2	0.619**	-0.195	60.3	0.017	11.019***
0	1.930	12.754**	54.2	-0.050	-0.245	42.6	1.980	12.999***
+1	1.778	14.532**	58.3	0.911	0.666	55.9	0.867	13.866***
+2	-1.466	13.066**	50.0	-0.075	0.591	42.6	-1.391	12.475***
+3	-0.255	12.811**	58.3	0.540	1.131	57.4	-0.795	11.680**
+4	0.089	12.900**	45.8	0.052	1.183	57.4	0.037	11.717**
+5	-0.471	12.429**	50.0	-0.130	1.053	51.5	-0.341	11.376**
(-1, 0)		2.566*	62.5		0.569*	48.5		1.996
(-2, +2)		4.133**	66.7		1.676**	58.8		2.458

*, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

We also examine Propositions 3B and 3C by comparing the wealth effects of resource and industrial sector joint ventures that are made domestically and overseas, respectively. The results (not shown) indicate that the wealth effects to resource sector firms announcing international joint ventures are significantly higher than the wealth effects for firms announcing purely domestic joint ventures. Conversely, the market responds more positively to domestic joint ventures than to international joint ventures announced by industrial firms. These results are consistent with our expectations as stated in Propositions 3B and 3C.

4.4. Incorporation of Joint Ventures

To determine whether the incorporation of joint ventures is a factor influencing shareholder wealth, we separate the domestic and international joint ventures into sub-samples of incorporated and unincorporated joint ventures. The results for domestic joint ventures appear in Panel A of Table 6, while the results for international joint ventures appear in Panel B. For the domestic joint ventures sample, we find that the difference in the CARs over days (-1, 0) and (-2, +2) of -0.32% and +0.77%, respectively, between incorporated and unincorporated joint ventures is not statistically significant. Further, the insignificance of the differences in CARs over the event window of days (-5, +5) suggests that the market generally does not differentiate between incorporated and unincorporated domestic joint ventures.

For international joint ventures, the difference in CARs over days (-1, 0) and (-2, +2) of 1.87% and +2.16%, respectively, between unincorporated and incorporated joint venture announcements is also insignificant. However, the differences in CARs over the event window of days (-5, +5) are statistically significant. Thus, for international joint ventures, our findings are consistent with Proposition 4A since we find that the market reacts significantly more positively to announcements of unincorporated versus incorporated joint ventures.

We also compare the wealth effects of unincorporated and incorporated joint ventures that are undertaken domestically and overseas, respectively. The results show that the market does not systematically differentiate across domestic and international joint ventures as far as the incorporation of joint ventures is concerned. These results are consistent with our expectations as stated in Propositions 4B and 4C.

4.5. Joint Venture Locations, Partners and Country Risk

The last three propositions we examine related to whether the location, type of partner or existence of country risk have any influence on the market's reaction to announcements of joint ventures. For brevity, we do not present these results here. To summarize, consistent with previous research, we find that the market reacts positively to joint venture announcements in the Asian region. The reaction to joint ventures in non-Asian countries is also positive and the *CAR*s over days (-2, +2) are also higher for joint ventures in Asian countries. However, we also find that the market does not systematically differentiate between announcements of domestic joint ventures and joint ventures in the Asian or non-Asian region as the differences in the *CAR*s are not statistically significant across these sub-samples. These results are consistent with our expectations as stated in Propositions 5A and 5B. Consistent with Proposition 6, we do not find any difference in the market's reaction to international joint venture announcements with government versus non-government partners. Finally, for international joint ventures announced in high-risk versus low-risk countries we find that high-risk countries significantly outperform low-risk countries. This result is consistent with the findings of previous researchers for joint ventures by US-based firms. The result is also consistent with our expectation as stated in Proposition 7.

Table 6

Summary and Comparison of the Average Abnormal Returns and Cumulative Abnormal Returns Earned by Australian Firms Announcing Unincorporated and Incorporated Domestic and International Joint Ventures During June 1988 - May 1996

