



Wealth Effects of Mergers and Acquisitions in Latin America

Master Thesis in Finance

Abstract

This thesis investigates the shareholder wealth effects of the first announcement of mergers and acquisitions in Latin America for the period of 1993-2010. The studied countries are Argentina, Brazil, Chile, Colombia, Mexico, and Peru. This document shows that mergers and acquisitions announcements represent positive abnormal returns for both Latin American bidders and targets being consistent with previous findings in other geographic regions.

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Introduction

Mergers and acquisitions are important tools in corporate finance as they are used to enter new markets, increase operations, adapt to industry shocks, and increase competitiveness (DePamphilis, 2010). According to the report of The Institute for Mergers, Acquisitions, and Alliances¹, these transactions have been significantly growing for the last decades in the following way:

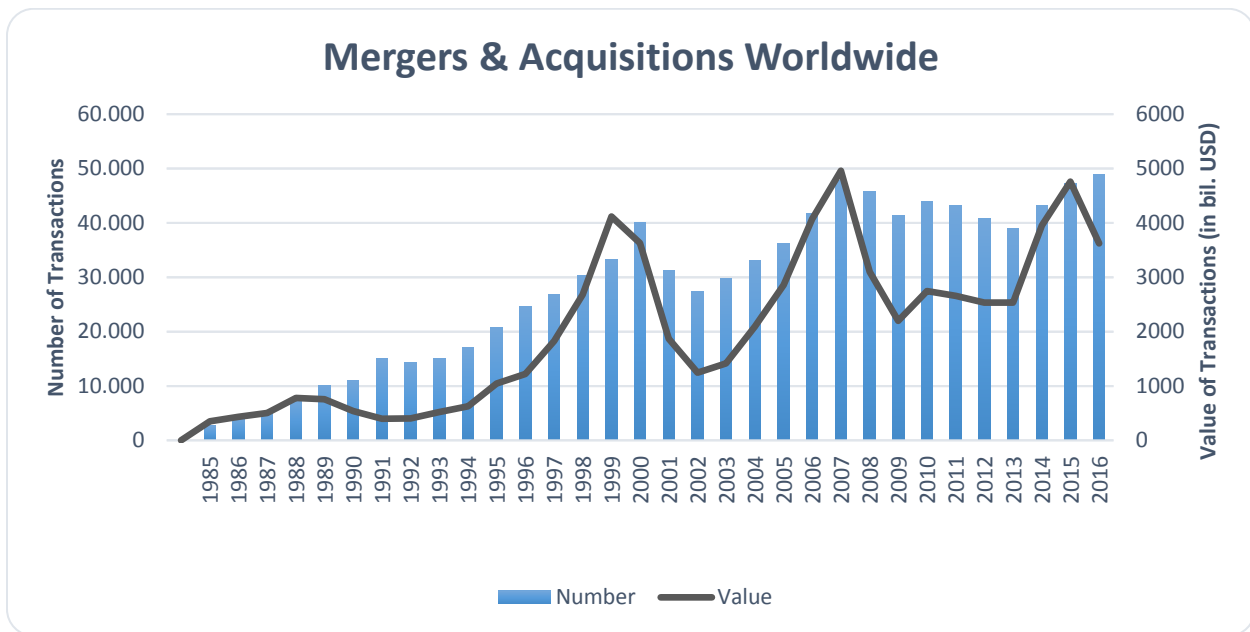


Figure 1. Number and value of worldwide M&A transactions from 1985 to 2016. Retrieved from <https://imaa-institute.org/mergers-and-acquisitions-statistics/>

The complexity of mergers and acquisitions and the need to understand their effects on the firm value has converted them into a commonly researched topic (Cartwright & Schoenberg, 2006).

Several detailed relevant research in the field of mergers and acquisitions can be found today. Most of that research is focused on events from the U.S. and Europe. Unfortunately, available studies on Latin American deals are scarce, and relevant publications respecting this topic are scant compared to those on the before mentioned geographical regions.

The research on M&A has studied these transactions in different levels. Some literature analyzes the main drivers of M&A; other literature studies their economic implications; and other studies try to measure their effect on the stock prices of the involved firms, in other words, the wealth generation to stockholders.

¹ Retrieved from <https://imaa-institute.org/mergers-and-acquisitions-statistics/>

The majority of studies alluding to the specific matter of wealth generation of mergers and acquisitions have been developed concerning companies from the U.S. and Europe. Research papers on this topic relating to Latin America are scarce.

The existing literature on wealth generation of M&A where Latin America is contemplated includes studies of broad geographical areas that incorporate some Latin American countries in their sample; and studies concerning solely Latin American countries. The former includes pool studies on cross border M&A and emerging markets (Arik & Kutan, 2015); industry specific studies (Goddard et al., 2012); and studies on BRICS countries (Wagner et al., 2017). Respecting the specific area of Latin America, studies on South American targets (Fuenzalida et al., 2006) and on the airline industry (Cortés et al., 2015) were found. A general research that pools Latin American M&A domestic transactions (occurring within the same country) and studies both bidder and target wealth effects still does not exist. This is why further research on this topic is meaningful and why the motivation to perform this thesis is high.

This thesis aims to obtain a clear perspective of the characteristics of the M&A market in Latin America by analyzing six countries: Argentina, Brazil, Chile, Colombia, Mexico, and Peru². Information such as percentage of domestic transactions, most traded sectors, most active countries, number of public acquirers and targets, percentage of ownership sought, status of the transactions, and attitude of the deals is intended to retrieve. This work also has the purpose to calculate the value that M&A announcements in Latin America create to the stockholders of both bidder and target firms.

Throughout this paper a literature review gathering useful information for this specific topic is carried out and presented; the ties between the characteristics from Latin America and Europe that have effects on abnormal returns are highlighted; hypotheses H1: *Wealth effects of mergers and acquisitions in Latin America are positive for target companies*, and H2: *Wealth effects of mergers and acquisitions in Latin America are small and positive for bidder companies*, are constructed; general data on mergers and acquisitions in Argentina, Brazil, Chile, Colombia, Mexico and Peru for the period between 1993 and 2013 is collected and analyzed; an event study using selected data is performed; and results of the event study are presented and analyzed.

This thesis shows that 87% of the sample consists of domestic transactions. Among the six studied countries, Brazil is by far the most active in mergers and acquisitions with 47% of the total domestic deals, followed by Mexico (17%), Chile (11%), Argentina (10%), Peru (9%), and Colombia (6%). An average of 54% of the total deals were seeking to own more than 50% of the target after the transaction. The industry that dominates the bidder market is *Investment & Commodity Firms*,

² As they have been the most active countries in M&A throughout the years (Transactional Track Record), the most active markets in Latin America (Jäger & Sathe, 2014), and they have been the only constantly present countries in the MSCI Latin American index.

*Dealers and Exchanges*³ and the most acquired companies are from the *Electric, Gas and Water Distribution*⁴ sector.

The results obtained show that mergers and acquisitions in Latin America generate value to shareholders around the first announcement date for both bidder and target companies and that this value is higher for target companies than for bidder firms.

Literature Review

As stated in the introduction, available studies on Latin American mergers and acquisitions are scarce and relevant publications respecting this topic are minuscule compared to those of the U.S. and Europe.

Found studies on Latin American wealth effects of mergers and acquisitions based their hypothesis on assumptions made in literature on other geographical areas. A good example of this is the contribution from Cortés et al. (2015), where they built hypotheses on Latin American airlines mergers and acquisitions by expecting their results to behave similarly to the ones found in the literature from the U.S and Europe without making any link or relationship between them. Even though the results to which they arrive are consistent with the general literature, no explanation on why they might have behaved the same way was provided. It is flawed to assume that if bidders or targets from one country had positive or negative abnormal returns, in other nations the behavior would be the similar without first showing the corresponding ties that would make it happen that way.

For this investigation, it would be easier just to assume that Latin America will react in the same form to a merger or acquisition as Europe does. Nevertheless, before converting that assumption into a statement, it is important to study the factors that ties Latin America to Europe in order to create a hypothesis capable to predict the value that M&A create to stockholders.

³ Establishments primarily engaged in the purchase, sale and brokerage of securities such as agents for mutual funds, investment bankers, stock brokers and dealers, oil royalties, etc. (SIC Code 6211); Establishments primarily engaged in furnishing space and other facilities to members for the purpose of buying, selling, or otherwise trading stocks, stock options, bonds, or commodity contracts such as commodity contract exchanges, future exchanges, Option Exchanges, Security Exchanges and Stock Exchanges (SIC Code 6231). Establishments primarily engaged in furnishing investment information and advice to companies and individuals concerning securities and commodities on a contract or fee basis such as futures advisory service, investment advisory service, investment counselors, investment research, manager of mutual funds (SIC Code 6282); Establishments primarily engaged in issuing shares other than unit investment trust such as money market mutual funds (SIC Code 6722); Establishments primarily engaged in closed-end investments in real estate or related mortgage assets such as realty trusts, mortgage investment trusts, real estate investment trusts and realty investment (SIC Code 6798); establishments primarily engaged in investing, not elsewhere classified such as investment clubs and venture capital companies (SIC Code 6799). Retrieved from <https://siccode.com/en/>

⁴ Establishments engaged in the generation, transmission, and distribution of electric energy for sale such as electric power generation, transmission or distribution (SIC Code 4911). Retrieved from <https://siccode.com/en/>

In the following pages an analysis of the crucial influencers of announcement returns will be executed to create hypotheses that can later be supported by data analysis.

M&A Drivers

Two models have been suggested to explain the drivers of M&A: The neoclassical hypothesis and the behavioral hypothesis. The former relies on the efficiency of capital markets, and the motivation of managers to maximize profits and to create wealth. The latter does not contemplate the existence of efficient capital markets and considers the psychology of its players (Vancea, 2012).

The main drivers of M&A explained by DePamphilis (2010) and divided into the two mentioned hypotheses are for the neoclassical model the search for synergies, diversification, and strategic realignment; and for the behavioral model misevaluations, hubris, the winners curse, mismanagement, and managerialism.

The combination of two or more businesses generates more value to the shareholders than the individually operating business. This value generation is achieved by synergies such as economies of scale and economies of scope (DePamphilis, 2010). When M&A are performed looking for completing synergies then they are perceived as value creators.

Diversification happens when firms look to place themselves in higher growth markets. It occurs with mergers or acquisitions between companies that are not in the same line of business. The more different that the lines of business within the involved companies operate are, the more repercussions in the effectiveness of the management in combined firms will occur (DePamphilis, 2010). That is why diversification is seen as value destroyer (Berger & Ofek, 1995). Between 1993 and 2001, 69.36% of the M&A announcements in Latin America were within companies of the same industry. The remainder percentage corresponded to industry diversification. (Cortés et al., 2012). For the same period, 64.4% of the M&A announcements in Europe were within companies in the same industry. The remainder percentage corresponds to diversifying transactions (Martynova & Renneboog, 2006). This shows that for both Latin America and Europe, diversifying mergers and acquisitions have been the minority.

