

Cross Border Mergers and Acquisitions in Emerging Markets: The Stock Market Valuation of Corporate Control¹

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Abstract

Using a database that covers all transactions that involve a developed-market acquirer and an emerging-market target from 1988-2002, this paper studies the stock market's reaction to M&A announcements in emerging markets. The evidence suggests that the stock market anticipates significant value creation from cross border transactions that involve an emerging market targets. Panel data estimations show that, on average, monthly returns for target firms increase by 5.05 to 6.68 percent in alternative specifications when a cross border M&A transaction is announced, while acquirer returns increase, on average, by 1.65 to 3.05 percent. The benefits of the M&A transactions stem from the transfer of majority control from emerging market targets to developed market acquirers. Overall, the results suggest that the boom in cross border mergers and acquisitions in emerging markets in the late 1990s led to substantial gains for shareholders of both acquiring and target firms.

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Introduction

A substantial fraction of the growth in FDI during the late 1990s can be attributed to the rapid increase of cross-border mergers and acquisitions rather than green-field investment. Figure 1 shows cross-border corporate mergers and acquisitions in Latin America and East Asia as a fraction of FDI inflows. During 1997-2001, cross-border mergers and acquisitions accounted for roughly 50 percent of FDI in Latin America and 70 percent in Asia.

There are two contrasting views about the appropriate interpretation of the increase in FDI in the form of mergers and acquisitions in emerging markets. One view is that foreign direct investment provides an important and stable source of external finance for capital scarce countries in contrast to the capricious hot money flows of portfolio equity and short term debt (Frankel and Rose 1996, Lipsey 2001). The alternative view is that FDI in the form of mergers and acquisitions may not be welfare improving in emerging markets especially if it involves a forced sale of assets at bargain prices (Krugman 1998). Central to the debate is the question of whether the transfer of ownership from domestic to foreign hands through cross border mergers and acquisitions results in a creation of surplus value in emerging markets.

The stock market is a natural place to search for an answer to this question. Prior to an M&A announcement, acquirer and target firm stock prices contain information about the stand-alone values of the two firms. When a merger or acquisition is announced, changes in acquirer and target firm stock prices reveal information about (i) the potential wealth creation from the transaction and (ii) the distribution of the gains and losses from the transaction to the acquirer and target firms. In other words, the stock

market's reaction to the information contained in the acquisition announcement reveals the market's view of the transaction.

This paper uses the stock price reaction of acquirer and target firms to the announcement of an M&A transaction as a summary statistic for value creation through cross border M&A activity. When a cross border M&A transaction is announced, acquirer and target firm stock price changes measure the value gains or losses to their respective shareholders. Changes in market weighted joint returns for acquirers and targets provide an estimate of the synergies that result from the M&A transaction.

Moving beyond the basic issue of measuring and assigning gains and losses to acquirers and targets lies the more fundamental question of the mechanism through which cross border M&A transactions actually create or destroy value. In order to understand the benefits of cross-border merger and acquisition activity in emerging markets, it is important to think about why firms would be worth more under foreign rather than domestic control (Kindleberger 1969). In general, a foreign acquirer may have an incentive to acquire majority control of the target if the improvement in productivity that results from the acquisition of control is greater than the loss of control by the local management of the target.

The benefits of acquiring control in response to situations where there are difficulties in writing or enforcing complete contracts has been studied extensively in the industrial organization literature (Coase 1937, Alchian, Crawford and Klein 1978, Grossman and Hart 1986 and Williamson 1979). Problems of ineffective monitoring and incomplete contracting are especially important in emerging markets (Antras 2003, La Porta, Lopez-de-Silanes, Sheilfer and Vishny 1998).

The paper uses the Securities Data Corporation (SDC) Thompson's International Mergers and Acquisitions database to identify merger and acquisition events in emerging markets over the period 1988-2003. Stock price information is taken from Datastream and Bloomberg. The benchmark results from firm level panel data estimations suggest that, on average, target firms in emerging markets experience positive monthly returns that range from 5.05% to 6.68% when a cross border M&A transaction is announced. Increases in market-capitalization-weighted joint monthly returns for targets and acquirers range from 1.79% to 2.28%. These results are consistent with the findings reported in studies that use US data (Andrade, Mitchell and Stafford 2001).

However, unlike studies that use US data, the estimations also suggest unambiguous gains for developed market acquirers when an emerging market M&A transaction is announced. The results in this paper show that monthly returns for acquirer firms show a statistically significant increase of 1.65% to 3.05% in alternative specifications. The increases in both acquirers and target firm returns are robust to the inclusion of controls for country, time, industrial diversification and method of payment effects as well as acquirer and target firm characteristics such as size and liquidity.

Panel data estimations in this paper also suggest that acquiring firm returns are significantly higher when the developed market acquirer gains majority control of the emerging market target. The increase in acquirer firm stock returns ranges from 3.1%-4.8% in alternative specifications when majority control is acquired. The result is robust to the inclusion of controls for industrial diversification and the size of the transaction. The finding suggests that value creation from M&A transactions in emerging markets is intimately linked to the acquisition of corporate control.

To isolate the role played by transfer of control in the emerging market context, the announcement returns for US acquirers are also compared across developed and emerging market M&A transactions. The results suggest that when an acquisition of targets located in developed markets such as Europe or Japan is announced, the acquisition of majority control is not associated with significant increases in acquirer returns. The acquisition of majority control in emerging markets is, however, associated with significant increases in acquirer returns ranging from 5.8% to 12.9% in alternative specifications. The result is robust to the inclusion of a variety of controls for acquirer and target firm characteristics as well as transaction specifics.

The focus of this paper is on the stock price reaction, an inherently ex-ante measure, to news of an acquisition as a summary statistic to capture the gains and losses from an acquisition. The evidence suggests that firm value is created based on the positive stock price reactions of acquirer and target firms. A drawback of the analysis is that it does not consider whether the synergies from the acquisition as measured by announcement returns are in fact realized. Indeed, the empirical analysis does not consider the ex-post performance of the combined firm. A drawback of ex-post performance measures is that these measures are sensitive to the choice of different sample periods as well as the benchmark that is used to measure risk (Barber, Lyon and Tsai 1999). Ex-post performance measures also tend to be fraught with problems of endogeneity. In light of these issues, this paper turns to changes in stock prices to derive forward looking estimates of changes in discounted expected future cash flows when a cross border acquisition is announced. Illusory or not, the stock market reaction tells us what the market thinks (Lang and Stulz 1994). Whether the stock market's reaction is rational or not, is a separate question.

1. Sources of Value Creation in Emerging Markets

Before turning to the empirical analysis of announcement returns, it is useful to begin with a simple example of a cross-border acquisition of an emerging market target firm by a developed market acquirer. Assume that the acquirer gains complete control of the target firm. For simplicity suppose further, that on the date of the acquisition announcement, the successful completion of the transaction is guaranteed. At the announcement date, the combined firm values minus the pre-announcement stand alone firm values reflect the market's assessment of the value creation or destruction resulting from the acquisition. This simple scenario is useful to enumerate the factors that could drive a wedge between the sum of the stand-alone values of the acquirer and target before the acquisition and the value of the combined firm after the acquisition. While many of the factors that drive a wedge between the stand alone and combined values of the acquirer and the target play a role in the context of domestic mergers and acquisitions, some factors are distinct to the cross-border framework.

The paper now turns to the following questions. First, under what conditions does a cross border acquisition in an emerging market lead to a creation of value? Second, what are the factors that may drive the creation of value?

1.1 Sources of Value Creation for the Combined Firm

1.1.1 Synergies

An acquisition can lead to a creation of value measured by joint returns if the cash flows of the merged firm are greater than the sum of its parts, namely the cash flows of the two stand-alone firms. The creation of value could be due to synergies

resulting from the transfer of technology and skills between the two firms that increases the profitability in one or both firms. Synergies may also accrue to the acquiring firm if the acquisition provides access to the target's market or allows the acquiring firm to vertically integrate its lines of production. Similarly, synergies can be achieved through cost reduction in the combined firm. Overall, positive synergies will increase the value of the combined firm.

1.1.2 Access to Capital

If the cost of capital is higher in the target's market, which is likely if the target is located in a developing country, then a cross border acquisition could create value by providing the target with access to a lower cost of capital through the internal capital market in the combined firm. If this is the case, projects which would otherwise not be undertaken by the target firm may become profitable and be a source of value creation. Note, however, that access to internal capital markets is often cited as a possible source of value destruction in developed market M&A transactions. The concern with internal capital markets within large diversified conglomerates is that they may be less efficient than external capital markets in allocating capital across projects. If bad projects are not properly evaluated and get funded, total value will be reduced within diversified conglomerates.

During financial crises, the cost of capital is likely to increase even further in emerging markets, creating even more of an incentive for cross-border mergers and acquisitions, and possibly bigger gains from the acquisition for cash-strapped targets. If this is indeed true then crisis periods should coincide with greater joint acquirer and target gains.

Access to capital leads to a further prediction related to industrial diversification. It is a common assumption that for both the acquirer and target firms to benefit from synergies that accrue from an acquisition, the two firms must be related in some way. The two firms could be related because they are in the same industry, or through a vertical value chain. However, value creation can be associated with the acquisition of a cash-starved firm by a cash-rich firm, regardless of industrial overlap. A high number of M&A transactions between unrelated industries could in fact be a sign of cash-motivated mergers.

1.1.3 Diversification benefits

Gains from cross-border M&A transactions also depend on the systematic risk of the target's cash flows as reflected in the covariance between the discount rate and the target's cash flows. If the acquisition switches the benchmark for pricing the systematic risk associated with the target's cash flows from the domestic market to the acquiring firm's market the acquisition could provide diversification benefits for both the target and acquiring firm resulting in value creation.

1.2 Gains to Acquirers in Emerging Markets

The literature on mergers and acquisitions in the US context suggests that while M&A transactions typically result in value creation, this value creation is generally realized almost entirely by the target's existing shareholders leaving little to no gains for the acquirer. Under the following circumstances the acquirer may be expected to retain a portion of the joint returns from the acquisition.

1.2.1 Bargaining power in Emerging Markets

The acquiring firm may realize positive returns when an acquisition is announced in an emerging market if the acquirer has greater bargaining power relative to the target compared to the case of a domestic acquisition. Acquirers may have greater bargaining power in emerging markets because fewer bidders compete for the target, cash-strapped targets have liquidity needs or changes in government policies help facilitate foreign M&A transactions. If the bargaining power of the acquirer increases in times of crisis when faced with a financially distressed target, then the gains to the acquirer should increase further during crises.

1.2.2 Information Asymmetry

In order for the target firm to negotiate the best possible offer, the target must be in a position to form an accurate estimate of its fundamental value. If the target is uncertain about its true stand-alone value, the firm may undervalue its assets. On the other hand, if acquirers are better able to assess the synergies from the merger, acquirers may be able to select and execute only those transactions that result in significant gains for them. The ability of acquirer firms to form a better estimate of the target's true value has particular significance in emerging markets where the stock price is often viewed as an especially noisy estimate of true firm values. Furthermore, crisis periods result in a collapse about beliefs about future payoffs in the emerging stock markets. If these beliefs are irrational and acquirers have greater confidence in the fundamentals, acquirers may realize further gains during times of crisis.

