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The Effect of Corporate Multinationalism on Shareholders' Wealth: Evidence from International Acquisitions

JOHN DOUKAS and NICKOLAOS G. TRAVLOS*

ABSTRACT

This study presents direct evidence on the effect of international acquisitions on stock prices of U.S. bidding firms. Shareholders of MNCs not operating in the target firm's country experience significant positive abnormal returns at the announcement of international acquisitions. Shareholders of U.S. firms expanding internationally for the first time experience insignificant positive abnormal returns, while shareholders of MNCs operating already in the target firm's country experience insignificant negative abnormal returns. The abnormal returns are larger when firms expand into new industry and geographic markets—especially those less developed than the U.S. economy. The evidence is consistent with the theory of corporate multinationalism, predicting an increase in the firm's market value from the expansion of its existing multinational network.

SINCE THE SEMINAL WORK of Grubel [19] on international investment, numerous researchers have tried to explain the determinants of international investment. (See, e.g., Lee [25], Miller and Whitman [28], Ragazzi [29], Black [4], and Stulz [35].) In view of all these studies, foreign direct investment (FDI) is the product of such factors as (a) imperfections in the product and factors markets, (b) different taxation, and (c) imperfections in the international financial markets. The systemic contribution to the value of the firm, however, generated by the development of a multinational network has recently been offered as a more complete explanation of the FDI decisions (Kogut [24]). As Kogut [24] argues, "the primary advantage of the multinational firm, as differentiated from a national corporation, lies in the flexibility to transfer resources across borders through a globally maximizing network." Specifically, the valuation effects of multinationality stem from the following collection of valuable options: (a) the firm's ability to arbitrage institutional restrictions (e.g., tax codes, antitrust provisions, and financial limitations), (b) the informational externalities captured by the firm in the conduct of international business (e.g., learning cost externalities), and (c) the cost saving gained by joint production in marketing and in

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manufacturing.¹ To the extent that these options can be exercised only by the multinational corporation (MNC) and cannot be traded and acquired by investors, the value of the firm should increase to reflect the incremental value of these options. Therefore, a firm's foreign-acquisition announcement may be viewed by investors as a signal to transfer or expand a firm's resources internationally that will enable the firm to exploit uniquely international distortions in capital markets or production. More specifically, a foreign acquisition may be construed as the acquiring firm's (current and future) ability to arbitrage institutional restrictions, capture informational externalities, and capitalize production economies on a global scale that may occur in both the marketing and manufacturing spheres. If these options are exercisable only by the acquiring firm, they should manifest themselves in the acquiring firm's market value. In spite of the importance of the multinational network as an important contributing factor to firm value, little effort has been directed toward formally investigating its effect on the market value of the firm.

Most research in this area has been concerned with the performance of multinationals, which may be viewed as portfolios of internationally diversified assets, relative to the performance of pure domestic firms. The empirical findings, however, are both inconclusive and unable to document whether, indeed, the value of the firm is enhanced by the incremental value embedded in the firm's multinational dimension. Agmon and Lessard [1], regressing the returns of 217 U.S. multinationals on the U.S. stock index and an international factor, found the coefficient of the world factor to be correlated with a sales measure of multinationals' international involvement, and they suggested that the international diversification objectives of the investor can be achieved by holding a portfolio of multinational stocks. Jacquillat and Solnik [22], using a sample of forty European and twenty-three U.S. firms, concluded that investing in multinationals is a poor substitute to international portfolio diversification. Recently, Senchack and Beedles [31] arrived at the same conclusion. Hughes, Logue, and Sweeney [21] showed that the results obtained in all these studies are sensitive to the market index (e.g., domestic versus world) used to compute the betas. Fatemi [17], however, found no statistical difference between MNCs and pure domestic firms in terms of performance regardless of the choice of market index. Mikhail and Shawky [27], using Jensen's [23] risk-adjusted measure of performance, reported that multinationals earn excess returns. However, Brewer [8], using the grouping method of Black, Jensen, and Scholes [5] and Jensen's [23] single-security analysis, reported no difference between multinationals and pure domestic in terms of security market line. Errunza and Senbet [15], using a value-based method to identify the monopoly rents associated with the international operations of multinationals, found a positive relationship between the current degree of international involvement and excess market value. Fatemi [17] reported no difference in the rates of return realized by the shareholders of multinational firms relative to those of purely domestic firms except when the MNC operates in competitive foreign markets, in which case MNC shareholders

¹ See Kogut [24] for an extensive discussion of the impact of these factors on firm value.

experience negative abnormal returns.² Finally, Michel and Shaked [26] found that domestic corporations have significantly superior risk-adjusted market-based performance, are significantly less capitalized, and have higher total risk as well as higher systematic risk relative to multinational corporations.³ In brief, the existing literature emphasizes the risk-reduction aspects of international diversification, but it does not provide direct evidence regarding the effect of international corporate expansion on shareholders' wealth.