Mergers and acquisitions for strategic realignment take place to adjust to changes in the external environment such as the ones in regulation and in technological innovation. These changes can create growth opportunities so they are seen as value creators (DePamphilis, 2010).

Bidder companies can overpay for a target company for different reasons. Sometimes the management of the acquirer company is exceedingly positive towards the potential synergies of a merger and acquisition and therefore values the target company higher than how the markets do. The competence within bidder companies can also result in a higher payment than the true value of the target due to hubris (DePamphilis, 2010).

When managers are more focused on their own interests and these interests are different to maximizing the profits of shareholders then agency problems occur. Some mergers and acquisitions take place to supplant those managers who are not pursuing the interests for shareholders (DePamphilis, 2010).

When the managers pursue a merger or acquisition to increase their power over the company, their staffing levels and the value of the assets under their control then managerialism or hierarchy drivers for mergers and acquisitions take place (DePamphilis, 2010).

When mergers and acquisitions are performed by the behavioral hypothesis drivers, then these transactions are seen as value destroyers, explaining the negative abnormal returns that are encountered in some M&A event studies (Roll, 1986).

Cortés et al., (2012) found that for the period of 1993-2010 M&A in Latin America were mainly performed for reasons of economies of scale, vertical integration, elimination of inefficiencies, industry consolidation and growth opportunities; according to the neoclassical model.

Mergers and Acquisitions Waves

Mergers and acquisitions have occurred in waves in the U.S., Europe, and Asia. (Martynova & Renneboog, 2006). Cortes, L. et al. (2012) found evidence of the existence of M&A waves in Argentina, Brazil, Chile, Colombia, Mexico and Peru for 1993-2002 and 2003-2010. These periods coincide with the waves stated by Martynova and Renneboog (2006). This means that mergers and acquisitions in Latin America have behaved similarly historically to the ones from Europe. Showing another link between these two areas.

Emerging markets vs Developed markets

The index provider MSCI classifies the Latin American countries Brazil, Chile, Colombia, Mexico and Peru as Emerging Markets. It was until 2009 that Argentina was part of this group and relegated as a frontier market⁵. The MSCI is considering to upgrade Argentina as an Emerging Market for 2018 and sources as Reuters believe this is likely to happen (Rabouin, 2017).

Khanna et al., (2005) state that the main differences between developed markets and emerging markets rely on the institutional context. The institutional context refers to the level of development of regulations and transparency present in a country. (Portugal-Perez and Wilson, 2010). It includes all the institutions which are required to maintain the economic, health, cultural, and social standards of a country; such as the financial, education, health care and government systems, emergency services, and law enforcement (Khanna et al., 2005).

⁵ Retrieved from <https://www.msci.com/market-classification>

Legal Origins and Law Enforcement

Legal Origins and law enforcement form part of the soft infrastructure of a country and have been previously studied as value determinants of firms (La Porta et al., 2002) and of mergers and acquisitions announcements (Matynova & Renneboog, 2006).

In 1998, La Porta et al., classified countries by their legal origin into common law and civil law. Common law countries are the ones in which precedents from judicial decisions build the legislation, explained in other way, their legislation proceeds from sentences made by judges. The United Kingdom, The United States, Australia, Canada, Hong Kong, India, Ireland, and Israel have common law origins. Civil law countries are the ones in which the legislation is written in a code by legal scholars. Civil law origin countries are divided into three law families according to their similarities and code origin into French, German, and Scandinavian. Argentina, Belgium, Brazil, Chile, Colombia, Ecuador, France, Greece, Italy, Mexico, Netherlands, Peru, Portugal, Spain, Uruguay, and Venezuela belong to the French law origin family; Austria, Germany, and Switzerland belong to the German law origin family; and Denmark, Finland, Norway, and Sweden belong to the Scandinavian origin family.

Law origins have an impact in the shareholder rights, creditor rights, law enforcement, accounting quality, and ownership concentration (La porta et al., 1998). These components are value determinants of firms (La Porta et al., 2002).

English law origin countries offer the best legal protection to shareholders, and French civil law countries offer the worst protection to shareholders. In terms of creditor rights, English law origin countries (excluding the US) offer creditors the strongest protection, and French civil law countries offer the weakest protection to creditors (La Porta et al., 1998).

Law enforcement refers to the efficiency of the judicial system, rule of law, corruption level, risk of expropriation, and risk of contract repudiation. The countries with the highest quality of law enforcement are Scandinavian origin countries; followed by German, common law, and French law origin families in that order. The countries that have the best quality in accounting are the Scandinavian; followed by common law, German-civil law countries, and French civil law countries in that order. In terms of ownership concentration, German civil law companies have the lowest concentration of ownership and French civil law companies have the highest concentration of ownership (La Porta et al., 1998).

Firms in countries with better protection of shareholders get higher valuation. This is explained by the fact that investors are willing to pay more for financial assets when they know their rights are protected by the law, resulting in a higher price of the stock. Companies in controlling shareholder countries have higher valuations in common law than in civil law countries. Companies in countries with poor investor protection suffer from lower valuations (La Porta et al., 2002).

As Latin American countries are from French civil law origin they provide the worst shareholder and creditor rights, the worst quality in law enforcement, and the worst quality in accounting. As they have poor investor protection, companies in this area will have lower valuations than in areas with different law origins.

Martynova and Renneboog (2006) categorized countries according to their legal origin and analyzed the wealth effects of their M&A per group. They found that on domestic acquisitions target firms from English and Scandinavian legal origins experience strong positive CAARs of 21% around, before and after the event; target firms of German legal origin present CAARs of 2.3%; and target firms from French origins have CAARs of 1.7%. On the side of the Bidder domestic acquisitions, they found that takeovers by bidding firms of English, German and Scandinavian legal origin generate positive announcement returns and that bidders CAARs for French legal origin are slightly different from zero.

Due to all the ties that exist within European and Latin American markets, this works wants to find if the same behavior in abnormal returns and cumulative abnormal returns from European countries of French law origin is present in abnormal returns and cumulative abnormal returns from Latin American countries. If that is the case then wealth effects of mergers and acquisitions are expected to be positive for target companies and small positive for bidders.

Other drivers

Hostile acquisitions generate higher target and bidder returns than friendly transactions do (Goergen & Renneboog, 2003). There is no evidence of hostile takeovers in Latin America (Cortés et al., 2012).

For Europe, cash payments generate higher target and bidder returns (Goergen & Renneboog, 2003). As shown in Table 1 the number of all cash payments transactions of Latin America is similar to the percentage of European cash transactions.

In Table 1, the results found in the studies from Martynova and Renneboog (2006), and Cortés et al. (2012) are summarized. There it can be appreciated how close the M&A activity of Latin America has been to the one from Europe.

Table 1. European and Latin American comparative characteristics found in literature.

	Europe (1993-2001)	Latin America (1993-2001)
Hostile Bid	6.7%	0%
Friendly M&A	93.3%	100%
Diversification	35.6%	30.63%
Industry Focused	64.4%	69.36%
All cash	38.8%	40.52%

Literature on wealth effects of M&A in Latin America.

Goddard, Molyneux, and Zhou (2011) analyzed the abnormal returns of 132 bank mergers and acquisitions in Asia and Latin America for the years between 1998 and 2009. The results indicated the existence of abnormal returns for target companies and no value destruction for bidder companies. The Latin American countries included in the sample were Argentina, Brazil, Chile, Colombia, and Peru. No statistically significant results from Latin America show abnormal returns for acquirers of 0.147% on the event day and 0.197% in an event window of [-5,5]. As not enough Latin American targets were listed in the sample, only results on Asia are reported.

Fuenzalida et al. (2006) evaluated the behavior of abnormal returns of South American target companies; specifically in Argentina, Brazil, Chile, Peru, and Venezuela. The results obtained from a 17 firm sample for the period of 1998-2002 were positive CAAR of 1.08% in a [-5,5] event window, 8.18% on the day of the event, and 3.12% on a [-1,1] event window.

In 2015, Cortés et al., studied the effect of mergers and acquisitions in Latin American airlines for the 1996-2013 period. They found that the main activity in those years were in Brazil, Mexico, Argentina, Colombia, Peru, and Chile. In an event window of [-1,1], positive abnormal returns of 2.1% to 8.5% were found for target companies and of 1.4% to 2% for bidder airlines.

Alfaro and Rwegasira (2012) presented a debate by making a survey on the literature concerning value generation of mergers and acquisitions in Latin America. They did not get to a conclusion about the success or failure of these transactions and they did not find models suitable for Latin American reality.

Wagner et al. (2017) studied the firm value determinants of domestic mergers and acquisitions in BRICS Countries. Their results are consistent to those of the developed countries. They found abnormal returns for bidder companies of - 0.124% on the day of the announcement and 0.701% on the day after. Positive abnormal returns of 1.450% were found on target companies on the day of the announcement and 1.524% on the next day.

In general what can be concluded from the reviewed literature is that positive abnormal returns are usually found in target companies and lower returns for bidder companies. This might be explained by bidders paying premiums to acquire targets (Eckbo, 2009).

In summary, all the relevant research literature found relating to M&A in Latin America are: one industry specific study that analyzes Asia and Latin America; one study that analyzes south American targets; one industry specific study on Latin American airlines; one literature survey on Latin American M&A that failed to get to a conclusion on value generation; and one study that analyzes BRIC countries. A general research that pools Latin American M&A domestic transactions to study both bidder and target wealth effects still does not exist. Therefore, the dearth of available information on this topic is the main driver for this work.

Literature on Wealth Effects of M&A in Europe

Goergen and Renneboog (2002) made an analysis of the wealth effects of large European takeovers during the fifth wave (1993-2000). They found that target companies present positive abnormal returns of 9% on the day of the event and CAAR of 12.9 %, 23.1%, 21.6% in event windows of [-2,+2],[-40,0],[-60,+60], respectively . On the other hand, abnormal returns for bidders are 0.7% on the day of the event, and CAAR of 1.1%, 0.4%, -0.4% in time intervals of [-2,+2],[-40,0],[-60,+60], respectively. These results are constant in most of the literature on European M&A.

Hypotheses

All the information previously mentioned and analyzed in this thesis helped to draw two hypotheses. Generally, in the described studies, larger premiums are received by target companies and small positive abnormal returns by the bidders. According to the literature review it seems like Latin American mergers and acquisitions have had strong ties in behavior to the one of European mergers and acquisitions. This suggests that for Latin America, positive abnormal returns are expected on target companies and small positive abnormal returns on bidder companies. With this stated, the research question that will be pursued to answer and the hypotheses of this study are shown below:

1. *What are the wealth effects of mergers and acquisitions performed in Latin America?*

H1: Wealth effects of mergers and acquisitions in Latin America are positive for target companies.

H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies.