1.2.3 The Acquisition of Control

In a world with incomplete contracts, the allocation of ownership within firms becomes important (Grossman-Hart, 1986). If the acquisition results in a transfer of control, it will shift the boundary of the acquiring firm and can alter the acquiring firm's incentives to transfer technology or invest in the target. The stock price reactions of the acquiring and target firms when a cross border acquisition leads to a majority control of the target firm by the foreign owner capture the importance of acquiring control. Previous research suggests that the acquisition of control is important in the presence of proprietary assets and less common in labor-intensive industries (Moran 2001). The acquisition of majority control may also be more important in countries with poor protection and enforcement of the minority shareholder rights (La Porta, Lopez-de-Silanes, Shliefer and Vishny 1999). Consistent with this view previous research shows that partially-owned affiliates of US multinational companies receive less training, use older technologies and export less to their parents than their wholly owned counterparts (Desai, Foley and Hines 2003).

If the transfer of control leads to an increase in investment and transfer of technology, joint returns should increase with control. Acquirers may also gain from M&A transactions that achieve control of the target firm. This gain may be the result of total gains being higher and the target and acquire split these gains in a constant ratio. Alternatively, acquirers could pay different prices when they acquire control of the target.

The impact of the foreign acquirer gaining majority control on the target's stock price is less clear. On the one hand, if the market expects that the acquirer will transfer better technology and provide access to cheaper capital to the target its stock price will increase. On the other hand if the foreign acquisition dilutes the ability of the previous

owners to exercise private benefits of control, the target's stock price may fall (Dyck and Zingales 2004).

In summary, value creation through cross border mergers and acquisitions is a function of a whole host of factors. The value of the combined firm will be greater than the stand alone values of the acquirer and target firms if the acquisition leads to the creation of synergies, access to internal capital markets for target firms and the provision of diversification benefits for the acquiring firms. Acquiring firms may gain from M&A transactions in emerging markets if they have better bargaining power in emerging markets, are able to form better estimates of the true stand alone value of the target or because they acquire control of the target firm. It is not easy to identify variables that precisely map into the various factors that affect value creation through cross border mergers and acquisitions. Nevertheless, the empirical estimation strategy employed in this paper includes proxies for the acquisition of majority control, target and acquirer characteristics such as firm size and liquidity, a measure of industrial diversification and transaction characteristics such as method of payment as factors that may drive value creation through cross border M&A transactions.

2. The Data

The empirical analysis is based on data from SDC Thompson's International Mergers and Acquisitions database. The data includes all public and private M&A transactions involving at least 5% ownership of the target company. SDC collates information from over 200 English and foreign language news sources, SEC filings and the filings from its international counterparts, trade publications, newswire reports and proprietary surveys of investment banks, law firms and other advisory firms.

One concern with the data is that foreign direct investment and cross-border mergers and acquisitions are not directly comparable. Cross-border mergers and acquisitions are measured as the transactions values on the announcement date whereas an investment flow is characterized as foreign direct investment if it results in a 10 percent or greater stake in the target firm. To make the data somewhat comparable to the foreign direct investment flows, the sample includes only those transactions in which the acquirer obtains a 10 percent or greater stake in the target firm. The data are not corrected for the source of financing of the transaction, although a majority of the transactions are financed outside the target country.

The sample covers nine Latin American and East Asian countries over the period 1988-2002. The nine target countries are Argentina, Brazil, Chile, Indonesia, Malaysia, Mexico, Philippines, South Korea and Thailand. The database contains information on 5,450 cross-border transactions of which approximately 2,000 involve a publicly traded target and acquirer. Subsidiary firms of multinational companies are not used in the estimations because while they are identified as publicly traded firms in the SDC database, they are not necessarily listed on the stock exchange in the target nation.

For each transaction, the SDC database provides information about the date on which the transaction was announced and the date on which the transaction became effective. The database also provides some characteristics of the target and acquiring firms such as name, nation, industry sector and primary SIC classification. Many of the transactions contain transaction-specific information such as the percent of shares acquired, the percent of shares owned before and after the transaction is completed and

the percent of shares sought by the acquiring firm.² The paper supplements this data with stock price information from Datastream, Bloomberg and the ISI Emerging Markets Database for the target and acquiring firms. Buy and hold returns are constructed using weekly data on stock prices. All returns are denominated in the local currency and the US dollar. For target firms, return data is dropped from sample if during event window the target security did not change price for more than two consecutive weeks.

Our primary sample covers 1629 observations of mergers and acquisitions by firms from developed markets that purchased publicly traded emerging market target firms. For 379 emerging market firms, stock price data was available. The sample of emerging market targets is supplemented with an additional 1,150 observations of developed market acquisitions by the US firms in the sample. These transactions cover M&A transactions that result in a change in majority control in the target firm as well as acquisitions of minority shares – a distinction that is explored in detail in later sections.

2.1 Some Facts about Cross-Border Mergers and Acquisitions in Emerging Markets

Table 1 provides a breakdown of M&A transactions in emerging markets over time by region of target, by target sector and by country of acquirer. The first panel shows the number of M&A transactions of targets in Asia and Latin America. Figures 2a and 2b show that the number of M&A transactions increased in both regions over time, with a particularly large increase in the 1998-2002 period. Table 1 shows that throughout

² SDC also provides some information about the nature of the transaction. Cross border mergers and acquisitions are transacted through a variety of means, from privately negotiated sales to open market tender offers. In the emerging market sample, a significant number of acquisitions are transacted through a third-party. In these cases, the target share price is unaffected by possible bidding pressure, and instead, any change in price will reflect the markets view of the value of the new owner relative to the previous owner. However, even with developed market targets, this bidding pressure infrequently contributes to target price changes as the majority of transactions in the sample are completed without the acquirer directly tapping into the open market.

the sample period the number of cross border M&A transactions in Latin America exceeds the number of M&A transactions in Asia. When decomposed by sector, it appears that most targets firms are either in the finance, insurance and real estate (FIRE) or manufacturing sectors. The M&A transactions appear evenly split between “tradables” and “nontradables” sectors. The bottom panel of the table shows the decomposition by the acquirer’s country of origin. US firms acquire roughly 40–50% of the emerging market targets while European firms acquire 20-30%.³ Firms in Singapore and Hong Kong made a large number of M&A transactions in emerging Asia during 1998-2002.

The difference in mergers and acquisition activity in the two regions is largely due to differences in regulations governing foreign participation in domestic capital markets. Both regions undertook capital market liberalizations in the mid to late 80s and early 90s. However, the degree of openness varied across countries. Latin America began its process of capital market liberalization in the early 1990s, and actively sought foreign investment in its newly privatized industries. The market for corporate control in Asia was more restricted as evidenced by the low volume of mergers and acquisition activity prior to the Asian Crisis in 1997.

In many countries in East Asia, foreign investors were explicitly prohibited from gaining a controlling share in local firms. For example, in 1996 the ceiling on the amount of stock foreigners could acquire in all Korean companies without the approval of the board of directors was only 18%. Another feature of the market for corporate control in Korea was that cross-holdings across business groups (Chaebols) were substantial. At the same time, the voting rights of institutional and minority shareholders were limited.

³ This pattern differs across regions. US and Spanish acquirers account for a larger share of targets in Latin America, and Japan, Hong Kong and Singapore accounts for a larger share in Asia.

As a result, the founder family could effectively control a business group with a relatively small direct ownership stake in the group (see Bae, Kang and Kim, 2002).

This situation changed dramatically as a consequence of the financial crises that swept the region during 1997. The IMF bail-out packages to Thailand, Korea and Indonesia imposed additional conditions such as restructuring domestic capital markets to allow foreign competition in the market for corporate control. The policy recommendations had a dramatic effect on M&A activity in the region. Figures 3a and 3b show the volume of cross-border M&A in Thailand and Korea, highlighting the relevant changes in policy. The Thai agreement largely affected foreign ownership of real estate and financial companies. The regulations changed in the mid- to second half of 1997, and cross-border mergers and acquisitions peaked shortly thereafter. Similarly, in Korea, regulations allowing foreigners to obtain controlling shares of Korean firms and to establish banking subsidiaries in Korea occurred in late 1997 and early 1998. Cross-border transactions rapidly increased thereafter, peaking at \$10 trillion in 1999.

Table 2 shows the change in the extent of corporate control resulting from the M&A transactions included in this paper. The empirical estimations in the later sections of the paper show that the transfer of control is strongly linked with the creation of value stemming from the acquisition. The columns of the table show the extent of ownership of the target prior to the acquisition, while the rows indicate post-acquisition ownership shares. The data show that in a significant number of transactions, the acquirer had no ownership stake in the target prior to the announcement. However, in a significant number of M&A transactions studied in this paper, the acquisition leads to a complete or near complete transfer of control to the acquirer. The transfer of control does not depend on whether the target and the acquirer had a relationship prior to the acquisition. Note

that in about 10 percent of the sample, the acquirer had majority ownership of the target prior to the acquisition.

Table 3 presents the transaction details for the US sample of 62 firms which engaged in M&A activity in both developed and emerging markets. Panel A shows that the 66% of the total M&A transactions are in the US as compared to 25% in other developed markets and 10% in emerging markets. Tender offers, which have received significant attention in the domestic literature, are a small portion of the overall sample. Instead, it is three times more frequent for an emerging market transaction to be privately negotiated. Method of payment data was not available for all observations. For observations with data, cash is the most common method of payment with all cash acquisitions being six times more common than all stock acquisitions. This pattern holds for targets in the United States, other developed markets and emerging markets. Privatizations, buyouts of bankrupt firms and new joint ventures are relatively rare. Divestitures represent approximately 30 percent of the total sample with a higher proportion of spin-offs in the target regions outside of the US.

Panel B shows that the sample of mergers and acquisitions made by US firms domestically includes a wide range of deal values with a minimum transaction value of \$0.75 million and a maximum value of \$65.59 billion. The median transaction value in is \$100 million. The median transaction values for targets in other developed and emerging markets are comparable to the domestic observations. The median transaction value for targets in developed markets other than the US is \$71.3 million and \$73.1 million for targets in emerging markets. Typically, for targets in the US or other developed markets, the average target stake acquired is 84.47% and 74.95%, respectively. For targets in

emerging markets, majority control is acquired in approximately half the observations, with an average control stake of 50.94 percent being acquired.

2.2 Measuring Returns

The most statistically reliable evidence on whether M&A activity creates value for shareholders comes from traditional event studies, where the average abnormal stock market reaction to a cross border acquisition announcement is used to gauge the creation or destruction of value. In efficient capital markets, stock prices adjust quickly to news of the acquisition and incorporate the acquisition's impact on expected changes in the value of the combined firm.⁴

This paper uses weekly stock price data to compute three different measures of returns for the acquirer and target firms, as well as the combined firm. The first measure is the raw buy-and-hold return over the relevant event window around the acquisition announcement. The second measure computes the raw returns minus the market returns over the event window. The third measure computes the cumulative abnormal return over the event window using a market model as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}. \quad (1)$$

The coefficients α_i and β_i are estimated for a given firm over a one-year interval starting eighteen months prior to the announced acquisition and ending six months before the announcement. The coefficients are then used to compute weekly expected returns around the acquisition announcement. The abnormal return is defined as the difference between the actual return and the expected return in the event window. Abnormal returns are cumulated by continuous compounding over the event window. The market returns

used in the estimation are the broadest market index available for a particular country. For target firms, return data is dropped from sample if during the event window the target security did not change price for more than two consecutive weeks. Acquirer and target returns are calculated in terms of the local currency. Joint returns are based on returns in US dollars.

The paper reports results for two different event windows. The typical event window in the literature using developed market returns is three weeks (one week prior to the announcement, the week of the announcement and the week after). Since this paper focuses on targets in emerging stock markets where trading may be thin, the estimations were also repeated using a five week event window starting two weeks before and ending two weeks after the acquisition.