The objective of this study is to investigate formally the impact of corporate multinationalism, through foreign acquisitions, on the market value of the firm in an attempt to provide evidence on whether direct foreign investment is a wealth-increasing corporate decision.⁴ Specifically, to the extent that such an expansion of the firm's operations in a global scale tends to accomplish the investors' international-diversification objectives while enhancing the acquiring firm's ability to benefit from the systemic advantages inherent in a multinational network, the announcement of a foreign acquisition may result in abnormal returns on the acquiring firm's stock. In the following, we refer to this prediction as the "positive-multinational-network hypothesis." Country- as well as industry-diversifying acquisitions are expected to have the greatest impact on the acquiring firm's shares. In a world where capital markets are integrated, however, the acquiring firm is not performing a valuable function for investors (see, for example, Hughes, Logue, and Sweeney [21]), and, if domestic capital markets are efficient, the announcement of a foreign acquisition should have no positive impact on the acquiring firm's stock. To the contrary, negative market reaction may result if the firm's decision to expand internationally signals a firm's limited (or rapidly decaying) capacity to extract additional benefits from its existing domestic operations. As Shapiro [33] points out, for many firms becoming multinational is a matter of survival rather than a search for abnormal profits. High agency costs in terms of monitoring and bonding foreign operations may also have an adverse effect on the firm's market value when news about a firm's decision to acquire (expand internationally) a foreign corporation reaches the market. Furthermore, since the degree of market integration differs across different countries and/or industries, the benefits (losses) may also depend on the target firm's country⁵ and/or industry. Moreover, because the choice of an

² Fatemi [17] provides some preliminary evidence on the effect of corporate international diversification on shareholders' wealth. For example, he finds that the cumulative average residuals for a portfolio of eighteen firms rise by some eighteen percent during the fourteen months preceding the initial foreign diversification. However, the lack of statistical tests and the small number of firms included in the portfolio do not allow one to reach general conclusions.

³ In addition, Shaked [32] finds that the average failure probability of domestic corporations is significantly higher than that of the MNCs. In light of this evidence, Shaked points out that, even in a world with no imperfections, corporate multinational diversification is supported by the potential for a reduced insolvency probability and the associated increase in debt capacity.

⁴ Although the valuation effects of domestic acquisitions have been examined in several studies (see, e.g., Dodd [10], Firth [18], Eger [14], Asquith [2], Asquith, Bruner, and Mullins [3], Eckbo [13], Dodd and Ruback [11], Bradley [6], Bradley, Desai, and Kim [7], and Travlos [36]), there is virtually no evidence on the valuation effects of international corporate takeovers. Thus, this study expands our knowledge on the effects of corporate acquisitions on the acquiring firms' stock returns.

⁵ See Hisey and Caves [20].

international acquisition is affected by the firm's previous experience in the host country, the benefits (losses) may also depend on the degree of the acquiring firm's existing foreign exposure.

In general, the results indicate that firms engage in international expansion (diversification) by acquiring foreign corporations in an attempt to maximize shareholders' wealth. In particular, the results suggest that shareholders of MNCs not already operating in the target firm's country reap the greatest benefits from international acquisitions when their firms expand into a new industry (product) and geographic market. MNCs shareholders' wealth-maximizing objective is better served when their firms expand into new economic areas that are less related and less developed relative to the U.S. economy. Shareholders of MNCs operating in the target firm's country experience insignificant negative abnormal returns. Finally, domestic firms expanding internationally for the first time experience insignificant positive valuation effects.

The remainder of the paper is organized as follows. Section I describes the data and methodology. Section II presents and interprets the results. The final section contains a brief summary and concluding remarks.

I. Data and Methodology

A. Sample and Data Description

The sample analyzed in this study contains U.S. firms engaged in international acquisitions over the nine-year period from 1975 through 1983. The data were drawn from public announcements of proposals to acquire a foreign target firm abroad. The sample contains completed transactions, and the firms included in it are listed on the New York Stock Exchange or the American Stock Exchange and are contained in the Center for Research in Securities Prices (CRSP) and COMPUSTAT data tapes.