Research Plan

Sample selection

As they have been the most active countries in M&A throughout the years (Transactional Track Record), the most active markets in Latin America (Jäger & Sathe, 2014), and they have been the only regularly present countries in the MSCI Latin American index, the studied countries for this thesis will be Argentina, Brazil, Chile, Colombia, Mexico and Peru.

The sample selected are the first announcements on domestic mergers and acquisitions in Argentina, Brazil, Chile, Colombia, Mexico and Peru in the period of 1993-2010. That period corresponds to mergers and acquisitions waves in Latin America (Cortes et al., 2012). The necessary data concerning deal characteristics was retrieved from SDC Platinum Mergers and acquisitions database from Thomson Reuters. The selection criteria considered the following restrictions:

1. Acquirer Nation : Argentina, Brazil, Chile, Colombia, Mexico, Peru.
2. Target Nation: Argentina, Brazil, Chile, Colombia, Mexico, Peru.⁶
3. Deal type: excluding leverage buyouts, spinoffs, recapitalizations, repurchases, and privatization.
4. Public Status: either the target or the acquirer should be a public company.⁷

After establishing restrictions, a report was requested to the database to analyze the main characteristics of mergers and acquisitions performed in these countries. The report was customized to show the following information:

Date of announcement, effective date of transaction, name of the target, industry of the target, nation of the target, SEDOL of target, public status of target, name of the acquirer, industry of the acquirer, nation of the acquirer, SEDOL of acquirer, public status of acquirer, synopsis of the deal, status of the transaction, percentage of shares owned after transaction, percentage of shares sought with the transaction, value of the transaction, and attitude of the deal.

⁶ The restriction on both acquirer and target nation countries was established to make it easier to clean the data and work only with domestic transactions.

⁷ To obtain information of their stocks prices.

Analysis of the sample

The sample consists of 1986 observations from which 88% corresponds to domestic transactions. This means that companies in the studied countries have been looking to expand within the same territory and not much of an international expansion. Brazil has been the leader of the studied countries with 47% of the total domestic transactions, followed by Mexico (17%), Chile (11%), Argentina (10%), Peru (9%), and Colombia (6%). In average 57% of the deals were seeking to own 50% or more of the target company after transaction. The industry that dominates the bidder market are Investment & Commodity Firms, Dealers and Exchanges; and the most acquired companies are from the Electric, Gas and Water Distribution industry.

Figure 2. Domestic and non-domestic to total M&A in the sample.

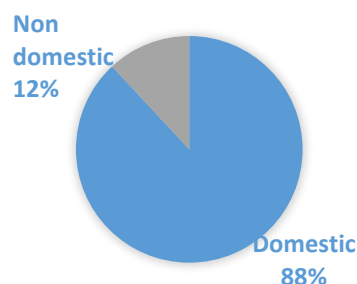


Table 2. Number of M&A between Argentina, Brazil, Chile, Colombia, Mexico, and Peru.

Acquirer	Target						Total Acquirer
	Argentina	Brazil	Chile	Colombia	Mexico	Peru	
Argentina	173	12	7	1	4		197
Brazil	29	823	9	5	8	9	883
Chile	28	11	198	8	6	11	262
Colombia	1	3	1	114		8	127
Mexico	19	14	9	15	289	9	355
Peru	2		5	3		152	162
Total Target	252	863	229	146	307	189	1986

In average; a 51% of the total domestic transactions was performed within companies from the same industry revealing that the majority of the M&A deals executed in Latin America are industry focused and not for diversification purposes; 71% of the total domestic transactions are executed by a public bidder; 47% of the total domestic transactions involve public targets; and 17.5% of the total domestic transactions are between both public targets and bidders.

Figure 2. Domestic M&A per country to total domestic M&A.

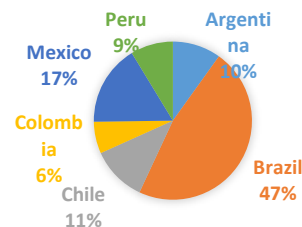


Table 3. This table shows the total number of domestic M&A per country (1), number of domestic M&A within the same industry per country (2), number of Public Acquirers per domestic M&A per country (3), number of public targets per domestic M&A per country (4), and number of both public bidders and targets per domestic M&A per country (5). In parenthesis is the percentage of the value of that cell to total domestic M&A per country.

Country	(1) Domestic	(2) Same industry	(3) Public Acquirer	(4) Public Target	(5) Public Target & Acquirer
Argentina	173	97 (56%)	122 (71%)	70 (40%)	19 (11%)
Brazil	823	438 (53%)	596 (72%)	336 (41%)	109 (13%)
Chile	198	94 (47%)	121 (61%)	118 (60%)	41 (21%)
Colombia	114	61 (54%)	81 (71%)	64 (56%)	31 (27%)
Mexico	289	125 (43%)	229 (79%)	109 (38%)	49 (17%)
Peru	152	80 (53%)	106 (70%)	71 (47%)	25 (16%)
Total	1749	895	1255	768	274

Percentage owned after transaction

An average of 66% of the total domestic transactions disclose information on the owned percentage after transaction. Of the total observations that disclose this data, only 34% of the sample was looking to own the total control of the targets and 54% were looking to own more than the 50% of the targets. This means that the majority of the M&A in Latin America seek for obtaining the control of the targets.

Table 4. This table shows number of total domestic transactions per country (1), number of observations for which disclosed information on the percentage owned after M&A is available (2), number of companies that owned 100% of the target after M&A (3), number of companies that owned more than 50% and less than 100% after M&A (4), number of companies that owned 50% after M&A (5), number of companies that owned less than 50% and more than 19% after M&A (6), and number of companies that owned less than 20% after M&A (7). In parenthesis: percentage of number of observations for which information on the percentage owned after M&A is disclosed to total domestic transactions (2); percentage of all other columns to number of observations that disclosed information on the percentage owned after transaction (3) (4) (5) (6) (7).

Country	(1) Total Domestic	(2) Disclosed information on % owned	(3) 100% owned after transaction	(4) > 50 , < 100 owned after transaction	(5) 50 % owned after transaction	(6) >19% , <50% owned after transaction	(7) <20%
Argentina	173	120 (69%)	27 (22.5%)	29 (24%)	3 (3%)	34 (28%)	27 (22.5%)
Brazil	823	559 (68%)	178 (32%)	96 (17%)	15 (3%)	145 (26%)	125 (22%)
Chile	198	146 (74%)	31 (21%)	33 (23%)	5 (4%)	37 (25%)	40 (27%)
Colombia	114	68 (60%)	26 (38%)	14 (21%)	1 (1%)	12 (18%)	15 (22%)
Mexico	289	173 (60%)	82 (47%)	22 (13%)	8 (5%)	33 (19%)	28 (16%)
Peru	152	97 (64%)	41 (42%)	25(26%)	3 (3%)	8 (8%)	20 (21%)

Status and attitude of the transactions

Of the total domestic transactions, 70% corresponds to completed deals, 21% to pending transactions and only 2% were withdrawn deals. An 82% of the deals were of friendly attitude.

Table 5. Panel A shows the status of the domestic transactions per country. Panel B shows the attitude of the domestic transactions per country.

	Panel A: Status						Panel B: Attitude			
	Completed ⁸	Disc. Rumor ⁹	Intended ¹⁰	Pending ¹¹	Status Unknown	Withdrawn ¹²	Friendly ¹³	Neutral ¹⁴	Not Appl. ¹⁵	Unsolic. ¹⁶
Argentina	124		5	37	3	4	147	20	6	
Brazil	595	4	8	159	37	20	643	128	51	1
Chile	152		3	34	2	7	157	35	5	1
Colombia	73		3	35	2	1	98	11	4	1
Mexico	185	2	9	66	17	10	249	26	14	
Peru	104		6	39	2	1	135	15	2	
Total	1233	6	34	370	63	43	1429	235	82	3

Most traded industries

In 5 out of 6 countries, Investment & Commodity Firms,Dealers,Exchanges has been the industry that most frequently acquires other companies. This is very reasonable as to that industry belong all the investing companies such as venture capitals, investment banks and mutual funds.

Table 6. Panel A shows the industries that most frequently acquire other companies in domestic M&A per country. Panel B shows the industries that are most acquired in domestic M&A per country.

Country	Panel A: Bidder industry higher frequency	Panel B: Most acquired industry
Argentina	Oil and Gas; Petroleum Refining	Electric, Gas, and Water Distribution
Brazil	Investment & Commodity Firms,Dealers,Exchanges	Electric, Gas, and Water Distribution
Chile	Investment & Commodity Firms,Dealers,Exchanges	Electric, Gas, and Water Distribution
Colombia	Investment & Commodity Firms,Dealers,Exchanges	Investment & Commodity Firms,Dealers,Exchanges
Mexico	Investment & Commodity Firms,Dealers,Exchanges	Food and Kindred Products
Peru	Investment & Commodity Firms,Dealers,Exchanges	Mining

⁸ The transaction has closed.

⁹ Target company has formally denied the rumor of an M&A

¹⁰ Acquirer has announced that they propose or expect to make an acquisition.

¹¹ The transaction has been announced but has not been completed or withdrawn.

¹² The target or acquirer has terminated the agreement, letter of intent or plans for the M&A.

¹³ The board recommends the offer

¹⁴ The management of the target has nothing to do with the transaction

¹⁵ The attitude of the board is not applicable (i.e. open market repurchases, split offs and spinoffs)

¹⁶ The offer is a surprise to the board of the target and has not yet given a recommendation.

The main characteristics of M&A by country are now reported:

Argentina

In the period of 1993-2010, 173 transactions were performed amid a public bidder or target inside the country. 93 of these transactions were within companies from the same industry. 122 acquirers and 70 targets were public. Out of the 173 transactions, 19 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is presented for 120 companies. 27 companies owned 100% of the stocks after transaction, 56 companies higher than 50% and 93 higher or equal to 20%. No hostile attitude was found in this set of data. The Industry that executed most of the transactions was Oil and Gas; Petroleum Refining. The most acquired companies were from the Electric, Gas, and Water Distribution industry. A summary of the industries in which most of the bids were made is now presented:

Table 7. Panel A shows the 5 industries that most frequently acquire other companies in argentinian domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Argentina. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions.

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Oil and Gas; Petroleum Refining	23 (13%)	Electric, Gas, and Water Distribution	26 (15%)
Food and Kindred Products	21 (12%)	Food and Kindred Products	22 (13%)
Commercial Banks, Bank Holding Companies	20 (12%)	Oil and Gas; Petroleum Refining	20 (12%)
Investment & Commodity Firms,Dealers,Exchanges	19 (11%)	Commercial Banks, Bank Holding Companies	13 (8%)
Electric, Gas, and Water Distribution	13 (8%)	Metal and Metal Products	11 (6%)

Brazil

Between 1993-2010, 823 transactions were performed between a public bidder or target in Brazil. 438 of these transactions were within companies from the same industry. 596 acquirers and 336 targets were public. Out of the 823 transactions, 109 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is presented for 559 companies. 178 companies owned 100% of the stocks after transaction, 274 companies higher than 50% and 434 higher or equal to 20%. No hostile attitude was found in the set of data. The Industry that executed most of the transactions was Investment & Commodity Firms, Dealers,Exchanges and the most acquired companies were from the Electric, Gas, and Water Distribution industry. A summary of the industries in which most of the bids were made is now presented:

Table 8. Panel A shows the 5 industries that most frequently acquire other companies in Brazilian domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Brazil. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions.