3. How does the Stock Market React to Cross Border M&A transaction Announcements?

This section addresses the following question. Do acquisitions by foreign firms in emerging markets create value? If markets are efficient, changes in stock prices are a summary statistic for changes in the fundamentals. To that extent the responses of firms' stock prices to the announcement of an M&A transaction reflect news about the present value of future cash flows.

Table 4a displays the stock price reactions for the full sample of acquirers and targets as well as the joint returns for the combined firms.⁵ Joint returns for acquirers and targets are positive and fairly similar across the different measures of returns and across the different event windows. Based on raw returns, joint returns range from 1.73% to

⁵ The results include the stock price data for all acquirers and all targets, not just the sample of matched acquirer and target firms. The sample of acquiring firms is greater than the sample of target firms because of stock price data availability.

2.28%, and are slightly smaller for market-adjusted returns, ranging from 1.08% to 1.79%. The results suggest that, on average, M&A transactions in emerging markets do create shareholder value. Cross border M&A transactions also create value for shareholders of the target in the emerging market. In local currency terms, the average market adjusted return for the three-week event window ranges from 6.68% to 6.87% depending on the measure of returns that is used. The second panel of Table 4a shows that acquirer firms also gain when they make cross-border acquisitions in emerging markets. The average announcement return in the event window that begins one week before and ends one week after the acquisition announcement ranges from 1.65% to 3.05% depending on the returns measure used. These results are also fairly stable over time.⁶ The fact that the estimates are robust to the sample period suggests that value creation may be invariant to the state of financial markets. The estimations explore the impact of financial crisis on the returns to acquirers and targets in greater detail below.

Previous studies based on US data have found evidence of value creation through mergers and acquisitions (Andrade, Mitchell and Stafford 2001). Typically, joint returns tend to be positive but the lion's share of the joint gain accrues to target shareholders (Jensen and Ruback 1983; Jarrell, Brickley and Netter 1988). In order to compare the in results in this paper to the US literature, Table 4b repeats the same exercise focusing on the sample of US acquirers in emerging markets. In the three-week event window, US acquirers gain 6.7 % in raw returns, and 5.7% in market-adjusted returns. Market adjusted target returns, while positive, are not statistically significantly different from zero in the three week window.

⁶ Average individual and combined acquirer and target returns are estimated for the 1988-1995, 1996-1998, and 1999-2002 sub periods. The results were remarkably similar to the entire sample and are available from the authors upon request.

The fact that acquiring firms realize positive returns when an acquisition is announced in an emerging market may suggest that developed market acquirers have greater bargaining power relative to the emerging market targets. An alternative interpretation for the increase in acquirer returns may be asymmetric information between the acquirer and the target about the target's true fundamental value. If an emerging market target is uncertain about its true stand-alone value, the firm may undervalue its assets. Or developed market acquirers may be better able to assess the synergies associated with acquiring the emerging market target. The ability of acquirer firms to form a better estimate of the target's true value has particular significance in emerging markets where the stock price is often viewed as an especially noisy estimate of true firm values.

To get a sense of the magnitude of the wealth creation from a typical acquisition, the bottom part of Table 4b shows the median and average market value of an acquiring and target firm. The median equity market value for the US acquirer firms in the sample is \$24 billion. A 5.5% average market adjusted return corresponds to \$204.27 million for acquirer firm shareholders over the three week window. The median equity market value for an emerging market target that has been acquired by a US acquirer is US\$ 146.77 million. A 5.1% market adjusted return corresponds to \$7.5 million of value for target firm shareholders over the three week windows.

Table 5a reports the returns to acquirers and targets by region. The results are similar to those reported above. In East Asia, acquirer gains range from 2.7 to 3.45 % and are significant at the 5 percent level. Acquirer gains in Latin America are also positive, ranging from 1.89 to 2.23 percent, and again are significant at the 5 percent level. Targets also gain, especially in Latin America. In Asia, the target returns are 5.17

percent and in Latin America target returns are 9.68 percent. The average combined market adjusted announcement returns involving targets from East Asia is 2.3 percent and in Latin America is 0.86%, though Latin American returns are not statistically significant. One explanation for the lack of statistical significance may be the small sample size for the combined returns since the acquirer and target announcement returns are significantly positive.

Table 5b displays average three-week announcement returns for a sub-sample of cross-border M&A transactions where the developed market acquirer gains majority control of the emerging market target. The magnitude of value creation increases when the acquirer gains majority control of the target in comparison to the results for the full sample in Table 5a. This distinction is explored in more detail in the formal estimations below. It is important to note that the average three-week market adjusted announcement return is 3.72% for the acquirer firms and 8.6% for the target firms. The average joint acquirer and target announcement return is 3.92% in market adjusted terms over the three-week window. The average announcement returns are also statistically significantly higher when compared to transactions where the acquirer does not gain majority control.

4. Does the Acquisition of Majority Control Drive Value Creation through Cross-Border M&A transactions?

The benchmark regression specification for examining the effects of different acquisition characteristics on announcement returns is:

$$R_{it} = \alpha_i + \beta_1 \cdot MAJORITYCONTROL_i + \gamma \sum_{j=1}^n CONTROLS_j + \varepsilon_{it} \quad (2)$$

The left hand side variable, R_{it} , represents market adjusted returns for the three-week window that begins one week before and ends one week after the announcement of the acquisition. The intercept term, α_i , measures the magnitude of the average abnormal announcement return over the three-week event window. $MAJORITYCONTROL_i$ is a dummy variable that takes on a value of one if the acquirer owns a 50% or more share of the target following the acquisition and did not have control before.⁷

Section 2 outlined a number of factors that could affect value creation and the distribution of gains between the acquiring and the target firm. Although it is difficult to provide precise tests for each of those effects, the regression specification includes a number of variables that may proxy for those effects and tests whether announcement returns systematically co-vary with those proxies. As a measure of synergies, the estimation procedure includes an industry diversification variable to see whether returns are higher when the target and the acquiring firm are in the same two-digit industry. Acquirer and target size are included as possible indicators of firm bargaining power. Acquirer cash is included to pick up possible effects of liquidity provision for the target. Dummies for the acquirer and target being in the FIRE sector are also included, to control

⁷ The regressions were also run including country fixed effects. In general, country effects were insignificant.

for the possibility that the particular regulatory restrictions in that sector (on banks, in particular) may have a systematic effect on the returns to M&A transactions.

Section 2 hypothesizes that the factors motivating an acquisition could change during periods of crisis. The hypothesis is that during periods of relative calm, cross-border M&A activity are driven by factors such as the transfer of technology, synergies, vertical specialization, management externalities, differences in the cost of capital and the acquisition of control. During crisis periods the same factors may continue to drive cross border M&A activity. However, a host of other factors such as targets experiencing financial distress as a result of liquidity crises, and increases in the bargaining power of the foreign acquirers may also become important drivers of cross border M&A activity. A country-specific dummy for financial crisis is included to see if the returns to an acquisition are systematically different during periods of financial turmoil in emerging markets.⁸

Table 6 shows the results. Panel 1 presents the estimates for joint returns in the three-week window surrounding the cross border acquisition announcement. Recall that estimating (2) without the majority control variable yields an estimate of the average change in joint returns surrounding an acquisition announcement. The coefficient estimate on the constant is 0.018 in Column 1a and is significant at the 5 percent level. This indicates that joint returns increase significantly in the three-week announcement event window.

Column 1b shows the results for the benchmark regression in (2). The magnitude of the coefficient on the *MAJORITYCONTROL* variable is 0.068 and is significant at the

⁸ The crises included are Mexico (1994), Thailand (1997), Malaysia (1997), Korea (1997), Indonesia (1997), Philippines (1997), Brazil (1999) and Argentina (2001). The crisis dummy takes a value of one from six months prior to the crisis to one year following the crisis.

1 percent level. The estimate suggests that the acquisition of majority control of the target drives joint returns up by 6.8% in the three-week event window surrounding the acquisition announcement. The coefficient on the constant term in Column 1a shows that, on average, joint returns increase by 1.8% when majority control is not included as an explanatory variable. Taking the difference in the coefficients, the result suggests that conditional on acquiring majority control, average joint returns increase by 5% compared to the case when majority control is not acquired. Note that the constant term becomes insignificant after conditioning on acquiring majority control of the target.

The magnitude of the coefficient estimate on *MAJORITYCONTROL* ranges from 0.58 to 0.78 in alternative regression specifications shown in Columns 1c to 1l and is statistically significant at the 1 percent level in all specifications. The control variables that are considered in the regression specifications in Columns 1c to 1l explore alternative explanations for what drives the increase in joint returns when a cross-border acquisition takes place. Columns 1c and 1d explore whether the existence of a prior relationship between the acquirer and the target firm have an impact on joint returns. The acquirer is classified as having a prior relationship with the target if the acquirer had an equity stake in the target prior to the acquisition announcement. The inclusion of the existence of a prior relationship by itself does not have a statistically significant impact on joint announcement period returns as seen in Column 1d.

Joint returns increase if the acquirer gains majority control after the acquisition, conditional on the existence of a prior relationship between the acquirer and the target. *PRIOR RELATION*CONTROL* captures the marginal effect of acquiring majority control conditional on the existence of a prior relationship between the acquirer and the target. The magnitude of this coefficient estimate is 0.07 and it is statistically significant

at the 10 percent level. Note that the raw effect of acquiring majority control is 0.058. The total effect is the sum of the coefficients for the raw and marginal effects. Thus, the total effect of acquiring majority control conditional on the existence of a prior relationship between the acquirer and the target on joint returns is 12.8%.

The *DIVERSIFY* variable in Column 1e captures industrial diversification through the acquisition. The coefficient estimate is negative but statistically insignificant. The statistical insignificance of the coefficient estimate suggests that the acquisition of a target in an unrelated line of business does not explain joint returns in the acquisition announcement period. If liquidity or cash is the main motivation for the acquisition, rather than technological synergies, the incidence of M&A transactions in unrelated industries may increase during periods of financial crises. Liquidity could have been an especially important factor during the Asian financial crisis, when firms were unable to borrow due to their high levels of dollar-denominated debt. To test the effect of liquidity motivated sales by cash strapped firms, the diversification dummy is interacted with the financial crisis dummy. The effect is statistically insignificant.

Columns 1f and 1g show that the point estimates for *TARGET SIZE* and *ACQUIRER SIZE* are statistically insignificant. Column 1h shows that there is no significant statistical relationship between joint announcement returns and the amount of cash the acquirer has on hand. The hypothesis that the regional location of the target affects joint announcement returns is explored in Column 1i. The coefficient for the *TARGET IS IN ASIA* variable is statistically insignificant suggesting that regional factors do not explain joint returns.

Column 1j includes a control variable for *CRISIS* to capture the effect of crises periods on joint acquisition announcement returns. The point estimate for the *CRISIS*

variable is statistically insignificant. Finally, Columns 1k and 1l explore whether the acquirer or target being in the finance, insurance or real estate sector affects joint returns. The coefficients on the interaction terms between the independent variables included in regression specifications 1e-1l and the majority control variable are all insignificant. In the interest of brevity these regression estimates are not reported in the paper.

Panel 2 of Table 6 presents the results for the acquisition announcement returns for acquirer firms. Column 2a shows that the coefficient for the average announcement returns for the acquirers is 0.024 and is significant at the 5 percent level. This estimate suggests that acquirer monthly abnormal returns increase by 2.4 percent in the three week cross border acquisition announcement window. This estimate corroborates the evidence presented in the previous section of the paper that, on average, cross-border M&A transactions create value for developed market acquirers when the target is in an emerging market.