The sample was obtained by searching the Foreign Acquisitions Roster of *Mergers and Acquisitions* and the *Wall Street Journal Index*. The event date of each foreign acquisition is the date of the offer's initial announcement in the *Wall Street Journal*. Firms with concurrent major corporate events (i.e., other takeover activities, divestitures, common stock repurchases, exchange offers, new offerings of securities, and announcements of new contracts) for the fifteen-day period prior to the announcement day ($t = 0$) are not included in the final sample. As shown in Table I, the final sample contains 301 foreign-acquisition announcements made by 202 different firms.

The degree of foreign exposure of the bidding firm in the target firm's country was determined from the Moody's *Directory of Corporate Affiliations* and from Stopford, Dunning, and Haberick's *The World Directory of Multinational Enterprises* [34]. Moody's *Industrial Manuals* were consulted to ensure that the sample of pure domestic firms contained only U.S. firms without any foreign operations. If the acquiring firm had international divisions in other countries but not in the target firm's country, it was assigned to the group of "MNCs not operating in the target firm's country" (99 acquisitions). If the U.S. MNC was already operating in the target firm's country, it was assigned to the group of "MNCs operating in the target firm's country" (175 acquisitions). Finally, if the acquiring

Table I
 Frequency Distribution by Year of 301
 Announcement Dates of Foreign
 Corporate Takeovers of U.S. Firms

Year	Frequency	%
1975	14	4.6
1976	25	8.3
1977	20	6.6
1978	36	12.0
1979	60	19.9
1980	46	15.3
1981	31	10.3
1982	42	14.0
1983	27	9.0
Total	301	100.0

firm did not have any foreign operations, it was assigned to the group of “domestic firms going abroad for the first time” (13 acquisitions).⁶

The overall sample was also divided according to the degree of economic development of the target firm’s country into acquisitions directed to developed ($n = 256$) and less developed ($n = 45$) countries.⁷ Finally, the degree of industry diversification was determined by comparing the primary industries (activities) of the acquiring and target firms, based on the first two digits of the SIC codes. Based on this criterion, 139 acquisitions were classed as “related” while 162 were deemed as “unrelated” acquisitions.

B. Estimation of Abnormal Stock Returns

Following Fama [16], the market model is specified:

$$R_{jt} = a_j + b_j R_{mt} + e_{jt}, \quad (1)$$

where R_{jt} is the rate of return on security j for event day t , R_{mt} is the rate of return on the CRSP equally weighted index on event day t , and e_{jt} is the error term of security j on event day t .

The market model is employed to examine whether the acquiring firm’s stockholders realize abnormal returns at foreign-acquisition announcements. An abnormal return for the common stock of firm j on day t is defined as $AR_{jt} = R_{jt} - \hat{R}_{jt}$, where $R_{jt} = \hat{a}_j + \hat{b}_j R_{mt}$ and \hat{a}_j, \hat{b}_j are ordinary-least-squares estimates of the market-model parameters. The estimation period is from $t = -136$ to $t = -16$ relative to the initial date of announcement in the *Wall Street Journal*, day $t = 0$.⁸ Daily abnormal returns are calculated for each firm over the interval $t =$

⁶ Fourteen acquisitions were not assigned to any of these three groups because the degree of the acquiring firm’s international exposure was ambiguous.

⁷ This is based on the standards of the International Monetary Fund (IMF) and the Organization of Economic Cooperation and Development (OECD).

⁸ To control for the possibility of a reduction in the firm’s beta due to the international-diversification effect, results were also obtained by estimating the market model’s parameters over the post-acquisition period $t = +16$ to $t = +136$. These results, similar to those presented in Section II, are not reported, but they are available from the authors.

-15 to $t = +15$. For a sample of N firms, a daily average abnormal return (AR) for each day t is obtained:

$$AR_t = \frac{1}{N} \sum_{j=1}^N AR_{j,t}. \quad (2)$$

The expected value of AR_t is zero in the absence of abnormal performance. To examine whether the average daily abnormal return is statistically different from zero, the average standardized abnormal return ($ASAR_t$) is calculated as

$$ASAR_t = \frac{1}{N} \sum_{j=1}^N \frac{AR_{j,t}}{S_{j,t}}, \quad (3)$$

where S_j is the square root of firm j 's estimated forecast variance computed by