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Investment & Commodity Firms,Dealers,Exchanges	133 (16%)	Electric, Gas, and Water Distribution	90 (11%)
Electric, Gas, and Water Distribution	66 (8%)	Real Estate; Mortgage Bankers and Brokers	77 (9%)
Commercial Banks, Bank Holding Companies	57 (7%)	Metal and Metal Products	59 (7%)
Metal and Metal Products	52 (6%)	Telecommunications	56 (7%)
Real Estate; Mortgage Bankers and Brokers	51 (6%)	Chemicals and Allied Products	50 (6%)

Chile

In the period of 1993-2010, 198 transactions were performed between a public bidder or target. 94 of these transactions were within companies from the same industry. 121 acquirers and 118 targets were public. Out of the 198 transactions, 41 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is only presented for 146 companies. 31 companies owned 100% of the stocks after transaction. 64 companies higher than 50% and 106 higher or equal to 20%. No hostile attitude was found in the set of data. The Industry that executed most of the transactions was Investment & Commodity Firms,Dealers,Exchanges and the most acquired companies were from Electric, Gas, and Water Distribution industry. A summary of the industries in which most of the bids were made is now presented:

Table 9. Panel A shows the 5 industries that most frequently acquire other companies in Chilean domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Chile. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions.

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Investment & Commodity Firms,Dealers,Exchanges	75 (38%)	Electric, Gas, and Water Distribution	26 (13%)
Electric, Gas, and Water Distribution	22 (11%)	Investment & Commodity Firms,Dealers,Exchanges	25 (13%)
Food and Kindred Products	11 (6%)	Insurance	14 (7%)
Transportation and Shipping (except air)	10 (5%)	Transportation and Shipping (except air)	13 (7%)
Commercial Banks, Bank Holding Companies	10 (5%)	Food and Kindred Products	13 (7%)

Colombia

In the period of 1993-2010, 114 transactions were performed between a public bidder or target. 61 of these transactions were within companies from the same industry. 81 acquirers and 64 targets were public. Out of the 114 transactions, 31 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is only presented for 68 companies. 26 companies owned 100% of the stocks after transaction, 40 companies higher than 50% and 53 higher or equal to 20%. No hostile attitude was found in the set of data. The Industry that executed most of the transactions was Investment & Commodity Firms,Dealers,Exchanges and the most acquired companies were from Investment & Commodity Firms,Dealers,Exchanges. A summary of the industries in which most of the bids were made is now presented:

Table 10. Panel A shows the 6 industries that most frequently acquire other companies in colombian domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Colombia. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions.

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Investment & Commodity Firms,Dealers,Exchanges	29 (25%)	Investment & Commodity Firms,Dealers,Exchanges	18 (16%)
Commercial Banks, Bank Holding Companies	25 (22%)	Commercial Banks, Bank Holding Companies	16 (14%)
Food and Kindred Products	10 (9%)	Food and Kindred Products	12 (11%)
Retail Trade-Food Stores	9 (8%)	Electric, Gas, and Water Distribution	8 (7%)
Stone, Clay, Glass, and Concrete Products	9 (8%)	Retail Trade-Food Stores	7 (6%)
Electric, Gas, and Water Distribution	9 (8%)		

Mexico

In the period of 1993-2010, 289 transactions were performed between a public bidder or target. 125 of these transactions were within companies from the same industry. 229 acquirers and 109 targets were public. Out of the 289 transactions, 49 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is only presented for 173 companies. 82 companies owned 100% of the stock after transaction, 104 companies higher than 50% and 145 higher or equal to 20%. No hostile attitude was found in the set of data. The Industry that executed most of the transactions was Investment & Commodity Firms,Dealers,Exchanges and the most acquired companies were from Food and Kindred Products. A summary of the industries in which most of the bids were made is now presented:

Table 11 . Panel A shows the 5 industries that most frequently acquire other companies in mexican domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Mexico. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Investment & Commodity Firms,Dealers,Exchanges	58 (20%)	Food and Kindred Products	28 (10%)
Commercial Banks, Bank Holding Companies	34 (12%)	Investment & Commodity Firms,Dealers,Exchanges	25 (9%)
Food and Kindred Products	28 (10%)	Radio and Television Broadcasting Stations	19 (7%)
Radio and Television Broadcasting Stations	20 (7%)	Business Services	15 (5%)
Wholesale Trade-Nondurable Goods	12 (4%)	Chemicals and Allied Products	14 (5%)

Peru

In the period of 1993-2010, 152 transactions were performed between a public bidder or target. 80 of these transactions were within companies from the same industry. 106 acquirers and 71 targets were public. Out of the 152 transactions, 25 were held within both public target and bidders. Disclosed information on the percentage owned after transaction is only presented for 97 companies. 41 companies owned 100% of the stocks after transaction, 66 companies higher than 50% and 77 higher or equal to 20%. No hostile attitude was found in the set of data. The Industry that executed most of the transactions was Investment & Commodity Firms,Dealers,Exchanges and the most acquired companies were from Mining. A summary of the industries in which most of the bids were made is now presented:

Table 12. Panel A shows the 5 industries that most frequently acquire other companies in peruvian domestic M&A. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions. Panel B shows the 5 most acquired industries in domestic M&A in Peru. In parenthesis it is shown the percentage that that industry represents to the total domestic transactions

Panel A		Panel B	
Industry	Number of Acquirers	Industry	Number of Targets
Investment & Commodity Firms,Dealers,Exchanges	38 (25%)	Mining	24 (16%)
Mining	25 (16%)	Food and Kindred Products	17 (11%)
Commercial Banks, Bank Holding Companies	17 (11%)	Real Estate; Mortgage Bankers and Brokers	13 (9%)
Food and Kindred Products	15 (10%)	Electric, Gas, and Water Distribution	13 (9%)
Real Estate; Mortgage Bankers and Brokers	9 (6%)	Investment & Commodity Firms,Dealers,Exchanges	11 (7%)

A cleaning of the data above described was executed to remove effects from outlying observations. The selection criteria was as follows:

Only mergers and acquisitions that lead into a percentage owned of 20% or more after transaction were included. This selection criteria was established in order to avoid losing a big amount of the sample as it allowed us to stay with 78% of the total sample. In the case that the percentage was not disclosed in the report, the synopsis of the event was read to acknowledge the sought percentage by the bidders, those higher or equal to 20% were included.

As performed by Martynova and Renneboog in 2006, successful takeovers and takeover attempts were both included as share price effect at the moment of the announcement should have had the same impact. Rumors¹⁷ were excluded as they do not represent any official announcement by the bidder or target in contrast with the takeover attempts.

As in the work of Martynova and Renneboog of 2006, companies from the financial sector as insurance companies, private equity, hedge funds, mutual funds, investment partnerships, venture capital, commercial banks and real state were excluded due to their special regulatory environment and accounting issues.

Different bids made by one acquirer were excluded if these occurred within less than 137 trading days since the previous announcement. This measure was implemented to evade biases in the estimation of the parameters necessary to calculate abnormal returns (Martynova & Renneboog, 2006). If one event occurred during the estimation window [-137, -21] of another event, then the estimation of the benchmark returns would not be accurate.

After these restrictions the sample reduced to the following levels:

Table 13

Country	Total domestic	Acquirer Public	Target Public
Argentina	62	44	23
Brazil	239	193	69
Chile	51	46	13
Colombia	38	32	14
Mexico	116	107	26
Peru	47	39	16

Using the new sample, stock prices and index returns were retrieved from Datastream. The technique to find share prices was creating a list using the SEDOL codes provided by SDC Platinum and requesting a time series report of those codes afterwards. When SEDOL codes were not provided, then the name of the company was manually searched at DataStream. All the companies

¹⁷ Reports about a likely transaction have been published in the media, but no formal announcement has been made by either the target or acquirer.

for which information could not be retrieved by the last two described steps were discarded. The companies that did not contain information of their stock prices during the event window and estimation window were also dropped.

The final sample size per country is the following:

Table 14

Country	Acquirer Public	Target Public
Argentina	33	19
Brazil	150	29
Chile	37	11
Colombia	27	4
Mexico	84	19
Peru	21	8

Methodology

Stock Returns and Index Returns

The information requested in the DataStream report was the closing adjusted prices identified by P(#S) which are unpadding¹⁸ prices. Later those numbers were used to calculate returns with the following formula:

$$R_t: \ln \frac{P_t}{P_{t-n}}$$

P_t = Price on the day t

P_{t-n} = Price on the preceding trading day

In which n represents the number of trading days since the stock last traded.

The indices used as benchmark were the MSCI local per country. The returns were measured as follows:

$$R_{Mt}: \ln \frac{Index_t}{Index_{t-n}}$$

¹⁸ Displays "NA" in days where the stocks did not trade instead of repeating the last available value.

Event Study

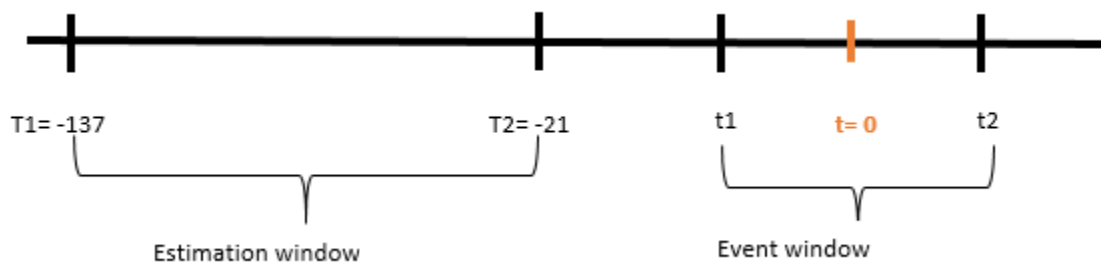
The method that is consistently encountered in all resources testing for wealth effects is the event study. An event study is constructed to check the impact that some specific event such as announcement on dividends, on stock splits and on mergers and acquisitions has on the security prices of companies (Brown & Warner, 1980). The impact that an event study tries to find is measured with abnormal returns. The steps to follow when performing an event study are first, identify the event; second, specify a benchmark model for normal returns; third, calculate abnormal returns around the event date. (Jong & Goeij, 2011)

Identification of the event

The event in this study is identified as the date of the announcement of an M&A. This information is provided by the SDC Platinum Mergers and acquisitions database from Thomson Reuters.