The coefficient for *MAJORITYCONTROL* is 0.033 and is significant at the 5 percent level in Column 2b. The estimate suggests that acquirer returns rise by 3.3% if the acquirer gains majority control of the target. Column 2d shows that the magnitude for the estimate for *PRIOR RELATION*CONTROL* is 0.06. The estimate is significant at the 10 percent level. The estimate suggests that conditional on the existence of a prior relationship between the acquirer and the target, the acquisition announcement results in a 6% increase in acquirer returns if the acquisition results in majority control of the target.

The results in Columns 2a-2l in Panel 2 of Table 6 demonstrate a similar pattern to the results for joint returns in the three-week announcement window. After controlling for variables such as industrial diversification through unrelated acquisition

(*DIVERSIFY*), acquirer and target size, acquirer cash, a crisis dummy, and whether the acquirer or the target are in the financial sector, the coefficient on *MAJORITYCONTROL* is significant in alternative regression specifications. According to the regression estimates, the increase in acquirer returns ranges from 3.1% to 4.6% in alternative specifications. The increase in acquirer returns in turn suggests that cross border M&A transactions in emerging markets create value for developed market acquirers.

Panel 3 of Table 6 shows the results for target returns. The constant term in Column 3a captures the average increase in target returns when a cross border acquisition announcement is made. The magnitude of the coefficient is 0.069 and is significant at the one percent level. The estimate suggests that, on average, target returns increase by 6.9% when a cross border acquisition is announced.

The results in Columns 3b to 3l suggest that when *MAJORITYCONTROL* is included in the regression specification, the intercept term is positive and significant in only a few instances. Moreover, there is no statistical relationship between target returns and the acquisition of majority control by the developed market acquirer. The coefficient on *MAJORITYCONTROL* is not statistically significant in any specification. The inclusion of a set of controls of acquirer and target characteristics also does not alter the results. Target returns cannot be explained by the acquisition of majority control by the acquirer.

The regression specifications in Columns 3a to 3l were also run without including *MAJORITYCONTROL* as an explanatory variable on the right hand side. The intercept term is statistically significant in all specifications at the 1 or 5 percent levels. The magnitude of the coefficient on the intercept term ranges from 0.034 to 0.096 in alternative regression specifications. The evidence suggests that, on average, target

returns increase from 3.4% to 9.6% in the three week announcement window surrounding the cross border acquisition announcement.

As a robustness check, the estimations were also run including various deal and target characteristics reported in the previous literature as determinants of acquirer returns. The additional variables tested include whether target was bankrupt; the existence of a competing bidder; an unsolicited bid; whether the target was a division; whether the deal was a new joint venture; whether the target was being privatized; whether the deal was privately negotiated; and, whether the deal was a tender offer. None of these additional variables explain acquirer returns when an emerging market target is acquired. A variable to capture the impact of the medium of payment was created as the fraction of cash paid in an acquisition relative to the total cash plus equity. The medium of payment also proved insignificant in explaining acquirer returns.

In summary, the evidence in this section suggests that, on average, both individual and combined returns for the acquirers and targets increase significantly when a cross border acquisition is announced. The acquisition of majority control of the target also has significant explanatory power for acquirer returns and combined acquirer and target returns. The acquisition of majority control does not appear to have explanatory power for target returns. Furthermore, acquirer and combined returns are significantly related to the acquisition of majority control conditional on the existence of a prior relationship between the acquirer and the target. These results are robust to the inclusion of a number of controls of acquirer and target characteristics.

5. Do US Acquirers Experience Positive Announcement Returns When They Acquire Developed Market Targets?

The results reported thus far suggest that there are significant gains to acquirers from emerging market M&A transactions. Although the estimations include controls for a number of factors, the results may largely be driven by acquirer firm characteristics that have little to do with the particular circumstances in emerging markets. For example, note that the median size of a US acquirer in the sample is \$24 billion, more than 140 times bigger than the median emerging-market target.

It is possible that large firms have greater bargaining power or an informational advantage in making acquisitions in general and not in emerging markets in particular. The following questions arise in this context. Are the gains to acquirers specific to emerging market acquisitions? Or, do the acquirer firms in the sample reap gains even when they make acquisitions in developed markets? If the acquirer firm returns increase when they announce an acquisition regardless of whether it is in an emerging or a developed market, then a sample selection bias in the form of acquirer characteristics may be driving the results in this paper. However, if the acquirer firm returns increase only when they acquire an emerging market target, then the appropriate interpretation of the increase in acquirer returns may be that the acquisition of control in emerging markets in particular is driving the result. Focusing on all acquisitions made by the US acquirers in the sample, allows the hypothesis that acquirers gain in both developed and emerging markets to be tested. To conduct the test, the sample is extended to include the acquisitions made by US acquirers in France, Germany, Japan, United Kingdom, United States, Italy, Spain, Hong Kong and Singapore in addition to the emerging market acquisitions.

Table 7 presents the results. Column 1a shows that in the full set of targets, acquirers now experience negative but statistically insignificant returns in the three-week event window. The results in Column 1b show that when a dummy variable for an emerging market target is introduced into the regression specification, US acquirers experience positive and statistically significant returns of 3.3% in the three-week event windows. Taken together, the results in Column 1a and 1b suggest that shareholder wealth effects for US acquirers are positive only when an acquisition is made in an emerging market and not in developed markets.

Column 1c shows that while the coefficient on the emerging market target dummy variable has a magnitude of 0.033 and continues to be significant when the acquisition of *MAJORITY CONTROL* is introduced as an explanatory variable on the right hand side. However, the coefficient on the *MAJORITY CONTROL* is negative and statistically insignificant suggesting acquirers when developed market targets are pooled together with emerging market targets, the acquisition of control per se does not result in positive returns for US.

In column 1d, *MAJORITY CONTROL* is interacted with the emerging markets dummy variable. The coefficient on *MAJORITYCONTROL*EMERGING MARKET TARGET* is 0.075 and is significant at the 5 percent level. The result suggests that conditional on the target being in an emerging market, the acquisition of majority control results in positive returns for US acquirers. Note that the total effect of the acquiring an emerging market target on US acquirer returns is the sum of the coefficients on the raw effects of the *EMERGING MARKET TARGET* dummy variable and the *MAJORITY CONTROL* dummy variable and the condition effect of *MAJORITY CONTROL*EMERGING MARKET TARGET* which is equal to 0.056. The sum of the

coefficients suggests that, on average, US acquirer returns increase by 5.6% when majority control is acquired in an emerging market target.

Columns 1e and 1f suggest that the acquisition of majority control leads to a positive and significant increase in acquirer returns when the regression specification includes a proxy for whether or not the acquirer had a relationship with the target firm before the acquisition was announced. The results show that the coefficient on *MAJORITYCONTROL*EMERGING MARKET TARGET* is 0.075 and 0.074 in the two columns, respectively and is significant at the five percent level. In contrast to the results in section 4, the acquisition of control in an emerging market target for an acquirer that had a previous relationship with the target does not explain the increase in acquirer returns when a cross border acquisition is announced. The coefficients *PREVIOUS RELATIONSHIP* and *PREVIOUS RELATIONSHIP*EMERGING MARKET TARGET* are positive but statistically insignificant.

The coefficient on *MAJORITYCONTROL*EMERGING MARKET TARGET* is 0.075 and 0.077 in Columns 1g and 1h and is significant at the 5 percent level. The two regression specifications also show that the impact on acquirer returns is negative and insignificant when US acquirers make unrelated acquisitions. The coefficient on *DIVERSIFY* and the coefficient on *DIVERSIFY*EMERGING MARKET TARGET* are both negative but not statistically significant. Therefore the evidence suggests that the acquisition of majority control in the emerging market target leads to a 7.5%-7.7% increase in acquirer returns when a cross border acquisition is announced even with the inclusion of industrial diversification as an explanatory variable on the right hand side.

Finally, Columns 1i and 1j examine whether the deal size has any explanatory power for US acquirer announcement returns. In both regression specifications, the value

of the transaction has a positive but insignificant effect on acquirer returns. The coefficient on *MAJORITY CONTROL*EMERGING MARKET TARGET* is 0.129 in the both columns and is significant at the 10 percent level.

In summary, the results in this section suggest that when the sample of cross border M&A transactions announced by US acquirers in emerging markets is extended to include M&A transactions in other developed markets, acquirer returns increase significantly only when the acquisition of an emerging market target is announced. The evidence therefore suggests that the increase in acquirer returns is not being driven by acquirer characteristics. Rather, the acquisition of majority control of an emerging market target is the primary driver of acquirer returns when a cross border acquisition is announced. The result that the acquisition of majority control of emerging market targets matters for acquirer returns is robust to the inclusion of proxies for the existence of a previous relationship between the acquirer and the target, industrial diversification and the size of the transaction.

6. Do Industry Characteristics Drive the Importance of Acquiring Majority Control in Emerging Markets?

6.1 Does the R&D Intensity in the Acquiring Firm's Industry Matter?

To investigate the factors that drive the importance of acquiring majority control, a number of alternative hypotheses are considered. First, in the absence of control, weak institutions and legal environments in emerging markets may inhibit acquiring firms from making technology transfers to the target firms. If acquiring firms hold back from transferring technology in emerging market transactions which do not involve control, the impact of this effect should be the most acute in R&D intensive industries. Since patent and legal protection matter in R&D intensive industries, the prediction is that the stock

market's reaction to transactions where control is acquired will be directly proportionate to the R&D intensity of an industry.

To test the prediction that the R&D intensity of an industry matters, the paper constructs a metric of R&D intensity using US data. Using all US firms in Compustat from 1990 to 2002 the research and development expense (Compustat data item #46) divided by their net sales (Compustat data item #12) is calculated. Dividing by net sales normalizes R&D expenses by the size of the firm. This measure is sorted by 2-digit SIC codes and an average measure of R&D intensity by 2-digit SIC code is constructed. The measure of R&D intensity is then matched by industry with the 2-digit SIC code of the emerging market targets.

The findings are as follows. Table 8 shows that the raw effect of the acquisition of control in an emerging market target is positive and significant in alternative specifications. In column 3, the marginal effect of control conditional on the level of R&D intensity is also positive and significant at the one percent level. The sum of the coefficients on *CONTROL*, *RDINTENSITY* and *CONTROL*RDINTENSITY* provides a measure of the total effect of control and R&D intensity on acquirer returns. The sum of the three coefficients is 0.03 and suggests that acquirer returns increase by 3% when control is acquired in an R&D intensive industry.

It is also worth noting that the *RDINTENSITY* measure also predicts whether control is acquired any given transaction. For example, compare a target say, an electric power plant, with an average R&D intensity of 0.148 with a target which manufactures automobiles with an R&D intensity of 0.324. Logit regression estimates with control as a right hand side variable, suggest the difference in the R&D intensity of the two industries

predicts a 16% increase in the probability that control is acquired in the transaction. The result is statistically significant at the 5% level.

If it is the case that the weak legal setting in emerging markets drive the importance of acquiring control, the effect should not be evident in developed markets. When the estimations are run by pooling developed and emerging market targets, the results show that the acquisition of control conditional on R&D intensity appears to matter only when the target is located in an emerging market. Column 6 of Table 8 shows that the acquisition of control conditional on R&D intensity is positive and significant when the transaction involves an emerging market target. The coefficient on *EMTARGET*CONTROL*RDINTENSITY* is 0.044 and is significant at the one percent level. On the other hand, the coefficient on *CONTROL*RDINTENSITY* which does not condition on the target being in an emerging market is negative and significant.