$$S_{j,t} = \left[S_j^2 \left[1 + \frac{1}{L} + \frac{(R_{mt} - \bar{R}_m)^2}{\sum_{K=1}^L (R_{mK} - \bar{R}_m)^2} \right] \right]^{1/2}, \quad (4)$$

where S_j^2 is the residual variance for security j from the market-model regression, L is the number of observations during the estimation period, R_{mK} is the return on the market portfolio for the K th day of the estimation period, R_{mt} is the return on the market portfolio for day t , and \bar{R}_m is the average return of the market portfolio for the estimation period. Assuming that the individual abnormal returns are normal and independent across securities, the statistic Z_t , which follows a unit-normal distribution (Dodd and Warner [12]), is used to test the hypothesis that the average standardized abnormal return equals zero,⁹ where

$$Z_t = \sqrt{N} ASAR_t. \quad (5)$$

Finally, a binomial-sign test examines whether the proportion of positive event-day returns and the proportion of statistically significant positive abnormal returns are greater than expected under the null hypothesis. This test is a test of location, and thus it is not affected by outlier returns in either a positive or negative direction.

II. Empirical Results

A. Overall Sample

Table II shows the average daily abnormal returns, the Z -values, and the number of positive and negative abnormal returns for the total sample of 301 foreign-acquisition announcements, for the period -10 to +10 days relative to the announcement day ($t = 0$) in the *Wall Street Journal*. As shown in Table II, the announcements of international acquisitions are, on average, associated with normal returns. For instance, the announcement-day ($t = 0$) abnormal return is 0.08 percent ($Z = 0.84$), statistically insignificant at any conventional level. The corresponding abnormal performance of U.S. bidding firms relative to the pre-

⁹ With this standardization procedure, it is possible in principle that the daily average abnormal return (AR_t) and the average standardized abnormal return ($ASAR_t$) will be of different sign, implying the possibility of different signs between AR_t and Z_t values.

Table II
 Daily Average Abnormal Returns (*AR*), *Z*-values,
 and Number of Positive and Negative Abnormal
 Returns for the Bidding Firms in 301 Foreign
 Acquisitions of U.S. MNCs from Ten Days before
 and Ten Days after the Initial Announcement (Day
 Zero) of International Takeover Bids
 Years 1975–1983

Event Day	<i>AR</i> (%)	<i>Z</i> - value	Positive:Negative
-10	-0.02	-0.11	141:160
-9	0.18	1.98	153:148
-8	0.10	1.06	154:147
-7	0.07	0.17	146:155
-6	0.13	1.19	152:149
-5	-0.05	-0.69	144:157
-4	0.05	0.44	154:147
-3	-0.18	-1.67	131:170
-2	0.19	1.51	153:148
-1	0.01	-0.10	155:146
0	0.08	0.84	152:149
+1	-0.07	-0.98	141:160
+2	-0.08	-0.94	140:161
+3	-0.02	-0.56	139:162
+4	-0.01	-0.28	139:162
+5	-0.02	0.12	157:144
+6	-0.02	-0.45	141:160
+7	0.00	0.22	157:144
+8	0.11	0.62	150:151
+9	0.16	1.56	138:163
+10	-0.07	-0.59	141:160

and post-announcement day is not statistically different from zero. In general, the evidence reported in Table II suggests that unanticipated international-corporate-acquisition announcements do not lead to changes in common stock prices of acquiring firms. This result is not consistent with the predictions of the theory of corporate multinationalism that views the MNC as a collection of valuable options arising from the systemic advantages inherent in the creation of a multinational network. The lack of positive abnormal returns at the announcement of international acquisitions may suggest that the systemic advantages inherent in a multinational network are largely offset by the costs associated with foreign operations (i.e., cost of acquiring information and absorbing experience, and monitoring and bonding expenses).

However, it must be recognized that the overall sample of 301 acquisitions is a heterogeneous group with respect to the degree of the existing international exposure of bidding firms, the degree of economic development of target firms' countries, and the degree of industrial and product relatedness between acquiring U.S. and foreign target firms. Disaggregation of large samples of domestic acquisitions according to various characteristics has produced conclusions differ-

ent from those based on the entire samples. (See Schipper and Thompson [30] and Travlos [36].) Therefore, it is important to divide the original sample into homogeneous subsamples before drawing any conclusions about the valuation effects of corporate multinationalism.