According to Kliger and Gurevich (2014) there is no universal rule for determining the right period for the event window and they recommend to identify it by taking in consideration previous studies. As from the reviewed literature on wealth effects of mergers and acquisitions that includes Latin America the only one that performed a pool event study on domestic transactions for both bidder and target was the one from Wagner et al. (2017), the estimation window that will be performed in this thesis will be the same as used in their work as well as the maximum event window used in their paper. The estimation window for this event study corresponds to $[-137, -21]$, and the event windows to $[-20, 20]$, $[-1, +1]$, $[-2, +2]$, $[-20, -1]$ and $[0]$.

The event study of this thesis looks like the following figure:



Calculation of benchmark returns

The market model is the most commonly used method to model parameters in an event study. It assumes that the market at time t determines the return of stock i at time t . The parameters of this model are estimated through an OLS regression and it predicts benchmark returns. The model (MacKinlay, 1997) is shown below:

$$R_{i,t} = \alpha_i + \beta_i R_{m,t} + \varepsilon_{i,t}$$
$$E(\varepsilon_{i,t} = 0) \qquad \text{var}(\varepsilon_{i,t}) = \sigma_{\varepsilon_i}^2$$

$R_{i,t}$: Period-t returns on security i .

$\alpha_i, \beta_i, \sigma_{\varepsilon_i}^2$: Parameters of the market model

$\varepsilon_{i,t}$: Zero mean disturbance term

$R_{m,t}$: Period-t market return

Calculation of abnormal returns

Abnormal returns are measured relative to a benchmark and can be calculated as follows:

$$AR_{i,t} = R_{i,t} - \hat{\alpha}_i + \hat{\beta}_i R_{m,t}$$

$AR_{i,t}$: Abnormal Returns of stock i in event window.

$R_{i,t}$: Realized return of stock i

$\hat{\alpha}_i, \hat{\beta}_i$: OLS estimates of α_i and β_i

To know what the accumulated effect is in surrounding periods, Cumulative Abnormal Returns are calculated as the sum of Abnormal Return from time t_1 to t_2 .

$$CAR_i = \sum_{t=t_1}^{t_2} AR_{i,t}$$

Average abnormal returns are calculated as follows:

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{i,t}$$

Cumulative average abnormal returns are the average of the sum of cumulative abnormal returns

$$CAAR = \frac{1}{N} \sum_{i=1}^N CAR_i$$

Significance t-test:

$$s = \sqrt{\frac{1}{N-1} \sum_{i=1}^N (CAR_i - CAAR)^2}$$

$$TS = \sqrt{N} \frac{CAAR}{s} \approx N(0,1)$$

s : cross sectional sample standard deviation of CAAR in the event window.

Multivariate Model

The following cross sectional regression is estimated to find the level of explanation that some deal characteristics have on cumulative abnormal returns from bidder companies.

$$CAR_i = \beta_0 + \beta_1 TIndustry_i + \beta_2 AIndustry_i + \beta_3 SameIndustry_i + \beta_4 Attitude_i + \beta_5 TPublicStatus_i + \beta_1 Persought_i + \varepsilon_i$$

TIndustry shows the effect on CAR that every industry of the target companies generates.

AIndustry shows the effect that every industry of the bidder companies generate on CAR.

SameIndustry shows the effect that mergers and acquisitions within companies from the same industry have on CAR.

Attitude represents the effect that the attitude of the deal has on CAR.

TPublicStatus indicates the effect on CAR that an acquisition of a public target has.

Persought is the effect that the announced seeking percentage of ownership has on CAR.

The following cross sectional regression is estimated to find the level of explanation that some deal characteristics have on cumulative abnormal returns from target companies.

$$CAR_i = \beta_0 + \beta_1 TIndustry_i + \beta_2 AIndustry_i + \beta_3 SameIndustry_i + \beta_4 Attitude_i + \beta_5 APublicStatus_i + \beta_6 Persought_i + \varepsilon_i$$

TIndustry shows the effect on CAR that every industry of the target companies generates.

AIndustry shows the effect that every industry of the bidder companies generate on CAR.

SameIndustry shows the effect that mergers and acquisitions within companies from the same industry have on CAR.

Attitude represents the effect that the attitude of the deal has on CAR.

APublicStatus indicates the effect on CAR that an acquisition of a public bidder has.

Persought is the effect that the announced seeking percentage of ownership has on CAR.

Results

Argentina

As seen in table 15, small positive cumulative abnormal returns were found for bidders in the event windows of $[-2,2]$, $[-1,1]$, and $[0]$ being 1.34% from window $[-1,1]$ the maximum value. Cumulative abnormal returns in the event windows of $[-20, 20]$ and $[-20,-1]$ were negative, and the lowest value, -3.17%, corresponds to the $[-20, 20]$ window. The only statistically significant result encountered was the one of the event date with positive abnormal returns of 0.08% being consistent with H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies. Table 16 displays positive cumulative abnormal returns in all event windows for Argentinian target companies. The only statistically significant result is the 14% from the event window $[-20,-1]$. This might be evidence of information leakage previous to the announcement. In general and consistent with literature, targets had higher cumulative abnormal returns than bidders with the exception on the event date where abnormal returns were higher on the bidder side.

Brazil

Table 15 shows positive cumulative abnormal returns for all event windows. The maximum value was 2.8% corresponding to the $[-20, 20]$ event window. The lowest value was on the day of event with abnormal returns of 0.49%. The only statistically significant result were the abnormal returns of 1.2% on the $[-2, 2]$ window which are consistent with H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies. Table 16 shows positive abnormal returns in the event windows of $[-1, 1]$, $[-20,-1]$ and $[-20, 20]$; where the latter had the highest abnormal returns (4%). The $[-2, 2]$ and $[0]$ event windows present negative values, being the -0.5% from the day of the event the lowest one. It is interesting to see that cumulative abnormal returns are higher for bidders than for target companies with the only exception of the $[-1,1]$ window. No statistically significant results were found for the targets.

Chile

As seen in table 15, the cumulative abnormal returns of the 37 bidder companies of Chile were positive in all the event windows with the exception of $[-20,-1]$ window, where negative abnormal returns of -0.8% were encountered. This was the lowest value found and 3.9% in the $[-20, 20]$ event window was the highest. This means that most of the value created was after time -1. The only statistically significant values found where the corresponding to $[-1, 1]$ and $[0]$ of 1.7% and 1% respectively which are consistent with H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies. In table 16 all event windows present positive

results being the highest 7.3% on the [-20, 20] event window and the lowest 0.5% on the day of the event. The only statistically significant results found were abnormal returns of 7.3% and 2.2%, on the [-20, 20] and [-2, 2] event windows, respectively. These results are consistent with H1: Wealth effects of mergers and acquisitions in Latin America were positive for target companies. In general, higher abnormal returns are found for target companies with the exception of [-1,1] and [0] windows.

Colombia

No statistically significant results were found for Colombian bidders or targets. In general, all results for bidder companies were positive. On the target side all results were negative with the exception of [-20,-1], where the returns were 6.9%. Bidder abnormal returns were higher than target ones with the exception of the [-20-1] event window.

Mexico

No statistically significant results were found for Mexico nor for bidders or targets. For bidders all the results were positive with the exception of the [-20,-1] event window where the lowest value of -0.23% was found. The largest returns correspond to 2.8% on the [-20,20] event window. On the target side all results were positive being 6.7% the largest and 0.46% the lowest corresponding to the [-20,-1] and [0] windows, respectively. All target results were higher than the bidder results.

Peru

All results for bidder companies were positive with the exception of the event date where abnormal returns were -0.24%. No significant results were found in table 15. Table 16 shows statistically significant positive CAR of 14%, 13%, 23%, and 7% for target companies on the [-2, 2], [-1, 1], [-20, -1], and [0] event windows, respectively. These results are consistent with H1: Wealth effects of mergers and acquisitions in Latin America are positive for target companies. Target abnormal returns are larger than those of the bidders.

All Countries

Most of the results found individually by country are not statistically significant. Nevertheless, when testing for abnormal returns of all bidder or target companies as a group, significant results were obtained.

In general, all bidder companies treated together as a group presented a small positive performance. For the event windows [-20, 20], [-2,2], [-1,1], and [0], cumulative abnormal returns of 2.20%, 1.08%, 1.08%, and 0.6% respectively were found. This indicates that cumulative abnormal returns for bidder companies are small positive in accordance to H2.

Target companies present positive performance. For the event windows [-20,20], [-2,2], [-1,1], and [-20,-1], cumulative abnormal returns were 7.81%, 3.35%, 2.28%, and 6.67% , respectively. This indicates that target companies generate positive cumulative abnormal returns, which is consistent with H1. Target companies presented higher cumulative abnormal returns than bidder companies, being consistent with general literature on European M&A.

All countries excluding Brazil

As Brazilian M&A announcements represent 43% of the bidder sample and 33% of the target sample, cumulative abnormal returns were measured discarding the observations from Brazil.

The results indicate that for the windows of [-2, 2], [-1, 1], and [0], small positive cumulative abnormal returns of 0.92%, 1.47%, and 0.75%, respectively, were found for bidders. Targets had positive cumulative abnormal returns of 9.7%, 5.2%, 3.2%, 9%, and 1.4% for the [-20, 20], [-2, 2], [-1, 1], [-20,-1], and [0] event windows, respectively.

The results found for both scenarios are consistent with the initial hypotheses:

H1: Wealth effects of mergers and acquisitions in Latin America are positive for target companies.

H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies.

With this we can also conclude that wealth effects of mergers and acquisitions in Latin America behave similarly to geographic areas such as Europe.

Table 15. Cumulative abnormal returns for bidder firms (Standard Errors in parenthesis). ***/**/* Statistical significance at the 1%, 5% and 10% respectively.

Event Widow	Argentina	Brazil	Chile	Colombia	Mexico	Peru	All	All excluding Brazil
[-20, 20]	-.03174	.02888	.03906	.00637	.02852	.01862	.02206 *	.01649
	(.04429)	(.01949)	(.03741)	(.06006)	(.02112)	(.05102)	(.01241)	.01627)
[-2,2]	.01119	.01293 *	.01405	.00430	.00316	.02809	.01088 ***	.00924 *
	(.01165)	(.00693)	(.00976)	(.00841)	(.00776)	(.02028)	(.00402)	(.00477)
[-1,1]	.01348	.00548	.01794 **	.04580	.00693	.00149	.01081 **	.01466 **
	(.01016)	(.00522)	(.00802)	(.04545)	(.00600)	(.00599)	(.00456)	(.00692)
[-20, -1]	-.00835	.01513	-.00820	.01496	-.00233	.02431	.00705	.00055
	(.02824)	(.01605)	(.01003)	(.04557)	(.01198)	(.03537)	(.00885)	(.00990)
[0]	.00866 **	.00490	.01097 *	.02118	.00117	-.00241	.00648 ***	.00751 **
	(.00383)	(.00344)	(.00634)	(.02081)	(.00336)	(.00535)	(.00247)	(.00347)
Number of Observations	33	150	37	27	84	21	352	202

Table 16. Cumulative abnormal returns for target firms (Standard Errors in parenthesis). ***/**/* Statistical significance at the 1%, 5% and 10% respectively.