6.2 Does the Dependence on External Finance, Investment Intensity or Fixed Assets in the Acquiring Firm's Industry Matter?

A second hypothesis may be that foreign acquirers are more likely to provide access to external capital markets to emerging market targets if they own a majority stake in these firms. A measure of the dependence on external capital, *EXCAP*, in an industry is adapted from Rajan and Zingales as follows. Using all US firms in Compustat from 1990 to 2002 we calculated their annual capital expenditures minus cash flow from operations divided by their capital expenditures. Cash flow from operations is defined as operating income before depreciation plus decreases in inventories plus decrease in receivables plus increase in payables. An industry level average measure is constructed by 2-digit SIC code and these results are matched to the 2-digit SIC code of the emerging market targets. The measure is designed to capture an industry's dependence on external

finance and whether this dependence makes an acquiring firm more likely to acquire control. However, the estimations do not bear out this hypothesis. The coefficient on the *EXCAP* measure interacted with the *MAJORITY CONTROL* does not explain the positive returns to acquiring firms when an emerging market M&A transaction is announced.

The third hypothesis for why majority control matters may be related to the degree of investment intensity in an industry. A measure of investment intensity, *INVMEASURE*, is calculated by dividing capital expenditures by net sales for any given firm in Compustat from 1990-2002. Capital expenditures are normalized by sales to be consistent with the R&D measure. Industry level averages are constructed by using the firm level measures and matched with the 2-digit SIC codes of the emerging market targets. Once again, the measure of investment intensity does not explain the positive acquirer returns when majority control of the emerging market target is acquired.

The final hypothesis for why majority control may matter is that foreign acquirers may be more likely to transfer fixed assets when they have majority control of the emerging market target. To explore this hypothesis, *FASSETMEASURE*, is constructed by dividing net property plant and equipment by net sales for all firms in Compustat from 1990-2002. Industry level averages were matched to emerging market target 2-digit SIC codes. The coefficient on the *FASSETMEASURE* interacted with the *MAJORITY CONTROL*EMTARGET* is positive and significant. However, this result holds for only the US acquirers in the sample.

7. Conclusion

There has been considerable debate about the welfare effects of the boom in cross-border M&A transactions in emerging markets. At the root of this debate is the question of whether cross-border mergers and acquisitions result in a creation of value through the transfer of corporate ownership from domestic to foreign investors and how the potential gains from the acquisition are distributed to shareholders of the target and the acquiring firms. This paper uses the stock price reaction of acquiring and target firms to the announcement of an acquisition as a summary statistic for value creation through foreign M&A transactions. Stock prices prior to an acquisition announcement contain information about the stand alone values of publicly traded acquirer and target firms. The acquirer and target firms' stock price reaction to the announcement of an acquisition reveals information about (i) the potential wealth creation from the merger and (ii) how the gains and losses from an acquisition are assigned to the acquiring and target firms. The stock market's reaction to the information contained in the acquisition announcement reveals the market's view of the transaction.

The paper examines all transactions involving a developed-country acquirer and an emerging-market target between January 1, 1988 and December 31, 2002 for which stock price data are available. In general, the results from panel data estimations suggest that the stock market anticipates significant value creation from the merger for the target and the acquiring firms. Joint monthly returns based on market-capitalization weighted returns in dollars increase by 1.79 to 2.28 percent when a cross border acquisition is announced. The benchmark results indicate that target firms benefit from the acquisition, experiencing monthly returns ranging from 5.05 to 6.68 percent in alternative specifications. Both sets of results are consistent with the findings in the literature on

domestic mergers and acquisitions. In contrast to the previous literature that uses US data, the evidence suggests that acquirer returns also increase, on average, by 1.65 to 3.05 percent.

The benefits from the acquisition stem from the transfer of majority control from the emerging market target to the developed market acquirer. The role of majority control is robust to the inclusion of controls for firm size, whether the acquisition involves diversifying across sectors, liquidity of the target and the acquirer, whether the acquirer and target had a previous relationship, and whether the announcement occurs during a financial crisis in the target country

The paper also compares acquirer returns for US firms when the acquisition is announced in a developed market rather than in an emerging market. The data suggest that positive acquirer returns are specific to M&A transactions in emerging markets, and that gaining corporate control is the key feature of transactions that deliver positive returns. Overall, the results in the paper suggest that the boom in foreign direct investment flows to emerging markets in the late 1990s led to a transfer of control to foreign acquirers and substantial gains to shareholders of both the acquiring and the target firms.

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Figure 1: Cross-Border Mergers & Acquisitions in Latin America and East Asia as a Fraction of FDI Inflows

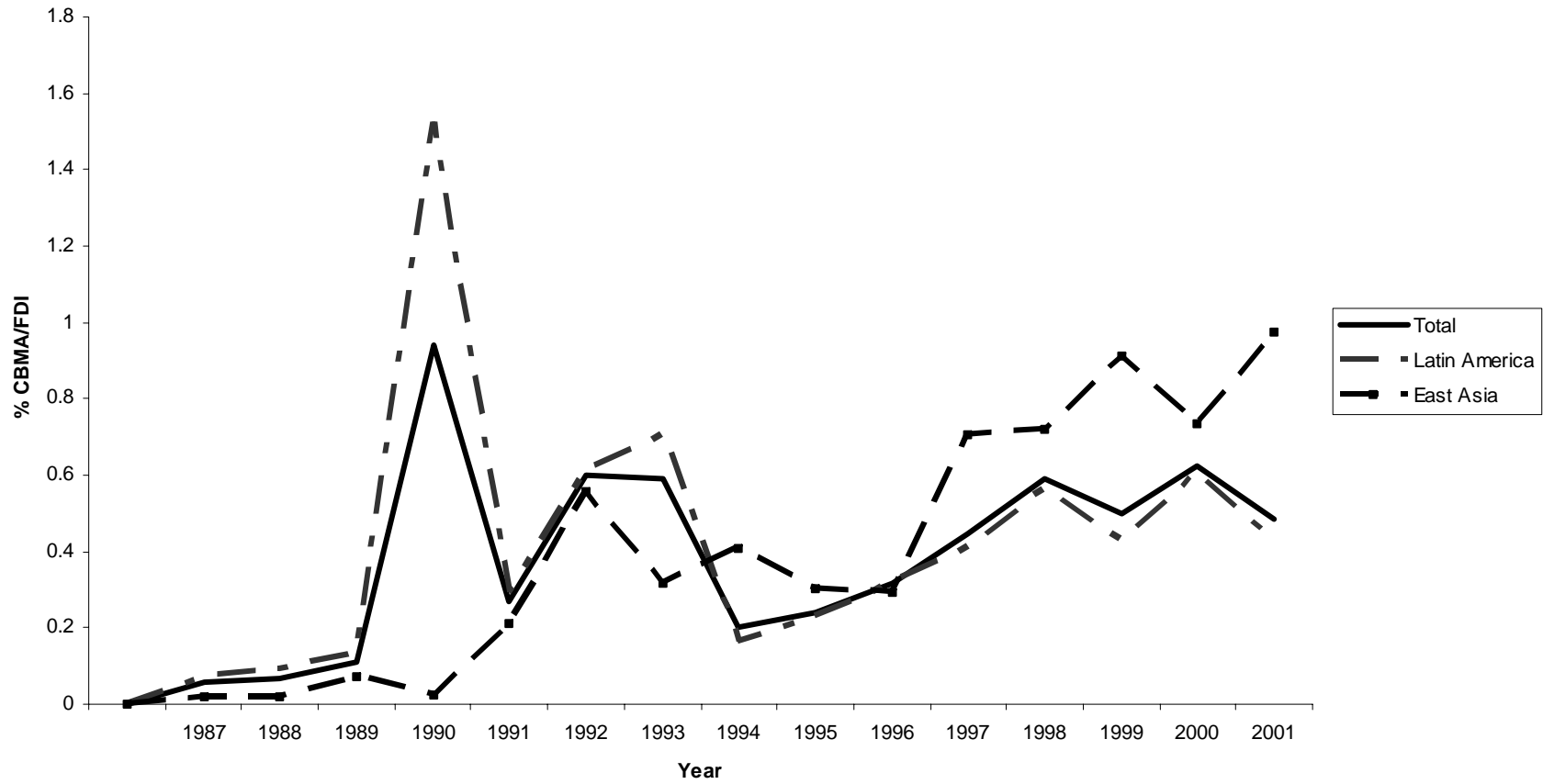


Figure 2a: East Asia: Cross Border and Domestic M&A

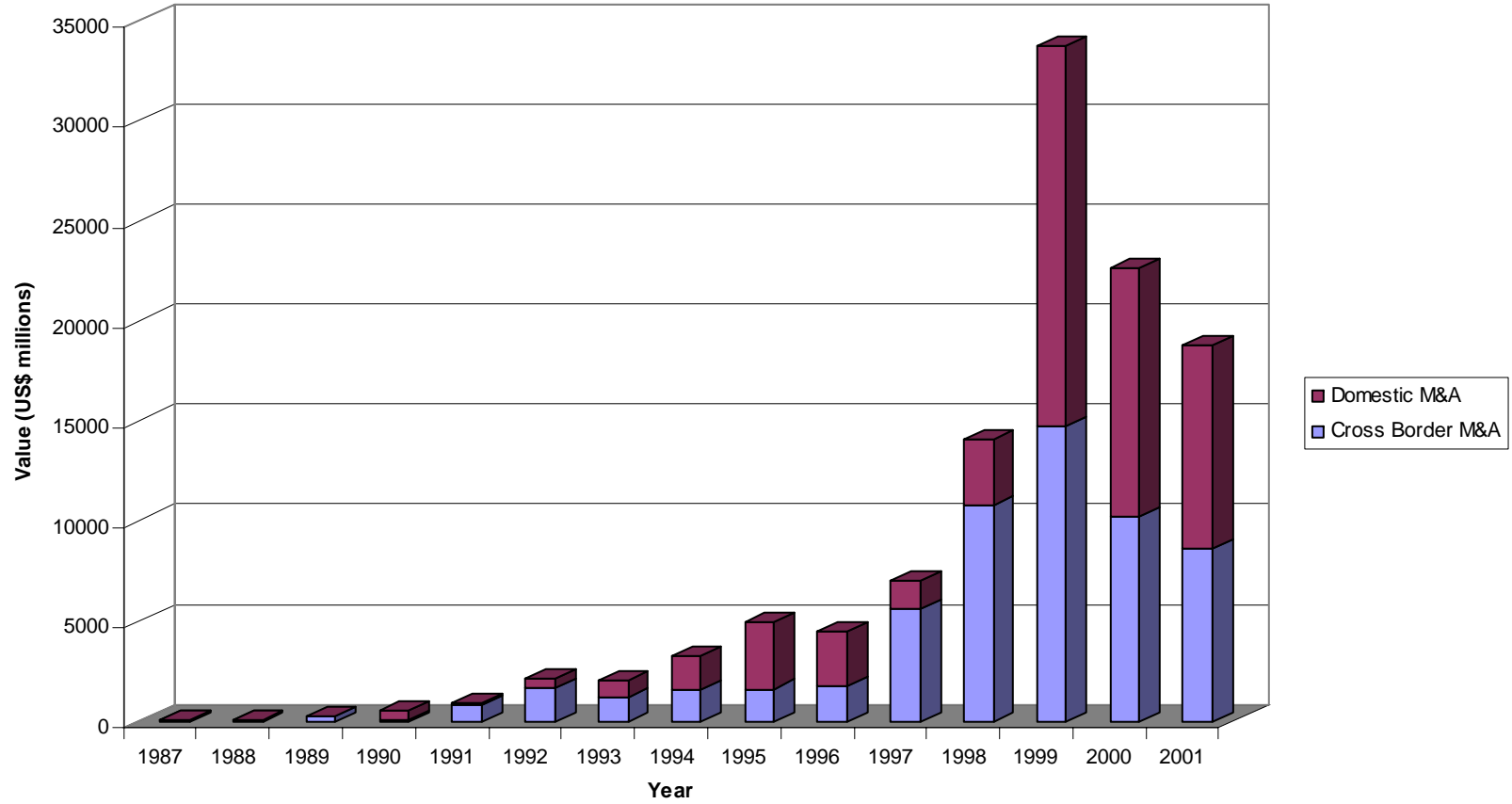


Figure 2b: Cross Border M&A as a Fraction of Total M&A Activity Increased in Latin America in the 1990s