B. Degree of International Exposure of the Acquiring Firm

Panel A of Table III presents ARs (over the period $t = -5$ to $t = +5$), Z-values, and number of positive and negative abnormal returns for the samples of 175 bids of U.S. MNCs operating in the target firm's country, ninety-nine bids of U.S. MNCs not operating in the target firm's country, and thirteen bids of U.S. firms going abroad for the first time. Panel B presents daily mean difference (DARs) and Z-values of the returns between acquisitions in the first and second groups and between those in the first and third groups, respectively. The comparison of the abnormal returns between these portfolios is expected to shed light

Table III

Panel A: Daily Average Abnormal Returns (AR), Z-values, and Number of Positive and Negative Abnormal Returns of Bidding Firms for the Samples of 175 Bids of U.S. MNCs Already Operating in the Target Firm's Country, Ninety-nine Bids of U.S. MNCs Not Operating in the Target Firm's Country, and Thirteen Bids by U.S. Firms Going Abroad for the First Time, for the Event Period -5 Trading Days to $+5$ Trading Days around the Initial Announcement (Day Zero) of International Takeover Bids Years 1975-1983^a

(1) Event Day	Operating in Target Firm's Country (N = 175)			Not Operating in Target Firm's Country (N = 99)			Going Abroad for the First Time (N = 13)		
	(2) AR (%)	(3) Z-Value	(4) Positive: Negative	(5) AR (%)	(6) Z-Value	(7) Positive: Negative	(8) AR (%)	(9) Z-Value	(10) Positive: Negative
-5	-0.08	-0.60	83:92	-0.02	-0.30	48:51	0.24	0.38	7:6
-4	-0.16	1.28	95:80	-0.18	-1.02	45:54	-0.60	-1.03	6:7
-3	-0.11	-0.77	80:95	-0.23	-1.31	44:55	-0.16	-0.12	7:6
-2	0.19	1.59	94:81	0.21	0.57	46:53	-1.39	-2.16**	5:8
-1	0.05	0.21	87:88	-0.20	-0.60	52:47	0.87	0.77	8:5
0	-0.08	-0.60	82:93	0.31	2.11**	58:41 ^b	0.74	1.22	7:6
+1	-0.10	-1.55	80:95	0.06	0.67	53:46	-0.71	-1.25	4:9
+2	-0.10	-1.05	81:94	0.03	0.18	50:49	-1.28	-1.84*	4:9
+3	0.05	-0.52	77:98	-0.05	0.06	45:54	-0.85	-1.54	4:9
+4	0.03	-0.18	79:96	-0.05	-0.16	49:50	0.15	0.17	6:7
+5	-0.16	-1.28	80:95	0.18	1.65*	63:36 ^c	0.42	0.59	8:5

^a Fourteen companies were omitted from this table because their international exposure was ambiguous.

^b The Z-value for the number of positive abnormal returns equals 1.71, significant at the 0.05 level (one-tailed test). This Z-value is given by $(m - pn)/\sqrt{p(1-p)n} \sim N(0,1)$, where p is the probability under the null hypothesis of observing a positive (or negative) abnormal return (0.50), n is the number of abnormal returns, and m is the number of positive (or negative) abnormal returns observed. Also, the Z-value for the number of positive abnormal returns for day 0 significant at the 0.05 level is 1.67 (one-tailed test). This Z-value is given by $(s - qr)/\sqrt{q(1-q)r} \sim N(0,1)$, where $q = 0.05$, the probability under the null hypothesis of observing a positive (or negative) abnormal return significant at the 0.05 level, r is the number of abnormal returns, and s is the number of observed positive (or negative) abnormal returns significant at the 0.05 level or better.

^c The Z-value for the number of positive abnormal returns equals 2.71, significant at the 0.01 level or better.

Table III—Continued

Panel B: Daily Mean Differences (*DAR*) of Average Abnormal Returns between U.S. Bidding MNCs Already Operating in Target Firm's Country ($N = 175$) and Bidding MNCs Not Operating in Target Firm's Country ($N = 99$), and *DARs* between Bidding MNCs Already Operating in Target Firm's Country ($N = 175$) and Bidding Domestic Firms Going Abroad for the First Time ($N = 13$), for the Period -5 Trading Days to $+5$ Trading Days around the Initial Announcement (Day Zero) of International Takeover Bids