Panel A: Domestic Joint Ventures

Event Day(s)	Unincorporated Joint Ventures (N = 67)			Incorporated Joint Ventures (N = 20)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.274	1.113	50.7	0.364	6.274*	55.0	-0.090	-5.161
-4	1.229***	2.342	59.7	-0.244	6.030*	35.0	1.473	-3.688
-3	0.057	2.399	41.8	0.393	6.423*	50.0	-0.336	-4.024
-2	-0.422	1.977	52.2	1.084	7.507*	50.0	-1.506	-5.530
-1	0.673	2.650	50.7	0.238	7.745*	45.0	0.435	-5.095
0	0.777	3.427	55.2	1.093	8.838*	55.0	-0.316	-5.411
+1	1.073	4.500*	52.2	-0.636	8.202*	40.0	1.709**	-3.702
+2	0.585	5.085*	52.2	-0.757*	7.445	25.0**	1.342**	-2.360
+3	-0.560	4.525*	41.8	0.101	7.546	55.0	-0.661	-3.021
+4	0.290	4.815*	46.3	1.082	8.628*	60.0	-0.792	-3.813
+5	0.993	5.808**	56.7	1.119*	9.747*	65.0	-0.126	-3.939
(-1, 0)		1.450*	55.2		1.771	40.0		-0.321
(-2, +2)		2.686**	56.7		1.914	50.0		0.772

Panel B: International Joint Ventures

Event Day(s)	Unincorporated Joint Ventures (N = 29)			Incorporated Joint Ventures (N = 61)			Difference	
	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)	Percent Positive	Average Abnormal Return (%)	Cumulative Abnormal Return (%)
-5	0.264	3.607*	55.2	0.149	-0.282	39.7	0.115	3.889*
-4	-0.016	3.591	58.6	-0.088	-0.370	44.1	0.072	3.961*
-3	2.374	5.965*	55.2	-0.003	-0.373	51.5	2.377	6.338**
-2	1.016**	6.981**	62.1	0.346*	-0.027	51.5	0.670	7.008**
-1	0.273	7.254**	44.8	0.659***	0.632	58.8	-0.386	6.622**
0	1.769	9.023**	55.2	-0.150	0.482	38.2*	1.919	8.541**
+1	1.921	10.944**	65.5*	0.870	1.352	47.1	1.051	9.592**
+2	-1.234	9.710**	44.8	-0.083	1.269	39.7	-1.151	8.441**
+3	-0.340	9.370**	44.8	0.736	2.005	57.4	-1.076	7.365*
+4	0.354	9.724**	55.2	-0.068	1.937	47.1	0.422	7.787*
+5	0.062	9.786**	48.3	-0.361	1.576	47.1	0.423	8.210**
(-1, 0)		2.374**	55.2		0.509	50.8		1.865
(-2, +2)		3.801**	69.0**		1.642**	57.4		2.159

*, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Table 7

Summary of Results From Stepwise Cross-Sectional Regressions of the Two-Day Cumulative Abnormal Return on the Hypothesized Variables for Australian Firms Announcing Domestic and International Joint Ventures During June 1988 - May 1996[a]

Panel A: Regression for Domestic Joint Ventures - $CAR_j = \alpha_0 + \alpha_1 LSIZE_j + \alpha_2 IND_j + \alpha_3 INCORP_j + \varepsilon_j$

α_0	α_1	α_2	α_3				N	Adj-R^2	F-Statistic	DW Stat
0.162	-0.004	-0.015	-0.044				87	-0.045	0.474	2.115
(0.000)***	(0.173)	(0.541)	(0.865)							

Panel B: Regression for International Joint Ventures - $CAR_j = \beta_0 + \beta_1 LSIZE_j + \beta_2 IND_j + \beta_3 INCORP_j + \beta_4 ASIA_j + \beta_5 GOVT_j + \beta_6 CRATE_j + \eta_j$

β_0	β_1	β_2	β_3	β_4	β_5	β_6	N	Adj-R^2	F-Statistic	DW Stat
0.156	-0.007	0.125	-0.144	0.000	-0.022	-0.067	90	0.145	13.566	2.175
(0.000)***	(0.000)***	(0.334)	(0.240)	(0.998)	(0.843)	(0.541)				

[a] $LSIZE_j$ is the natural log of total assets of the Australian partner; IND_j is a dummy variable that takes the value of 1 if the firm is an industrial firm and 0 if it is a resource firm; $INCORP_j$ is a dummy variable that takes the value of 1 if the joint venture is incorporated and 0 if it is unincorporated; $ASIA_j$ is a dummy variable that takes the value of 1 if the joint venture is located in Asia and 0 if it is located elsewhere; $GOVT_j$ is a dummy variable that takes the value of 1 if the joint venture partner is a government entity and 0 otherwise; and $CRATE_j$ is the credit rating of the country where the joint venture is located taking a value between 0 and 100. DW Stat denotes the Durbin-Watson statistic. The numbers in parentheses are p-values for the estimated regression coefficients.
*, ** and *** denote statistical significance at the 10%, 5% and 1% levels, respectively.