Event Widow	Argentina	Brazil	Chile	Colombia	Mexico	Peru	All	All excluding Brazil
[-20, 20]	.11744	.04068	.07331*	-.11494	.06664	.25577	.07814**	.09656**
	(.09597)	(.04251)	(.03388)	(.05345)	(.05722)	(.16023)	(.03109)	(.04143)
[-2,2]	.04574	-.004281	.02234*	-.01282	.05058	.14446**	.03353**	.05212***
	(.04050)	(.016369)	(.01160)	(.01073)	(.03116)	(.04180)	(.01307)	(.01736)
[-1,1]	.02600	.0048212	.01382	-.01599	.01617	.13028***	.02280**	.03165**
	(.02899)	(.011423)	(.00875)	(.00921)	(.01802)	(.03586)	(.00927)	(.01254)
[-20, -1]	.14201**	.02035	.02142	.06938	.06757	.22780**	.06679***	.08963***
	(.05831)	[.03174]	(.02944)	(.05643)	(.04721)	(.09052)	(.02056)	(.02608)
[0]	.00710	-.00591	.00512	.00245	.00462	.07122**	.00747	.01406**
	.01265	(.00670)	(.00604)	(.00948)	(.00991)	(.01429)	(.00471)	(.00607)
Number of Observations	19	29	11	4	19	8	90	61

Bidder Multivariate Regression Results

Robust results from the bidder multivariate regression can be observed in table 17 located in the appendix.

The results indicate that the acquisitions of companies that belong to the industries of Drugs; Educational Services; Public Administration; Electronic and Electrical Equipment; and Rubber and Miscellaneous Plastic Products have a positive effect on bidder cumulative abnormal returns. Companies acquired that belong to the industries Hotels and Casinos; Leather and Leather Products; Soaps, Cosmetics, and Personal-Care Products; Transportation Equipment; and Wholesale Trade-Nondurable Goods have a negative effect on cumulative abnormal returns.

The results indicate that bidder companies from the Agriculture, Forestry, and Fishing; Chemicals and Allied Products; Computer and Office Equipment; Electric, Gas, and Water Distribution; Food and Kindred Products; Mining; Oil and Gas; Petroleum Refining; Printing, Publishing, and Allied Services; Retail Trade-General Merchandise and Apparel; Rubber and Miscellaneous Plastic Products; Telecommunications; Transportation Equipment; Wholesale Trade-Durable Goods; and Wholesale Trade-Nondurable industries, have positive effects on cumulative abnormal returns.

Positive effects of 9.50% and 6.6% are observed in event windows of [-2, 2] and [-1,1] when the target is a public company. The percentage sought for the bidder has a positive effect of 0.09% on cumulative abnormal returns.

The F statistic explains if a group of variables are jointly statistically significant, in this case, the variables of this model are jointly statistically significant. The R-squared of this model varies from 0.1224 on the day of the event to 0.3063 on the [-20,-1] event window. This indicates that the independent variables in the model explain from 13% to 31% of the variation in CAR.

Target Multivariate Regression Results

Robust results from the target multivariate regression can be observed in table 18 located in the appendix.

The results from the multivariate model show that the acquisitions of companies that belong to the industries of Communications Equipment; Electronic and Electrical Equipment; Leather and Leather Products; Radio and Television Broadcasting Stations; and Telecommunications have negative effects on the target cumulative abnormal returns.

When bidders belong to the Printing, Publishing, and Allied Services industry, then positive target cumulative abnormal returns are observed. The acquisition from companies that belong to the industries of Stone, Clay, Glass, and Concrete Products; and Telecommunications have a negative effect on target cumulative abnormal returns.

The F statistic explains if a group of variables are jointly statistically significant, in this case, the variables of this model are jointly statistically significant. The R-squared of this model varies from 0.4921 on an event window of [-20, 20] and 0.5802 on the day of the event. This indicates that the independent variables in the model explain from 49% to 58% of the variation in CAR.

Conclusion

This thesis analyzes the announcements of domestic mergers and acquisitions from 6 different Latin American countries in order to have a clear perspective of their main characteristics and of the value that they create to shareholders of both bidder and target companies.

This study examines the main features of domestic mergers and acquisitions performed in Argentina, Brazil, Chile, Colombia, Mexico, and Peru for the period of 1993-2010. Information such as percentage of domestic transactions, most traded sectors, most active countries, number of public acquirers and targets, percentage of ownership sought, status of the transactions, and attitude of the deals was analyzed. The results of the analysis show that 87% of the sample consists of domestic transactions; that among the six studied countries, Brazil is by far the most active in mergers and acquisitions with 47% of the total domestic deals, followed by Mexico (17%), Chile (11%), Argentina (10%), Peru (9%), and Colombia (6%); that an average of 54% of the total deals were seeking to own more than 50% of the target after the transaction; that the industry that dominates the bidder market is Investment & Commodity Firms, Dealers and Exchanges; and that the most acquired companies are from the Electric, Gas and Water Distribution sector.

The main purpose of this thesis was to calculate the value that M&A announcements in Latin America create to the stockholders of both bidder and target firms. The results obtained show that the first announcements of mergers and acquisitions in Latin America generate value to shareholders for both bidder and target companies and that this value is higher for target companies than for bidder firms, being consistent with general literature on European M&A. In general, all bidder companies treated together as a group present a small positive performance and target companies presented positive cumulative abnormal returns.

These results are consistent with the initial hypotheses which state that

H1: Wealth effects of mergers and acquisitions in Latin America are positive for target companies.

H2: Wealth effects of mergers and acquisitions in Latin America are small positive for bidder companies.

The main limitations found for this study were the lack of literature on the specific topic of value creation of mergers and acquisitions in Latin America and its methodology; the small sample size per country; and the lack of available data. The former, which was the main driver for performing

this thesis, also caused limitations in terms of what results to expect based on previous research and which methodology to apply to execute the event study. This also opens the opportunity to further research and treatment of characteristics such as thin trading. The small sample sizes contributed to the minor amount of significant results per country. The lack of disclosed information and available data caused the drop of several companies from the sample making it even smaller.

The suggestions for further research in this topic are the creation of a methodology that can treat characteristics of Latin American markets such as thin trading; a study that evaluates the long term value creation of mergers and acquisition in Latin America; a specific study on the banking sector; and a research that checks the value creation of mergers and acquisitions in Latin America according to the firm size of the involved companies.

This study remarks the lack of research on the topic of wealth effects of Latin American M&A. Today, the available information on Latin American Mergers and Acquisitions is limited and scarce. Conducting further research on this subject is very important in order to have a solid idea of the value that Latin American M&A create to shareholders, as it could help in the decision making for future transactions in the field.

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Appendix

Table 17. Effects of deal characteristics on bidder CAR

Event Window	[-20,20]	[-2,2]	[-1,1]	[-20,-1]	[0]
Industry					
<i>Agriculture, Forestry, and Fishing</i>	-.0650056 (.274303)	.1257819 (.1086989)	.0303973 (.0406682)	.1331237 (.1764135)	-.0279992 (.0244915)
<i>Air Transportation and Shipping</i>	-.0512215 (.2989201)	.0576978 (.1156536)	-.0369578 (.0648694)	.0460185 (.183488)	-.0336139 (.0313392)
<i>Business Services</i>	-.2701353 (.2797289)	.11849 (.1075649)	.0416282 (.0424041)	.0026143 (.1774724)	-.0186527 (.0256284)
<i>Chemicals and Allied Products</i>	-.1454902 (.2907083)	.098444 (.1090484)	.0294675 (.0413555)	.0837155 (.1780676)	-.0238085 (.0248251)
<i>Communications Equipment</i>	-.2001462 (.3167935)	.0618923 (.1077756)	.0031784 (.0418303)	-.0627329 (.2176135)	-.0252516 (.0342891)
<i>Construction Firms</i>	-.0000521 (.3002821)	.1067425 (.1130619)	.0238049 (.0485879)	.1283389 (.1881963)	-.0268476 (.0287544)
<i>Drugs</i>	-.0078541 (.1378441)	.1223753 * (.0683477)	.0770132 * (.0402209)	-.0992667 * (.0535962)	.03668 (.0290524)
<i>Educational Services</i>	-.1120773 (.3339553)	.1704306 (.115452)	.1272971 *** (.0467527)	.0927697 (.2045797)	-.0362986 (.0295646)
<i>Electric, Gas, and Water Distribution</i>	-.2112265 (.2843181)	.0766856 (.1085975)	-.0081189 (.0464908)	.0782877 (.1843585)	-.0402132 (.0294266)
<i>Electronic and Electrical Equipment</i>	.7714851 (.5205562)	.1075272 (.1135917)	.0127767 (.0504472)	1.077481 * (.5837564)	-.0154542 (.038128)
<i>Food and Kindred Products</i>	-.1847386 (.2767818)	.1081417 (.1093978)	.0230566 (.040604)	.0598087 (.1761968)	-.0342688 (.0258703)
<i>Health Services</i>	-.0626301 (.0906165)	-.0000388 (.0310245)	.0070732 (.0239952)	-.0568965 (.0572206)	.023621 (.0229278)
<i>Hotels and Casinos</i>	.0802871 (.0916875)	-.0372878 * (.0210813)	-.045533 ** (.0230728)	.0712589 (.0620728)	-.0160021 (.0140741)
<i>Leather and Leather Products</i>	-.4069063 *** (.0818807)	-.032498 (.022913)	-.0098102 (.0223242)	-.1658653 *** (.050679)	-.0014798 (.0140917)
<i>Machinery</i>	.1246982 (.3284995)	.0676233 (.1104189)	-.0052406 (.0438738)	.2960106 (.245578)	-.0337913 (.0285065)
<i>Metal and Metal Products</i>	-.1574849 (.2984228)	.0804535 (.1115479)	-.0129133 (.0446331)	.0613575 (.1909981)	-.0334618 (.0295623)
<i>Mining</i>	-.3998967 (.3523893)	.0615988 (.1117011)	.0298636 (.0627216)	-.0294367 (.254165)	-.0218637 (.0379787)
<i>Miscellaneous Retail Trade</i>	-.2953556 (.274721)	.0586222 (.1105542)	-.0073777 (.0415442)	-.0023606 (.1775298)	-.0368065 (.0262946)
<i>Oil and Gas; Petroleum Refining</i>	-.2062253 (.288548)	.0918973 (.1104961)	.014404 (.0451607)	.0715265 (.1846095)	-.0225381 (.0297979)
<i>Paper and Allied Products</i>	-.3049997 (.2835013)	.081051 (.1098818)	-.0051012 (.0405657)	-.0141713 (.1879696)	-.0272403 (.0318964)
<i>Prepackaged Software</i>	-.3929648 (.2951981)	.0717115 (.1158427)	.0048825 (.0512436)	-.0583574 (.2024151)	-.0280192 (.0310622)
<i>Printing, Publishing, and Allied Services</i>	-.0785832 (.2903154)	.1344014 (.1079096)	.0206248 (.04396)	.1742244 (.1923387)	-.0311881 (.0328429)
<i>Public Administration</i>	-.1839672 (.3376078)	.2461789 ** (.124835)	.1234478 (.0776636)	-.0708795 (.1924393)	.104496 *** (.0379858)
<i>Radio and Television Broadcasting Stations</i>	-.3151912 (.2881449)	.0773432 (.1181156)	.0143766 (.0535159)	-.0669882 (.1856133)	-.0297589 (.0311262)
	-.202527	.1447402	.0549924	.1035193	-.0076011