(1) Event Day	Daily Mean Differences (Already Operating in Target Firm's Country Minus Not Operating There)		Daily Mean Differences (Already Operating in Target Firm's Country Minus Going Abroad for the First Time)	
	(2) <i>DAR</i> (%) ^a	(3) <i>Z</i> -value ^b	(4) <i>DAR</i> (%) ^a	(5) <i>Z</i> -value ^b
-5	-0.06	-0.13	-0.32	-0.53
-4	0.34	1.59	0.76	1.33
-3	0.12	0.58	0.05	-0.09
-2	-0.02	0.50	1.58	2.49**
-1	0.25	0.59	-0.82	-0.69
0	-0.39	-2.06**	-0.82	-1.34
+1	-0.16	-1.48	0.61	0.79
+2	-0.13	-0.77	1.18	1.50
+3	0.10	-0.36	0.90	1.34
+4	0.08	0.02	-0.12	-0.21
+5	-0.34	-2.09**	0.58	-0.91

^a $DAR = AR_1 - AR_2$, where 1 represents firms in the first group and 2 represents firms in the second group.

^b $Z\text{-value} = \frac{ASAR_1 - ASAR_2}{\sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$, where N_1, N_2 represent the numbers of the firms in the first

and second groups, respectively.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

on the role of bidding firms' international exposure as well as on the benefits involved when firms seek international expansion. The thirteen foreign-acquisition announcements made by U.S. firms expanding internationally for the first time are, on average, associated with an announcement-day abnormal return of 0.74 percent and a *Z*-value of 1.22, statistically insignificant at conventional levels.¹⁰ Thus, the proposition that internationally diversifying acquisitions lead always to significant benefits to bidders is not supported by the data. Although the small sample makes it difficult to draw any strong conclusions, this finding offers support to Shapiro's [33, pp. 383–84] conjecture that, for domestic firms, "becoming multinational is not a matter of choice but, rather, one of survival." Consequently, for these firms, the primary motive in international diversification

¹⁰ The estimated average abnormal return of 0.74 percent may suggest that, for such firms, some economic benefits may be generated by expanding internationally for the first time. Indeed, one firm experiences a large abnormal return of 6.18 percent ($Z\text{-value} = 2.67$) on event day $t = 0$. By removing this observation, the average abnormal return on event day $t = 0$ becomes 0.28 percent ($Z\text{-value} = 0.49$). This observation was not deleted, however, because no other corporate event announcement was found in the *Wall Street Journal* for this firm for the period surrounding the announcement day.

through acquisitions may be preservation of normal profits and hence survival rather than the search for abnormal profits.

The ninety-nine acquisition announcements made by U.S. multinational firms not operating in the target firms' country are, on average, associated with a positive abnormal return of 0.31 percent (Z -value = 2.11, significant at the 0.05 level), indicating that stockholders of bidding MNCs experience statistically significant abnormal returns. The Z -value for the number of positive abnormal returns on event day $t = 0$ is 1.71, significant at the 0.05 level (one-tailed test), while the Z -value for the number of positive abnormal returns significant at the 0.05 level is 1.67, which is also significant at the 0.05 level (one-tailed test). The Z -values for both the abnormal returns and the number of positive abnormal returns support the positive-multinational-network hypothesis, according to which the valuation effect of international acquisitions reflects the systemic opportunities that stem from the expansion of MNCs' existing activities. In contrast, as shown in Panel A of Table III, corporate international diversification does not result in positive abnormal returns for stockholders of MNCs already operating in the target firm's country. Specifically, the announcement-day average abnormal return is -0.08 percent, which is statistically insignificant at conventional levels (Z -value = -0.60).

The positive-multinational-network hypothesis predicts that a branching-tree process of expansion that takes the expanding firm into a new geographic market leads to increases in common stock prices. The results presented in Panel A of Table III are consistent with this prediction. Indeed, the findings offer strong evidence that the acquisition of a foreign firm by a MNC not operating in the target firm's country constitutes positive news to investors. Furthermore, since diversifying across geographic space is likely to reap the greatest risk-spreading benefit, the lack of a significant market response to acquisition announcements made by U.S. MNCs already operating in the target firm's country is not a surprise. It appears that foreign acquisitions that do not expand MNCs' multinational network do not alter the market's perception regarding the acquiring firm's ability to arbitrage institutional restrictions, capture informational externalities in the conduct of international business, and benefit from joint production in marketing and manufacturing. As shown in Panel B of Table III, significant differences exist in the announcement-period abnormal returns between the bidding MNCs that already operate in the target firm's country and the bidding MNCs that do not yet operate in the target firm's country. In particular, on event day 0, the daily mean difference (DAR) of abnormal returns between these two groups is -0.39 percent, which is significantly different from zero at the 0.05 level (Z -value = -2.06). These findings offer additional support to the view that different types of international acquisitions are assessed differently by investors at the announcement day of a takeover bid.