4.6. Multivariate Regression Results

Table 7 presents the results from the cross-sectional regression analysis. The insignificance of the coefficients in the first regression and the low adjusted-R^2 suggests that none of the variables are significant in explaining the two-day cumulative abnormal return associated with domestic joint ventures (Panel A). Thus, the market does not appear to distinguish between the size of the firms undertaking the joint venture, the industry in which the joint venture is undertaken, and the type of joint venture[1]. The regression for international joint venture announcements shows that only firm size ($LSIZE_j$) is statistically significant in explaining movements in the two-day cumulative abnormal return (Panel B). The negative coefficient is consistent with our expectation that smaller firms are more likely to earn higher abnormal returns when announcing international joint ventures than are larger firms. According to the regression model, the remaining variables do not have much explanatory power, implying that no general conclusions can be drawn regarding them. However, when we regress each variable individually against the two-day cumulative abnormal return, the results, which are not shown here, indicate that the industry dummy (IND_j) and the incorporation dummy ($INCORP_j$) are significant at the 5% level. In fact, their lack of significance in the multivariate regression could be due to the relatively high correlation of these variables with each other and with $LSIZE_j$[2]. In the univariate regressions we find that the coefficient for $INCORP_j$ is of the expected sign. However, the sign of the coefficient for IND_j is positive suggesting that industrial firms announcing international joint ventures are likely to earn higher abnormal returns than are resource sector firms. This is contrary to our hypothesized relationship. We note that since $LSIZE_j$ appears to dominate these two variables in terms of explana-

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[1] We note, however, that the coefficients for all the variables are negative which is consistent with our expectations. That is, smaller firms announcing domestic joint ventures provide a greater abnormal return to shareholders than do larger firms. Also, resource sector joint ventures experience higher abnormal returns than industrial joint ventures, and firms announcing unincorporated joint ventures are more likely to earn higher returns than firms announcing incorporated joint ventures.
[2] The correlation between IND_j and $INCORP_j$ is -0.51, while the correlation between IND_j and $LSIZE_j$ is -0.54 and between $INCORP_j$ and $LSIZE_j$ is 0.48. All these correlations are significantly different from zero at the 5% level.

tory power, too much emphasis cannot be placed on the results for $INCORP_j$ and IND_j even though they are found to be significant in the univariate regressions[1].

In summary, the regression results show that the shareholder wealth gains for domestic joint venture announcements are not related to the variables examined. In contrast, for international joint venture announcements, the wealth gains can be attributed to the relative size of the firm that announced the joint venture, the industrial sector in which the joint venture is undertaken, and whether the joint venture was incorporated or unincorporated. The institutional status of the international partner and country risk are unable to explain the wealth gains from international joint ventures.

5. Summary and Conclusions

In this paper, we provide a comprehensive analysis and comparison of the shareholder wealth effects associated with the announcements of 87 domestic joint ventures and 90 international joint ventures made by Australian firms during June 1988 - May 1996. We examine the wealth effects associated with announcements of domestic and international joint ventures, and compare these wealth effects with each other. We also attempt to determine the source of the wealth effects and how they vary across domestic and international joint ventures. To the best of our knowledge, this is the first study that examines the valuation of joint ventures for Australian firms and provides a comprehensive comparison of the differences in wealth effects associated with domestic and international joint ventures.

Our results support the proposition that, on average, shareholders of firms announcing domestic and international joint ventures earn positive abnormal return over a two-day announcement period. For domestic joint ventures we do not find any factors as having any explanatory power on the announcement period abnormal returns. For international joint ventures we find that the wealth gains are influenced by firm size (smaller firms experience higher gains), industrial classification (resource sector joint ventures provide higher gains), and the type of the joint venture (unincorporated joint ventures provide higher gains). Finally, the institutional status of the joint venture partner and country risk do not play a role in explaining the positive wealth gains from international joint venture announcements.

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[1] Even though GOVTj and CRATEj are found to be insignificant in the multivariate regression, the negative signs on each of these variables suggest that announcements of international joint ventures with government partners are associated with lower abnormal returns. Also, joint ventures undertaken in high-risk countries are likely to result in higher abnormal returns to the firm's shareholders than joint ventures in low-risk countries.

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