<i>Retail Trade-Eating and Drinking Places</i>	(.2847709)	(.1166662)	(.0454673)	(.1797015)	(.0270734)
<i>Retail Trade-Food Stores</i>	- .1626516	.0983473	-.014533	.0718085	-.0300879
	(.2842401)	(.1211353)	(.0504508)	(.1802435)	(.0374773)
<i>Retail Trade-General Merchandise and Apparel</i>	-.2157908	.1337365	-.0124961	.029332	-.0509576
	(.2880896)	(.1288309)	(.042108)	(.180607)	(.0304578)
<i>Rubber and Miscellaneous Plastic Products</i>	-.090084	.2429052 **	.1094716 **	.0984328	-.016319
	(.2854889)	(.1130587)	(.0449018)	(.1834099)	(.0291637)
<i>Sanitary Services</i>	.0201593	.0808759	.0109931	.1179454	-.0166833
	(.3042155)	(.1209631)	(.0669791)	(.1886807)	(.0323022)
<i>Soaps, Cosmetics, and Personal-Care Products</i>	-.1592882	-.0298654	-.1198634	.1214091	-.076559 ***
	(.2950501)	(.1119588)	(.0450606)	(.1822527)	(.0275122)
<i>Stone, Clay, Glass, and Concrete Products</i>	-.2310646	.1033413	.0106268	-.0431127	-.0316572
	(.3100816)	(.1110421)	(.0434359)	(.195716)	(.0307852)
<i>Telecommunications</i>	-.2574526	.1063121	.0350099	.0016305	-.0269506
	(.279929)	(.1087515)	(.0420258)	(.1824888)	(.0298569)
<i>Textile and Apparel Products</i>	-.4104614	-.0179048	.0270747	.0785306	.0049988
	(.2842273)	(.1100608)	(.0482977)	(.1766551)	(.0299919)
<i>Transportation Equipment</i>	-.259598 ***	-.242412 ***	-.1971699 ***	.042622	-.014675
	(.0924138)	(.0210407)	(.0240584)	(.0623058)	(.0143325)
<i>Transportation and Shipping (except air)</i>	-.041303	.0924914	.0157195	.1566507	-.0292501
	(.2849708)	(.1082739)	(.0420725)	(.1812444)	(.0255201)
<i>Wholesale Trade-Durable Goods</i>	-.3382262	.0180296	-.0337104	.0594799	-.047492
	(.288593)	(.1106153)	(.0420068)	(.1877597)	(.0260503)
<i>Wholesale Trade-Nondurable Goods</i>	-.1849948	.0959404	-.019034	.1685518	-.0488813 *
	(.2906982)	(.1120606)	(.0542615)	(.1921123)	(.0281262)
<i>Wood Products, Furniture, and Fixtures</i>	-.0254542	.0269934	.0279911	.0811718	-.0196673
	(.2305823)	(.0771316)	(.0365568)	(.1700569)	(.0151583)
Alndustry					
<i>Agriculture, Forestry, and Fishing</i>	-.0291411	-.1144257	-.0141922	-.2343511	.0499956 **
	(.2847417)	(.1097687)	(.0416364)	(.1872999)	(.0224907)
<i>Air Transportation and Shipping</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Amusement and Recreation Services</i>	.3634679	-.1181356	-.04693	.0223452	.0249691
	(.3012988)	(.1144798)	(.0399171)	(.2073384)	(.0360655)
<i>Business Services</i>	.1160721	-.1300297	-.0561721	-.0511679	.0288732
	(.2717158)	(.1061505)	(.0400283)	(.1777552)	(.0234292)
<i>Chemicals and Allied Products</i>	.0285534	-.074343	-.0128928	-.1348776	.0397134 *
	(.2808806)	(.1073656)	(.0394107)	(.1744331)	(.0232862)
<i>Computer and Office Equipment</i>	.4016726	.0302815	.0634471	-.0260243	.0705643 ***
	(.2901211)	(.113636)	(.0407668)	(.1995983)	(.0260923)
<i>Construction Firms</i>	.0375405	-.0517435	.0179838	-.1295729	.0476234
	(.2938246)	(.116321)	(.0613663)	(.179396)	(.0290096)
<i>Drugs</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Educational Services</i>	.025348	-.1112223	-.0683123 *	-.1265723	.0393325
	(.2795239)	(.1063667)	(.038702)	(.1764413)	(.0244925)
<i>Electric, Gas, and Water Distribution</i>	.1058837	-.0764487	.0057714	-.1527379	.0443364 *
	(.2733117)	(.1068695)	(.0387348)	(.177851)	(.023748)
<i>Electronic and Electrical Equipment</i>	-.6722549	-.0365098	.0497803	-.9425136 *	.0817407 **
	(.5099827)	(.1138096)	(.0537593)	(.5712948)	(.0413851)
<i>Food and Kindred Products</i>	.0590647	-.0900774	-.0085069	-.1357875	.0486534 **
	(.2651831)	(.1060768)	(.0334428)	(.168708)	(.0203774)
<i>Health Services</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))

<i>Leather and Leather Products</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Machinery</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Metal and Metal Products</i>	-.0447067	-.0837872	-.0228173	-.1950152	.0352672
	(.2867297)	(.1090713)	(.038838)	(.1827421)	(.0241214)
<i>Mining</i>	.2830772	-.0654429	.0348583	-.0880949	.0658703 **
	(.3336579)	(.1088438)	(.0554536)	(.236431)	(.032684)
<i>Miscellaneous Retail Trade</i>	.1316723	-.074957	.0253133	-.1062827	.0355278
	(.2910597)	(.1159508)	(.0395227)	(.1742296)	(.0264719)
<i>Oil and Gas; Petroleum Refining</i>	.1021817	-.0822863	.0057814	-.1212441	.0513179 **
	(.2778393)	(.1081002)	(.0406553)	(.1797214)	(.0251089)
<i>Paper and Allied Products</i>	.2403703	-.0784665	-.009419	-.0403867	.0394285
	(.2798876)	(.1085153)	(.0347649)	(.1873632)	(.0272088)
<i>Prepackaged Software</i>	.0719371	-.1338754	-.0454033	-.1348915	.0224963
	(.2787569)	(.1079299)	(.040733)	(.1849887)	(.0253474)
<i>Printing, Publishing, and Allied Services</i>	.3046956	-.0467702	.015613	.0120265	.0570418 **
	(.2999758)	(.1068532)	(.0347525)	(.2062946)	(.0285106)
<i>Radio and Television Broadcasting Stations</i>	.1861036	-.0838185	-.0026447	.0246498	.0342583
	(.2796529)	(.1151447)	(.0451774)	(.1835186)	(.0293525)
<i>Retail Trade-Eating and Drinking Places</i>	.037444	-.1165049	-.0266559	-.1785061	.0232022
	(.2751497)	(.1147449)	(.0392794)	(.1729008)	(.0217916)
<i>Retail Trade-Food Stores</i>	.074583	-.0876227	.0231925	-.1390445	.034976
	(.2795856)	(.1194588)	(.0452556)	(.1745785)	(.0343424)
<i>Retail Trade-General Merchandise and Apparel</i>	.1349298	-.0839395	.0226391	-.1142572	.0561604 **
	(.2690159)	(.1126194)	(.0374881)	(.1709841)	(.0252775)
<i>Rubber and Miscellaneous Plastic Products</i>	.0325503	-.1712677	-.0529879	-.1756967	.0839098 ***
	(.2766562)	(.1101249)	(.036422)	(.177925)	(.0233342)
<i>Sanitary Services</i>	-.0215079	-.1076217	-.0574047	-.2048446	-.002014
	(.3329811)	(.1242283)	(.0772971)	(.1866745)	(.0376159)
<i>Soaps, Cosmetics, and Personal-Care Products</i>	-.2180205	-.1290058	-.0620742	-.2201689	.0187131
	(.2871371)	(.109512)	(.0390891)	(.1755315)	(.0225311)
<i>Stone, Clay, Glass, and Concrete Products</i>	.1065	-.1123188	-.0149256	-.026782	.0303662
	(.2863504)	(.1076573)	(.0374407)	(.1844309)	(.0262764)
<i>Telecommunications</i>	.2291555	-.0853701	-.0219561	-.0435553	.0391768 *
	(.2716043)	(.1068518)	(.0380505)	(.1752019)	(.0233027)
<i>Textile and Apparel Products</i>	.2076602	.0477293	-.0165758	-.0859523	.0115905
	(.2613752)	(.1033789)	(.0335832)	(.167907)	(.0197725)
<i>Transportation Equipment</i>	-.2758941	-.100796	-.0001657	-.2152964	.063871 **
	(.3900177)	(.1094033)	(.0377733)	(.212309)	(.0302724)
<i>Transportation and Shipping (except air)</i>	-.1196207	-.0899893	-.0143347	-.1735795	.0370382
	(.2743619)	(.1091738)	(.0416772)	(.1779422)	(.023451)
<i>Wholesale Trade-Durable Goods</i>	.2170905	-.0366869	.0056174	-.0760709	.0384378 *
	(.3049218)	(.1075456)	(.036759)	(.1964601)	(.0228159)
<i>Wholesale Trade-Nondurable Goods</i>	.1639985	-.0513336	.0194141	-.1367266	.054282 **
	(.2910977)	(.1131366)	(.0399737)	(.1756792)	(.0240663)
<i>Wood Products, Furniture, and Fixtures</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
Sameindustry	.04968	-.0033989	.0030042	.0241618	.0088391
	(.0391038)	(.0108174)	(.00995)	(.030445)	(.0063633)
Attitude					
<i>Friendly</i>	-.0494353	-.0026546	-.0100459	-.008694	-.007011
	(.0491453)	(.0165932)	(.0150663)	(.0308812)	(.0094872)

Tpublicstatus					
<i>Public</i>	-.1594131 **	.095016 ***	.0606076 **	-.0000804	.0206777
	(.0676082)	(.0245604)	(.0245515)	(.0482515)	(.014997)
PerSought	.000885 **	-.000146	.0000399	.0002985	.0000309
	(.0004345)	(.0001487)	(.0001962)	(.0002912)	(.0001011)
_Cons	.2805883 ***	-.0792436 ***	-.0405853	.0755362	-.0271688
	(.098991)	(.0283098)	(.027826)	(.0691001)	(.0186824)
Number of Observations	352	352	352	352	352
R-squared	0.2436	0.2072	0.1265	0.3063	0.1224
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000