C. Cross-Sectional Regression Analysis

To obtain additional insights into the price effects of corporate multinationalism, the following regression model is estimated:

$$SCAR_{j(-1,0)} = a_0 + a_1 CNTRD_j + a_2 INTROD_j + a_3 RELATD_j + e_j, \quad (6)$$

where $SCAR_{j(-1,0)}$ is the two-day ($t = -1$ to $t = 0$) standardized cumulative abnormal return at the announcement of an international takeover bid,¹¹ $CNTRD$ is a dummy variable that represents the degree of economic development of the target firm's country ($CNTRD = 0$ for developed countries, 1 for less developed countries), $INTROD$ is a dummy variable that represents the degree of international operations of the bidding firm prior to engaging to the current acquisition ($INTROD = 0$ if the bidding firm is already operating in the target firm's country, 1 otherwise), and $RELATD$ is a dummy variable representing the degree of industrial relatedness based on the first two SIC digits between acquiring and target firm ($RELATD = 0$ for acquisitions across the same industry, 1 for acquisitions across different industries).

The $CNTRD$ variable is employed to test whether the acquiring firm's benefits from international acquisitions depend on the level of economic development of the target firm's country relative to that of the acquiring firm's country. The positive-multinational-network hypothesis suggests that the benefits from international acquisitions stem from the firm's ability to exploit uniquely international distortions in capital markets or production, implying that these benefits will be greater the less integrated the economies of the two countries are. Since the degree of integration between two economies depends on their relative economic development, the benefits should be greater when firms expand into geographic areas less developed than the parent firm's economy, suggesting a positive coefficient for $CNTRD$. The $INTROD$ variable is used to test the hypothesis that the expanding firm's degree of previous international exposure affects the acquiring firm's announcement-period abnormal returns. Consistent with the positive-multinational-network hypothesis, a branching-tree process of an expansion that takes the multinational firm into new geographic areas creates more benefits than expanding the firm's operations in the same country, suggesting a positive coefficient for $INTROD$. Finally, research on corporate strategy distinguishes between related and unrelated corporate expansion. (See, e.g., Hisey and Caves [20].) Accordingly, international diversification that takes the expanding firm into a new product market (i.e., different industries) from the parent firm's base is expected to enhance the firm's multinational network and result in positive valuation effects, implying a positive coefficient for $RELATD$.

Table IV reports results of different versions of the general-regression model described in equation (8). Regressions (1) through (3) are based on the entire sample. Regressions (4) and (5) include only those firms that are already operating in the target firm's country, while regressions (6) and (7) contain multinational firms that are expanding into new geographic markets. The results indicate that the regression model has a relatively strong explanatory power. (Five out of seven regressions have F -statistics significant at the 0.05 level or better.) In addition, the coefficient of $CNTRD$ has the predicted positive sign and is always statisti-

¹¹ The two-day announcement period is motivated by the fact that "it cannot be determined from published sources whether the initial post-announcement market transaction preceded or followed the close of trading in the trading day prior to the published announcement in the *Wall Street Journal*" (Dann and Mikkelsen [9, p. 162]). The two-day standardized cumulative abnormal return for firm j ($SCAR_j$) is derived by summing the AR 's for event days $t = -1$ and $t = 0$ and by dividing the sum by the estimated standard deviation of the two-day abnormal return.

Table IV

Estimated Coefficients and *t*-Statistics (in Parentheses) from Regressing the Two-Day ($t = -1$ to $t = 0$) Standardized Cumulative Abnormal Returns, $SCAR_{(-1,0)}$, for U.S. Bidding Firms at the Announcement of International Takeover Bids on the Degree of Economic Development of the Target Firm's Country ($CNTRD$),^a the Degree of Prior International Operations of the Bidding Firms ($INTROD$),^b and the Degree of Industrial Relatedness between Acquiring and Target Firms ($RELATD$)^c Years 1975–1983