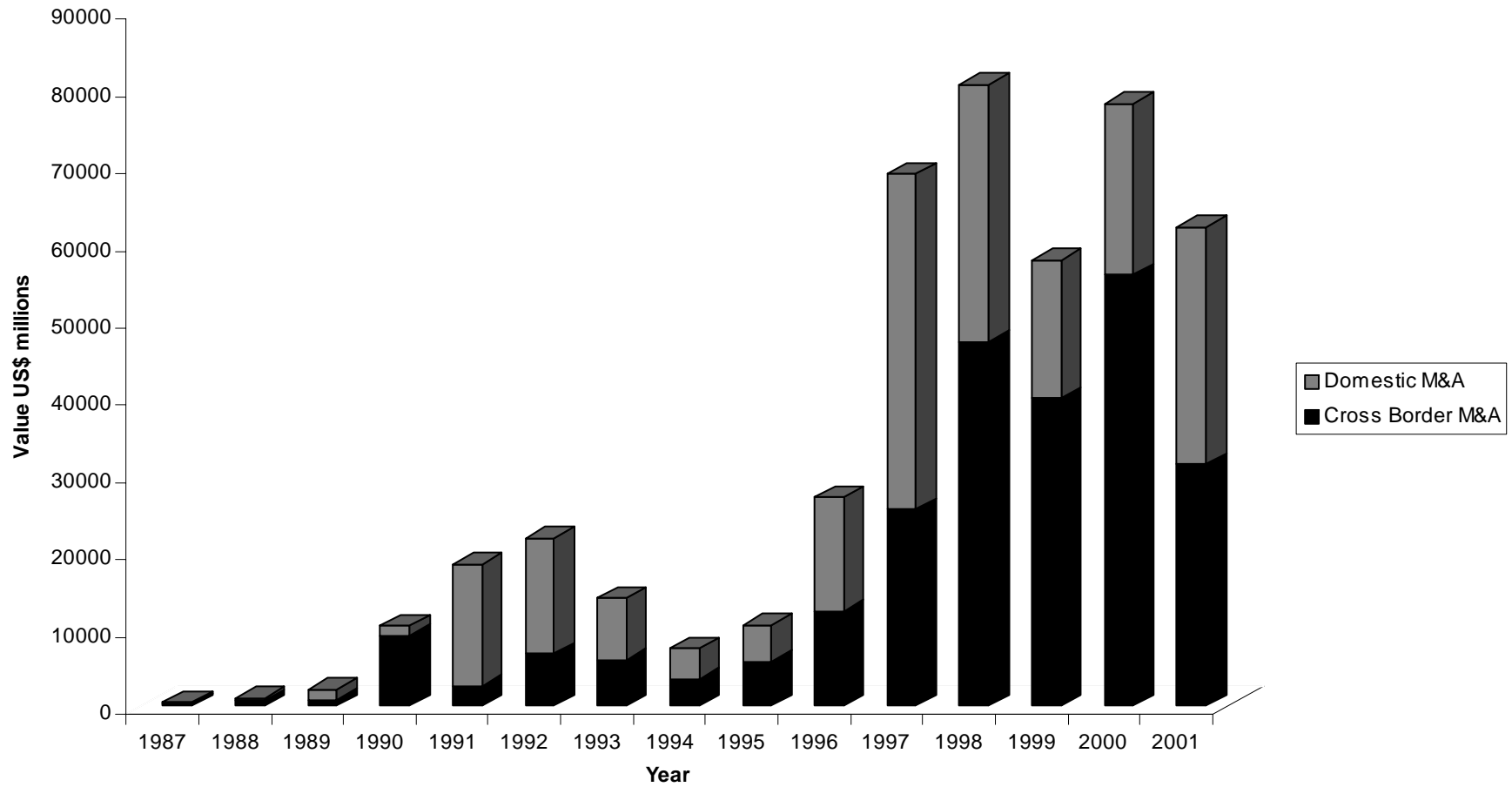


Figure 3a: Deregulation of Foreign Ownership Restrictions Facilitates the Increase in Cross Border M&A Activity

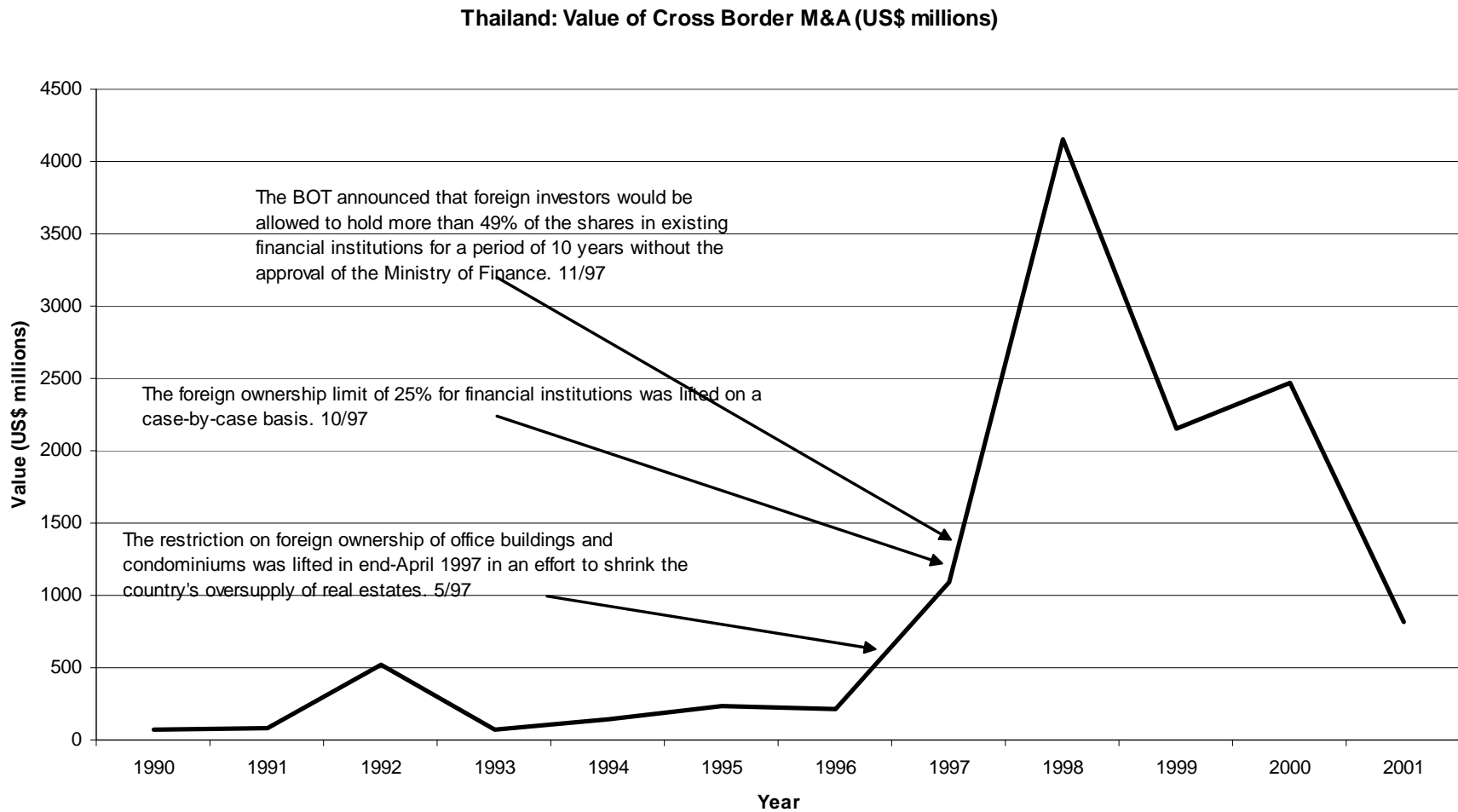


Figure 3b: Deregulation of Foreign Ownership Restrictions Facilitates the Increase in Cross Border M&A Activity

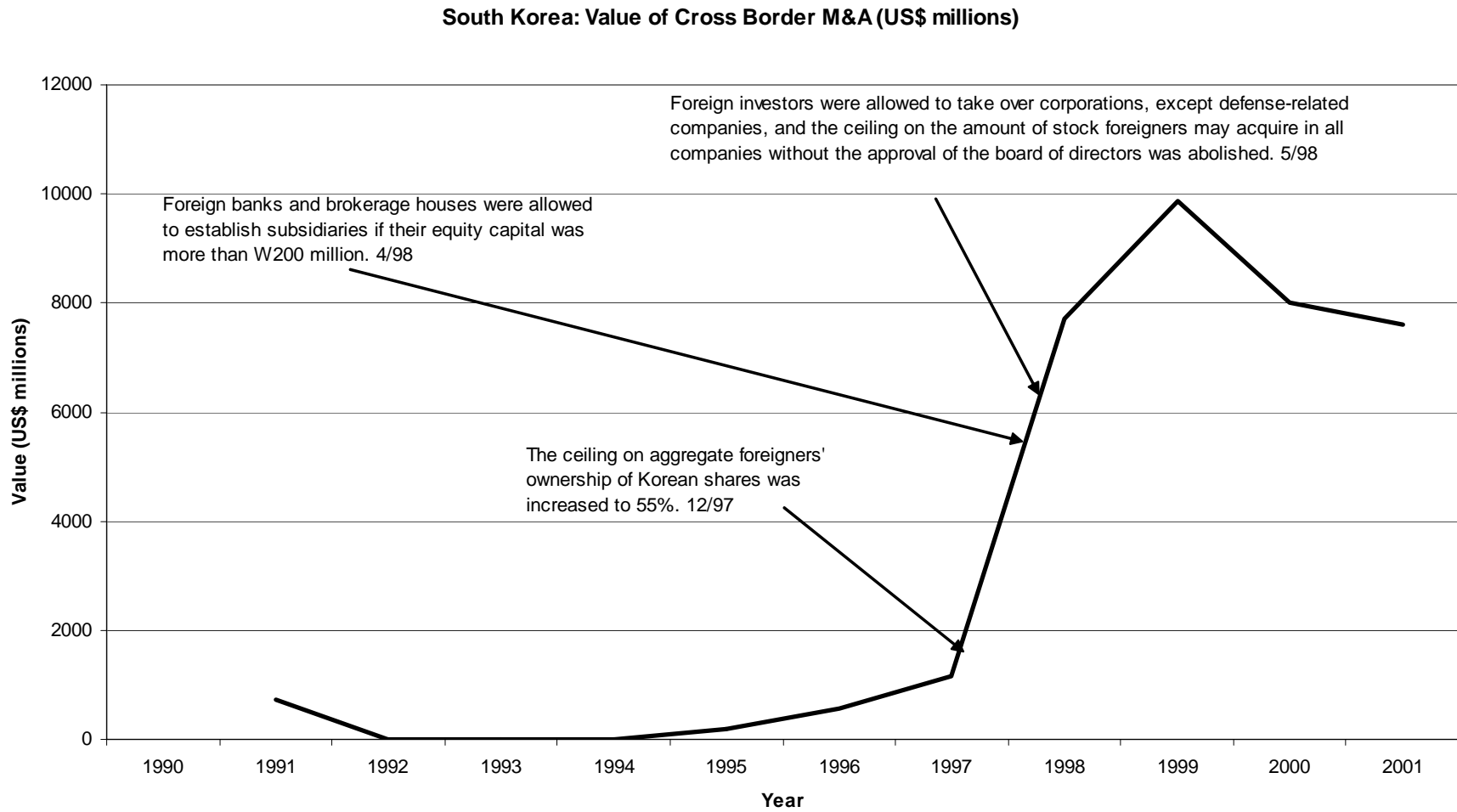


Table 1. The Frequency of Cross-Border M&A transactions in Emerging Markets Varies by Time, Region and Sector.