Table 18. Effects of deal characteristics on target CAR

Event Window	[-20,20]	[-2,2]	[-1,1]	[-20,-1]	[0]
TIndustry					
<i>Air Transportation and Shipping</i>	.0360735	-.2889251	-.2397474	-.0219223	-.0727901
	(.7584899)	(.2940293)	(.2110749)	(.375024)	(.1225934)
<i>Business Services</i>	-1.029.095	-.4832901	-.3996597	.1145773	-.0588213
	-1136468	(.3807715)	(.2768171)	(.3370207)	(.1367158)
<i>Chemicals and Allied Products</i>	-.4069219	-.400567	-.2975353	-.014131	-.0767096
	(.6713242)	(.251134)	(.1931733)	(.278381)	(.1134899)
<i>Communications Equipment</i>	-.2955785	-.590821 **	-.4732947 **	-.0105492	-.2060554 **
	(.7038117)	(.2581757)	(.2022964)	(.2779456)	(.0948892)
<i>Construction Firms</i>	.2251442	-.2906509	-.22625	-.0966616	-.1356864
	(.5669113)	(.2176607)	(.1788634)	(.2613227)	(.0873095)
<i>Electric, Gas, and Water Distribution</i>	-.3665622	-.3241525	-.2059557	-.005832	-.0183091
	(.7618079)	(.28209)	(.2052594)	(.3569076)	(.1142463)
<i>Electronic and Electrical Equipment</i>	-.403452	-.1989826	-.1408775	-.4957663 **	-.0995187
	(.3240429)	(.1317335)	(.1193346)	(.2130198)	(.0736752)
<i>Food and Kindred Products</i>	-.5076253	-.345092	-.281001	.0373407	-.0607051
	(.6144808)	(.2320495)	(.1847111)	(.2571198)	(.0899736)
<i>Leather and Leather Products</i>	-.6968723	-.4908001 *	-.360542 *	-.1034834	-.1531491
	(.7343609)	(.2711514)	(.2082839)	(.3127717)	(.0980523)
<i>Metal and Metal Products</i>	.1614481	-.2202098	-.1468942	.2086671	-.0355996
	(.7606562)	(.2834091)	(.2099301)	(.3497404)	(.1185511)
<i>Mining</i>	-.5592318	-.2484378	-.1642867	.2593901	.045414

	-120739	(.4092526)	(.2922623)	(.4256142)	(.1642698)
<i>Miscellaneous Retail Trade</i>	-.6547305	-.3740341	-.2987017	-.1822545	-.1039631
	(.644255)	(.228581)	(.1839413)	(.2632443)	(.0971588)
<i>Motion Picture Production and Distribution</i>	-.2595481	.0466597	-.0304401	-.1657289	-.0434273
	(.2205423)	(.0937139)	(.1013587)	(.1431294)	(.064307)
<i>Oil and Gas; Petroleum Refining</i>	.4635386	-.086735	-.1085656	.1033026	-.0509236
	(.7783433)	(.3033798)	(.2130299)	(.4142745)	(.0958489)
<i>Paper and Allied Products</i>	-.8665498	-.3979012	-.2984032	.2132327	-.1240428
	(.9877716)	(.3358302)	(.2480582)	(.3247183)	(.1259041)
<i>Radio and Television Broadcasting Stations</i>	-.3424315	-.0350957	-.0264451	-.3091194 *	-.0323775
	(.2699318)	(.1371605)	(.1196628)	(.1742003)	(.0688909)
<i>Retail Trade-Food Stores</i>	.7587631	.3413803	.1101481	.1693708	-.0561417
	(.7720532)	(.2829631)	(.1894698)	(.367274)	(.0846618)
<i>Retail Trade-General Merchandise and Apparel</i>	.2739679	-.0544261	-.0742307	-.1212349	-.0310331
	(.2556627)	(.1261368)	(.1066526)	(.2123071)	(.0609541)
<i>Rubber and Miscellaneous Plastic Products</i>	-1.225.115	-.4549275	-.3518753	-.0166914	-.0695523
	-1189808	(.3901871)	(.2827534)	(.3820883)	(.1434367)
<i>Soaps, Cosmetics, and Personal-Care Products</i>	.2764872	.0250068	.0094886	.2611368	-.0386549
	(.269989)	(.1151031)	(.1092202)	(.1761771)	(.0676028)
<i>Stone, Clay, Glass, and Concrete Products</i>	.1330057	-.343911 *	-.3055407 *	.1301208	-.1451125
	(.4414609)	(.1993329)	(.1703405)	(.2780778)	(.0877669)
<i>Telecommunications</i>	-.3741528	.0920402	.1141829	-.40405 **	.1125051
	(.6027999)	(.2044805)	(.1618731)	(.1977911)	(.092318)
<i>Textile and Apparel Products</i>	.3534984	-.3243479	-.2432177	.0012033	-.1141783
	(.6456384)	(.2870683)	(.2074339)	(.3857181)	(.1190154)
<i>Transportation and Shipping (except air)</i>	.968931	-.2844158	-.2574618	-.08263	-.1957351
	(.924954)	(.3730973)	(.2658703)	(.4678664)	(.1543166)
<i>Wood Products, Furniture, and Fixtures</i>	-.3078579	-.0334639	-.0431719	.5943863	.0424268
	-1259142	(.4253458)	(.3031774)	(.4761129)	(.173879)
Alndustry					
<i>Chemicals and Allied Products</i>	.2016537	.2857455	.2238065	-.3652744	-.0344086
	(.6657001)	(.2645901)	(.1915087)	(.2995734)	(.0960959)
<i>Construction Firms</i>	-.3113917	.3037803	.2561376	-.2147629	.1013962
	(.5256196)	(.2226608)	(.1710081)	(.2658759)	(.0619662)
<i>Electric, Gas, and Water Distribution</i>	.1596584	.1697861	.1323885	-.2546378	-.0596548
	(.7768532)	(.3007345)	(.2042013)	(.384291)	(.0976902)
<i>Electronic and Electrical Equipment</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Food and Kindred Products</i>	.2950641	.2652595	.2400191	-.341358	.0125391
	(.6045104)	(.2474119)	(.1823644)	(.2883715)	(.0701853)
<i>Holding Companies, Except Banks</i>	-1.096.905	.0146012	.0578076	-.2538383	.082356
	(.9837395)	(.3762881)	(.2620525)	(.4583598)	(.1048993)
<i>Metal and Metal Products</i>	-.5107644	.072104	.0487424	-.6298419	-.0633347

	(.763894)	(.2867924)	(.2007071)	(.3811036)	(.0996639)
<i>Mining</i>	.395086	.2190244	.2014409	-.4929198	-.0436696
	-1243248	(.4299526)	(.300825)	(.4656508)	(.1620063)
<i>Miscellaneous Services</i>	-.5258463	.2501742	.1333366	-.0288811	.0545383
	(.7647242)	(.2652157)	(.1937312)	(.3295146)	(.0963743)
<i>Motion Picture Production and Distribution</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Oil and Gas; Petroleum Refining</i>	-.5486433	.2108711	.1874798	-.3201219	.0300876
	(.5550997)	(.2245438)	(.1652537)	(.3181714)	(.068074)
<i>Paper and Allied Products</i>	.807904	.2890821	.2246063	-.4588987	.0601765
	(.9814917)	(.3514747)	(.2476601)	(.3592193)	(.1174357)
<i>Printing, Publishing, and Allied Services</i>	.1209281	.4142734	.3215467 *	-.364421	.0680648
	(.5986123)	(.251895)	(.1894355)	(.2770074)	(.068688)
<i>Public Administration</i>	-.833201	-.0198755	.0156849	-.4647433	-.0292851
	(.6445944)	(.2657237)	(.1831628)	(.3814276)	(.0717036)
<i>Radio and Television Broadcasting Stations</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Retail Trade-Food Stores</i>	-.9909931	-.0868807	-.0074962	-.1418663	.0086273
	(.6294838)	(.2237962)	(.1764155)	(.2567807)	(.0939529)
<i>Retail Trade-General Merchandise and Apparel</i>	-.1644703	.2251039	.1975093	-.0999345	.0818036
	(.2950636)	(.1576175)	(.1405491)	(.2402581)	(.0679628)
<i>Soaps, Cosmetics, and Personal-Care Products</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>Stone, Clay, Glass, and Concrete Products</i>	-.4610172	.227754	.191927	-.4439902 *	.0673437
	(.3123085)	(.1838414)	(.147551)	(.2544867)	(.0458818)
<i>Telecommunications</i>	.3631389	-.1436449	-.1313482	.2144429	-.1800549 **
	(.5744235)	(.2014721)	(.1319518)	(.1837297)	(.0836173)
<i>Textile and Apparel Products</i>	-.8503969	.1346668	.11918	-.32303	.0224634
	(.5673925)	(.2531131)	(.1773583)	(.3570336)	(.0787357)
<i>Transportation and Shipping (except air)</i>	-1.195.304	.2025017	.1724913	-.2692167	.107679
	(.8668623)	(.353979)	(.2415597)	(.4356545)	(.1270251)
<i>Wholesale Trade-Nondurable Goods</i>	-.0887233	.468587	.2804605	.0690585	.04057
	(.6143907)	(.3199927)	(.1802666)	(.495265)	(.0645142)
<i>Event Window</i>	[-20,20]	[-2,2]	[-1,1]	[-20,-1]	[0]
SameIndustry	-.6315104	-.048194	-.0188687	.0368476	.0378688
	(.5693624)	(.1817006)	(.1269958)	(.1439417)	(.0648021)
Attitude					
<i>Friendly</i>	-.0298958	.0052827	.0182864	-.0182681	-.025405
	(.1806483)	(.0676778)	(.0420858)	(.1092255)	(.0235749)
<i>Not Appl.</i>	-.6461863	-.0879389	-.0082317	.061281	.0160061
	(.7937924)	(.2830813)	(.1823715)	(.3576589)	(.0724167)
APublicStatus					

<i>Public</i>	-0.1950805	-0.0438937	-0.0292458	-0.0528805	-0.0004573
	(.1449395)	(.0561741)	(.0424903)	(.0812126)	(.020102)
<i>Sub.</i>	0	0	0	0	0
	((omitted))	((omitted))	((omitted))	((omitted))	((omitted))
<i>PerSought</i>	.001086	.0005681	.0003206	.0016415	.0002116
	(.001553)	(.0006925)	(.0005172)	(.0010159)	(.0002367)
<i>_cons</i>	1.012.237	.1827564	.1000275	.3122709	.0497434
	(.6618097)	(.2308107)	(.1775906)	(.2609975)	(.0938184)
Number of Observations	90	90	90	90	90
R-squared	0.4921	0.5283	0.5486	0.5142	0.5802
Prob > F	0.0000	0.0000	0.0000	0.0000	0.0000