$$SCAR_{j(-1,0)} = a_0 + a_1CNTRD_j + a_2INTROD_j + a_3RELATD_j + e_j$$

Regression	a_0	a_1	a_2	a_3	N	$R^2(\%)$	F	Significance of F (%)
Entire Sample								
1	-0.032 (-0.35)	0.714 (2.99)***			301	3.10	8.99	0.30
2	-0.106 (-0.95)	0.702 (2.95)***	0.295 (1.73)*		287	3.54	5.14	0.64
3	-0.113 (-0.76)	0.704 (2.94)***	0.296 (1.73)*	0.012 (0.07)	287	3.54	3.42	1.79
Acquiring Firms Already Operating in the Target Firm's Country								
4	-0.086 (-0.77)	0.548 (1.79)*			175	1.85	3.21	7.48
5	0.012 (0.07)	0.523 (1.70)*		-0.167 (-0.79)	175	2.21	1.92	15.00
Acquiring Firms Not Operating in the Target Firm's Country								
6	-0.007 (-0.04)	0.933 (2.49)**			99	5.68	5.72	1.88
7	-0.235 (-1.08)	0.968 (2.50)**		0.468 (1.59)	99	8.13	4.16	1.86

^a $CNTRD$ = dummy variable for degree of economic development of target firm's country ($CNTRD = 0$ for developed countries, 1 for less developed countries).

^b $INTROD$ = dummy variable for the degree of international operations of the bidding firm prior to acquisitions analyzed in this study ($INTROD = 0$ if the bidding firm was already operating in the target firm's country, 1 otherwise).

^c $RELATD$ = dummy variable for the degree of industrial relatedness—based on the first two SIC digits—between acquiring and target firms ($RELATD = 0$, for acquisition across the same industry, 1 for acquisitions across different industries).

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

cally significant, in most cases at the 0.05 level or better. Also, the coefficient for $INTROD$ has the predicted positive sign and is significant at the 0.10 level. The coefficient for $RELATD$ is insignificant in the regression restricted to the firms already operating in the target firm's country, but it has the predicted positive

sign and is significant at the 0.11 level in the regression pertinent to the firms that expand into new geographic markets.¹²

These findings provide evidence supporting the view that the acquiring firms' benefits from international acquisitions are greater when U.S. firms expand into new geographic areas and when the target firms' countries have economies which are less developed than the U.S. economy. The results also provide support to the view that diversifying simultaneously across geographic and industry space generates benefits to the bidding firms' stockholders. These findings reinforce the results presented in Subsection *B* and are consistent with the positive-multinational-network hypothesis. In sum, the evidence from the portfolio and regression analysis suggests that firms engage in multinational expansion by acquiring foreign corporations (i.e., expand their existing multinational network) in an effort to maximize shareholders' wealth.

III. Summary and Conclusions

This study investigates acquiring firms' share price changes associated with foreign-acquisition announcements. In particular, this study provides direct evidence on the effect of corporate multinational expansion on shareholders' wealth. Shareholders of internationally expanding domestic firms experience insignificant positive abnormal returns at the announcement of the acquisition. Acquisition announcements made by multinational corporations already operating in the target firm's country have insignificant negative valuation effects on the firm's common stock prices. However, the valuation effect of acquisition announcements by multinational firms not already operating in the target firm's country, on average, is positive and statistically significant. The reaction of the bidding MNCs' stock prices to acquisition announcements in countries when the acquiring firm is lacking operating exposure is generally consistent with the positive-multinational-network hypothesis, which predicts an increase in the firm's market value in response to the firm's multinational expansion. Another interesting result is that shareholders of MNCs benefit the most when their firms' expansion is taking place in less developed countries. It seems that the inherent advantages in a multinational network are viewed by investors as valuable options exercisable only when the MNC is expanding into geographical areas that are less related and developed relative to the U.S. economy. Finally, shareholders of MNCs reap the greatest benefits from foreign acquisitions when

¹² An alternative regression model was specified that also contains the relative size of the acquisition (*RELSIZE*) and a dummy variable (*FIND*) representing the method of acquisition financing (*FIND* = 1 for common stock exchanges, 0 for cash offers). Relative size is measured as value of acquisition, as reported in the *Wall Street Journal*, divided by the market value of the bidding firm's common equity at year end prior to the acquisition announcement, taken from the COMPUSTAT tapes. The method of payment was identified from the *Wall Street Journal* for sixty percent of the sample. Based on this information, ninety percent of the acquisitions are cash offers and ten percent represent common stock exchanges. The regression results do not reveal any explanatory power for the variables *RELSIZE* and *FIND*; since they are qualitatively similar to those reported in Table IV, they are not reported here but are available from the authors.

their firms diversify simultaneously across geographic and industry space. Moreover, the results confirm the view that investors correctly perceive the benefits inherent in a multinational network as well as the diversification benefits of shares of multinational firms.

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