	1988-90	1991-95	1996-97	1998-02
Decomposition by Region of Target				
East Asia	25	110	78	437
Latin America	35	239	184	520
Decomposition by Target Sector				
Basic Manufacturing	19	67	50	135
Machinery & Electronics	8	60	48	205
Utilities, Telecom & Transportation	2	37	29	165
Wholesale & Retail Trade	2	21	15	69
FIRE	8	47	57	165
Hotels, Tourism & Misc. Services	2	20	15	103
Decomposition by Country/Region of Acquirer				
Canada	5	51	30	90
Europe	27	62	54	293
Japan	9	18	10	74
Singapore & Hong Kong	1	31	27	129
United States	18	187	141	371

Notes: The table summarizes all cross-border mergers and acquisitions involving a public acquirer from a developed market and a public target from a developing market by region, by sector and over time for all cross border M&A transactions which were announced between 1988 and 2002. The emerging markets include Argentina, Brazil, Chile, Indonesia, Malaysia, Mexico, Philippines, South Korea and Thailand. The developed markets include Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, Spain, the United Kingdom and the United States. Basic manufacturing is targets with 2-digit SIC codes 20-29; Machinery & Electronics is targets in SIC codes 30-39; Utilities, Telecom and Transportation is targets in SIC codes 40-49; Wholesale and Retail Trade is targets in SIC codes 50-59; FIRE is targets in SIC codes 60-69; Hotels, Tourism and Miscellaneous services is targets in SIC codes 70-89. Data for M&A transactions, primary SIC codes, target and acquirer nations is from SDC.

Table 2. There is Cross Sectional Variation in Post Acquisition Ownership through Cross Border Mergers and Acquisitions.

Number of M&A transactions	Acquirer had Minority Interest Before Acquisition		Pre-Acquisition Ownership			
	No	Yes	< 20%	20-40%	40-50%	50%+
0-50%	214	16	8	6	2	0
50-95%	138	47	5	9	5	28
95-100%	490	106	1	3	8	94

Notes: The following table summarizes cross-border mergers and acquisitions involving a public acquirer from a developed market and a public target from an emerging market by pre- and post-acquisition ownership. The table covers all M&A transactions announced between 1988 and 2002 and for which control data is available. Emerging markets include Argentina, Brazil, Chile, Indonesia, Malaysia, Mexico, Philippines, South Korea and Thailand. Developed markets include Canada, France, Germany, Hong Kong, Italy, Japan, Netherlands, Singapore, Spain, the United Kingdom and the United States. M&A transactions are identified and control information is collected from SDC data items “Percent Shares Acquired” and “Percent Shares Owned After Transaction.” Control information is available for 1011 observations.

Table 3. Transaction Characteristics Vary Across Cross Border M&A transactions

Panel A					
Transaction Characteristics	Targets in the United States	Targets from other Developed Markets		Targets from Emerging Markets	
Total M&A transactions	836	314		124	
Tender Offer	33	7		9	
All Cash Payment	257	102		65	
All Stock Payment	59	7		2	
Payment is a mix of Cash and Stock	18	2		1	
Target is Being Privatized	2	6		2	
Acquisition is Privately Negotiated	107	35		22	
Target is Bankrupt	5	8		1	
Target is Being Divested	218	119		44	
Joint Venture	2	2		5	
Panel B					
	Mean	Median	Minimum	Maximum	Percent of Sample with Reported Data
Transaction Value					
Targets in the US	\$1.24B	\$100M	\$0.75 M	\$62.59B	44.4%
Other Developed Market Targets	\$355.7 M	\$71.3M	\$0.47 M	\$5.25B	38.2%
Emerging Market Targets	\$216.4	\$73.1M	\$0.05 M	\$3.204B	60.4%
Target Stake Acquired					
Targets in the US	84.47%	100%	1.1%	100%	67.3%
Other Developed Market Targets	74.95%	100%	1%	100%	67.2%
Emerging Market Targets	50.94%	49%	0.37%	100%	57.3%

Notes: This table summarizes the deal value and target stake acquired for the 62 US firms in the sample which announced M&A transactions in emerging markets and other M&A transactions in developed markets from 1990 to 2002 by the geographic region where the target is present. All data is collected from SDC. Data was consistently available for all characteristics except method of payment which suffers from missing data in Panel A. Data was not consistently available for transaction value or target stake acquired and thus the percent of the sample with data is reported in the final column of Panel A.

**Table 4A. Cross Border M&A transactions in Emerging Markets
Create Value for both Acquirers & Targets.**

Joint Returns (US\$)	Raw Returns	Market Adjusted Returns
-1:+1	2.28%**	1.79%**
-2:+2	1.73%**	1.08%*
N	224	221
<hr/>		
Developed Acquirer Returns (Local Currency)	Raw Returns	Market Adjusted Returns
-1:+1	3.05%***	2.43%**
-2:+2	2.00%**	1.26%
N	346	346
<hr/>		
Emerging Market Target Returns (Local Currency)	Raw Returns	Market Adjusted Returns
-1:+1	6.68%***	6.87%***
-2:+2	5.51%***	5.05%***
N	299	299

Notes: This table summarizes average stock market reactions to the announcement of cross-border M&A transactions involving a public acquirer from a developed market and a public target from a developing market. Averages are reported in standardized monthly return units. Firms in the sample include all public acquirers and targets in the developed and emerging markets involved in a cross-border acquisition for which the underlying equity security for both parties can be identified. Two event windows are considered around the announcement date. -1:+1 is a symmetric 3 week window and -2:+2 is a symmetric 5 week window, both with week 0 being the week of the announcement. Returns are calculated using continuous compounding of the percent changes in the weekly equity closing prices (equivalent to a buy and hold methodology). Raw returns are unadjusted average returns. Market adjusted returns are calculated by subtracting the market return from the raw return for any given firm. Joint returns are calculated as market capitalization weighted average returns for both the target and the acquirer using dollar-denominated returns for both parties. Acquirer and target returns are calculated using local currencies. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 4B. Emerging Market M&A transactions Create Value for US Acquirers.

US Acquirers	Raw Returns	Market Adjusted Returns
(-1,+1) week	6.7%**	5.7%**
(-2,+2) week	4.9%	3.7%
N	87	87
Emerging Market Targets	Raw Returns	Market Adjusted Returns
(-1,+1) week	6.7%	5.6%
(-2,+2) week	5.5%**	5.9%**
N	72	72
Acquirer Equity Market Value (Average)	US\$ 57.14 Billion	
Acquirer Equity Market Value (Median)	US\$ 24 Billion	
Target Equity Market Value (Average)	US\$ 607.76 Million	
Target Equity Market Value (Median)	US\$ 146.77 Million	

Notes: This table summarizes average event window returns of US acquirers and emerging market targets around the announcement of a cross-border acquisition along with the average market capitalization of the involved firms. Firms in the sample include all public acquirers and targets in the developed and emerging markets involved in a cross-border acquisition for which the underlying equity security for both parties can be identified. Two event windows are considered around the announcement date. -1:+1 is a symmetric 3 week window and -2:+2 is a symmetric 5 week window, both with week 0 being the week of the announcement. Returns are calculated using continuous compounding of the percent changes in the weekly equity closing prices (equivalent to a buy and hold methodology). Raw returns are unadjusted average returns. Market adjusted returns are calculated by subtracting the market return from the raw return for any given firm. Joint returns are calculated as market capitalization weighted average returns for both the target and the acquirer using dollar denominated returns for both parties. Acquirer and target returns are calculated using local currencies. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 5A. Cross Border M&A transactions Create Value in East Asia and Latin America.

	East Asia		Latin America	
Developed Market Acquirer (Local currency Returns)	Raw Returns	Market Adjusted Returns	Raw Returns	Market Adjusted Returns
-1:+1	3.45%**	2.70**	2.23%**	1.89%**
N	230	230	116	116
Emerging Market Target (Local currency Returns)	Raw Returns	Market Adjusted Returns	Raw Returns	Market Adjusted Returns
-1:+1	5.17%*	5.17%*	9.18%***	9.68%***
N	188	188	111	111
Joint Returns (US\$ Returns)	Raw Returns	Market Adjusted Returns	Raw Returns	Market Adjusted Returns
-1:+1	2.34%*	2.29%**	2.15%*	0.86%
N	144	144	80	77

Notes: This table summarizes average stock market reactions to the announcement of a cross-border acquisition involving a public acquirer from a developed market and a public target from a developing market by region. Averages are reported in standardized monthly return units. Firms in this sample include all public acquirers in our developed markets and all public targets in our emerging markets, involved in a cross-border acquisition, for which we were able to identify the underlying equity security for both parties. East Asian emerging markets in our sample include Indonesia, Malaysia, Philippines, South Korea and Thailand. Latin American emerging markets in our sample include Argentina, Brazil, Chile and Mexico. The event window comprises a symmetric 3 week period which includes the week before and the week following the announcement. Returns are calculated using continuous compounding of the percent changes in the weekly equity closing prices (equivalent to a buy and hold methodology). Raw returns are unadjusted average returns. Market adjusted returns are calculated by subtracting the market return from the raw return for any given firm. Joint returns are calculated as market capitalization weighted average returns for both the target and the acquirer using dollar-denominated returns for both parties. Acquirer and target returns are calculated using local currencies. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 5B. The Magnitude of Value Creation Increases when the Acquirer Gains Majority Control of the Target.

Developed Market Acquirer (Local Currency Returns) -1:+1 N	Raw Returns 5.66%*** 92	Market Adjusted Returns 3.99%*** 92
Emerging Market Target (Local Currency Returns) -1:+1 N	Raw Returns 9.87%*** 85	Market Adjusted Returns 8.92%*** 85
Joint Acquirer-Target Returns (US\$ Returns) -1:+1 N	Raw Returns 7.42%*** 55	Market Adjusted Returns 5.89%*** 55

Notes: This table summarizes average stock market reactions to the announcement of a cross-border acquisition (involving a public acquirer from a developed market and a public target from a developing market) in which control is transferred to the acquirer. Averages are reported in standardized monthly return units. The acquisition of control is defined to have occurred if the acquirer holds 50% or more of the target firm's equity following the acquisition and did not have control previously. Firms in this sample include all public acquirers in our developed markets and all public targets in our emerging markets, involved in a cross-border acquisition, for which we were able to identify the underlying equity security for both parties. The event window comprises a symmetric 3 week period which includes the week before and the week following the announcement. Returns are calculated using continuous compounding of the percent changes in the weekly equity closing prices (equivalent to a buy and hold methodology). Raw returns are unadjusted average returns. Market adjusted returns are calculated by subtracting the market return from the raw return for any given firm. Joint returns are calculated as market capitalization weighted average returns for both the target and the acquirer using dollar-denominated returns for both parties. Acquirer and target returns are calculated using local currencies. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 6 (Panel 1). The Acquisition of Majority Control of the Target Drives Joint Returns in Cross Border M&A transactions

	(1a)	(1b)	(1c)	(1d)	(1e)	(1f)	(1g)	(1h)	(1i)	(1j)	(1k)	(1l)
Intercept	0.018** (0.008)	-0.001 (0.009)	-0.008 (0.011)	-0.002 (0.012)	-0.008 (0.011)	-0.012 (0.010)	-0.014 (0.010)	-0.013 (0.010)	-0.009 (0.012)	-0.008 (0.009)	-0.01 (0.011)	-0.009 (0.010)
Majority Control		0.068*** (0.015)	0.078*** (0.018)	0.058*** (0.021)	0.069*** (0.015)	0.068*** (0.015)	0.069*** (0.015)	0.07*** (0.015)	0.068*** (0.015)	0.069*** (0.015)	0.068*** (0.015)	0.068*** (0.015)
Previous Relationship Control*Prev Relationship			0.002 (0.017)	-0.016 (0.020)								
Diversify					-0.0038 (0.0150)							
Acquirer Size						9.16e-08 (1.5e-07)						
Target Size							4.27-e06 (3.4e-06)					
Acquirer Cash Target is in Asia								1.8e-06 (1.9e06)				
Crisis Period Acquirer is in FIRE									0.001 (0.015)			
Target is in FIRE										-0.006 (0.020)		
R-squared		0.12	0.14	0.16	0.13	0.12	0.13	0.14	0.12	0.12	0.12	0.12
N	216	150	124	124	149	150	150	149	150	150	150	150

Notes: This table summarizes the results of regressing joint (acquirer + target) abnormal returns during a 3 week event window (standardized to monthly return units) around the announcement date on characteristics of the involved firms. Mean coefficient estimates are reported with standard errors in parentheses. All M&A transactions in the sample involve a public acquirer from a developed market and a public target from an emerging market. Joint returns are market capitalization weighted averages of acquirer and target returns and US\$-denominated. Weekly abnormal returns are calculated using a market model and are continuously compounded, then standardized to monthly units. The acquisition of control is a dummy variable identified if the acquirer holds 50% or more of the target firm's equity following the acquisition and did not previously have control. Previous relationship is a dummy variable that takes on a value of one if the acquirer held equity in the target firm prior to the sample acquisition. Diversification is a dummy variable that takes on a value of one if the absolute value of the difference in SIC codes between acquirer and target is 1000 or greater. Acquirer and target size and acquirer cash is measured in US\$ million. Emerging markets included in Asia are Indonesia, Malaysia, Philippines, South Korea, Thailand, Argentina, Brazil, Chile and Mexico. Crisis period is a dummy variable that takes on a value of one if the target country is in a currency crisis. Acquirer and target FIRE dummies are take on a value of one if the firm has an SIC code between 6000 and 6999. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 6 (Panel 2). The Acquisition of Majority Control of the Target Drives Acquirer Returns in Cross Border M&A transactions

	(2a)	(2b)	(2c)	(2d)	(2e)	(2f)	(2g)	(2h)	(2i)	(2j)	(2k)	(2l)
Intercept	0.024 (0.009)**	0.007 (0.008)	0.008 (0.010)	0.014 (0.010)	0.006 (0.010)	0.009 (0.011)	0.003 (0.009)	4.68e-04 (0.010)	0.004 (0.009)	0.009 (0.008)	0.010 (0.010)	0.011 (0.009)
Majority Control		0.033 (0.013)**	0.043 (0.015)***	0.026 (0.017)	0.035 (0.013)***	0.033 (0.013)**	0.046 (0.014)***	0.042 (0.015)***	0.048 (0.014)***	0.035 (0.013)***	0.031 (0.013)**	0.033 (0.013)**
Previous Relationship Control*Prev Relationship			-0.004 (0.015)	0.021 (0.017)								
Diversify Target is in Asia					-0.001 (0.013)							
Acquirer Size							2.96e-08 (1.27e-07)					
Target Size								5.30e-06 (4.07e-06)				
Acquirer Cash									-9.39e-08 (1.70e-06)			
Crisis Period Acquirer is in FIRE										-0.017 (0.018)		
Target is in FIRE												-0.015 (0.015)
R-squared		0.03	0.04	0.03	0.03	0.05	0.05	0.06	0.03	0.03	0.03	0.06
N	341	237	198	234	237	210	198	209	237	237	235	198

Notes: This table summarizes the results of regressing acquirer abnormal returns during a 3 week event window (standardized to monthly return units) around the announcement date on characteristics of the involved firms. Mean coefficient estimates are reported with standard errors in parentheses. All M&A transactions in the sample involve a public acquirer from a developed market and a public target from an emerging market. Joint returns are market capitalization weighted averages of acquirer and target returns and US\$-denominated. Weekly abnormal returns are calculated using a market model and are continuously compounded, then standardized to monthly units. The acquisition of control is a dummy variable identified if the acquirer holds 50% or more of the target firm's equity following the acquisition and did not previously have control. Previous relationship is a dummy variable that takes on a value of one if the acquirer held equity in the target firm prior to the sample acquisition. Diversification is a dummy variable that takes on a value of one if the absolute value of the difference in SIC codes between acquirer and target is 1000 or greater. Acquirer and target size and acquirer cash is measured in US\$ million. Emerging markets included in Asia are Indonesia, Malaysia, Philippines, South Korea, Thailand, Argentina, Brazil, Chile and Mexico. Crisis period is a dummy variable that takes on a value of one if the target country is in a currency crisis. Acquirer and target FIRE dummies are take on a value of one if the firm has an SIC code between 6000 and 6999. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 6 (Panel 3). The Acquisition of Majority Control of the Target Does Not Drive Target Returns in Cross Border M&A transactions

	(3a)	(3b)	(3c)	(3d)	(3e)	(3f)	(3g)	(3h)	(3i)	(3j)	(3k)	(3l)
Intercept	0.069 (0.020)***	0.045 (0.027)*	0.031 (0.032)	0.037 (0.034)	0.051 (0.033)	0.063 (0.034)*	0.005 (0.025)	0.033 (0.032)	0.025 (0.025)	0.036 (0.028)	0.040 (0.033)	0.053 (0.031)*
Majority Control		0.044 (0.042)	0.055 (0.046)	0.039 (0.055)	0.044 (0.043)	0.045 (0.042)	0.029 (0.036)	0.044 (0.047)	0.038 (0.037)	0.039 (0.042)	0.046 (0.044)	0.039 (0.043)
Previous Relationship Control*Prev Relationship			0.028 (0.047)	0.010 (0.057)								
Diversify					-0.014 (0.044)							
Target is in Asia						-0.034 (0.042)						
Acquirer Size							7.7e-07** (3.8e-07)					
Target Size								3.71e-06 (1.27e-05)				
Acquirer Cash									-7.5e-08 (5.2e06)			
Crisis Period										0.071 (0.05)		
Acquirer is in FIRE											0.014 (0.046)	
Target is in FIRE												-0.021 (0.048)
R-squared	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.01
N	292	209	175	175	205	209	180	180	180	209	208	206

Notes: This table summarizes the results of regressing target abnormal returns during a 3 week event window (standardized to monthly return units) around the announcement date on characteristics of the involved firms. Mean coefficient estimates are reported with standard errors in parentheses. All M&A transactions in the sample involve a public acquirer from a developed market and a public target from an emerging market. Joint returns are market capitalization weighted averages of acquirer and target returns and US\$-denominated. Weekly abnormal returns are calculated using a market model and are continuously compounded, then standardized to monthly units. The acquisition of control is a dummy variable identified if the acquirer holds 50% or more of the target firm's equity following the acquisition and did not previously have control. Previous relationship is a dummy variable that takes on a value of one if the acquirer held equity in the target firm prior to the sample acquisition. Diversification is a dummy variable that takes on a value of one if the absolute value of the difference in SIC codes between acquirer and target is 1000 or greater. Acquirer and target size and acquirer cash is measured in US\$ million. Emerging markets included in Asia are Indonesia, Malaysia, Philippines, South Korea, Thailand, Argentina, Brazil, Chile and Mexico. Crisis period is a dummy variable that takes on a value of one if the target country is in a currency crisis. Acquirer and target FIRE dummies are take on a value of one if the firm has an SIC code between 6000 and 6999. *, ** and *** denote statistical significance at the 10, 5 and 1 percent levels, respectively.

Table 7: For US acquirers value is created through M&A transactions in emerging markets and not developed markets

	1a	1b	1c	1d	1e	1f	1g	1h	1i	1j
Intercept	-0.0002 (0.003)	-0.0038 (0.004)	-0.0002 (0.01)	0.008 (0.011)	0.006 (0.012)	0.0013 (0.013)	0.013 (0.011)	0.012 (0.011)	-0.009 (0.013)	-0.009 (0.013)
Emerging Market Target		0.033** (0.013)	0.033** (0.017)	-0.007 (0.024)	-0.007 (0.024)	0.0144 (0.028)	-0.008 (0.023)	0.00002 (0.025)	-0.0004 (0.03)	-0.003 (0.031)
Control			-0.0023 (0.011)	-0.012 (0.012)	-0.009 (0.013)	-0.006 (0.014)	-0.013 (0.012)	-0.013 (0.012)	0.002 (0.016)	0.002 (0.016)
Emerging Market Target* Control				0.075** (0.032)	0.0738** (0.032)	0.058* (0.033)	0.075** (0.032)	0.077** (0.032)	0.129*** (0.04)	0.122*** (0.044)
Previous Relationship					0.005 (0.017)	0.018 (0.019)				
Previous Relationship* Emerging Market Target						-0.056 (0.039)				
Diversify							-0.013 (0.01)	-.001 (0.011)		
Diversify* Emerging Market Target								-0.036 (0.036)		
Value of Transaction									0.000001 (0.000001)	0.000001 (0.000001)
Emerging Market Target * Value of Transaction										0.000029 (0.000035)
Firm Fixed Effects Included	NO	YES	YES	YES	YES	YES	YES	YES	YES	YES
R squared										
N	1024	1024	693	693	693	693	1017	1017	458	458

Table 8. Majority Control Matters More in R&D Intensive Industries in Emerging Markets.

	1	2	3	4	5	6
Intercept	0.007 (0.008)	0.007 (0.008)	0.012 (0.008)	0.062 (0.033)*	0.063 (0.033)*	0.061 (0.034)*
Control	0.033 (0.013)**	0.033 (0.013)**	0.024 (0.014)*	-0.012 (0.012)	-0.012 (0.012)	-0.011 (0.014)
Rdintensity		0.000 (0.003)	-0.013 (0.006)**		-0.001 (0.002)	-0.001 (0.004)
Rdintensity* Control			0.019 (0.007)***			-0.001 (0.005)
Emerging Market Target				-0.007 (0.024)	-0.008 (0.024)	0.011 (0.026)
Emerging Market Target*Control				0.074 (0.032)**	0.075 (0.032)**	0.043 (0.035)
Rdintensity*Emerging Market Target						-0.035 (0.013)***
Emerging Market Target*Control*Rdintensity						0.044 (0.015)***
Firm Fixed Effects Included	No	No	No	Yes	Yes	Yes
R-squared	0.027	0.028	0.057	0.345	0.346	0.355
N	237	236	236	693	689	689