

# To Switch or Not to Switch: Evidence from Multiple U. S. Acquirers

Vanya Stefanova Petrova

School of Finance, Shanghai University of Finance and Economics, Shanghai, P. R. China

## Email address:

vaniashufe@yahoo.com

## To cite this article:

Vanya Stefanova Petrova. To Switch or Not to Switch: Evidence from Multiple U. S. Acquirers. *International Journal of Finance and Banking Research*. Vol. 2, No. 3, 2016, pp. 49-62. doi: 10.11648/j.ijfbr.20160203.11

**Received:** March 21, 2016; **Accepted:** April 10, 2016; **Published:** May 8, 2016

---

**Abstract:** With a comprehensive U.S. domestic sample, we study shareholder announcement returns for firms that acquired 5 or more public, private, and/or subsidiary targets, and *switched* or shifted from in-state to out-of-state acquisition, and vice versa, from a deal conducted in different state to one completed in their own state. Generally, switching has a negative effect on bidder announcement returns (-3.424): switch-deals have significantly lower CARs than non-switch deals: 1.251% against 2.876. Shifting states has a more pronounced negative impact in later deals, and when the switch is from same to different state.

**Keywords:** Multiple Acquisitions, Merger Announcement Returns, In-state and out-of-state Takeovers

---

## 1. Introduction

The general opinions on M&A performance range from “Hosanna” to “Crucify”! Target shareholders enjoy significant abnormal returns (Asquith & Kim, 1982; Malatesta, 1983; Datta et al., 1992; Hansen & Lott, 1996; Leeth & Borg, 2000).

Combined bidder-target returns are positive (Bradley et al., 1988; Healy et al., 1992; Berkovitch & Narayanan, 1993). “Sixty to seventy percent of all M&A transactions are associated with financial performance that at least compensates investors for their opportunity cost” (Bruner, 2001, p.14).

Targets’ shareholders profit while acquirers’ either gain or lose (Firth, 1980; Kaplan & Weisbach, 1992). M&As create value when high-q firms obtain low-q ones (Servaes, 1991). On average, mergers increase profits but reduce the sales of the merging firms (Gugler et al., 2003). Small insignificant abnormal returns to acquirers are present around the announcement (Halpern, 1983). Creating value for acquirers’ shareholders is a 50/50 bet at best (Cording et al., 2002). They make small gains before and large losses after (Leeth & Borg, 1994).

The null hypothesis of zero abnormal returns to acquirers should not be rejected (Roll, 1986). In other words, there is no positive return from mergers (Chatterjee & Meeks, 1996;

Roll, 1986; Salter & Weinhold, 1978).

Acquirers’ stockholders suffer about a 10% wealth loss over the 5 years after a merger (Agrawal et al., 1992).

An increasing and diverse literature is devoted to the role of geographic proximity in the transmission of information. Despite the substantial gains from international diversification, investors demonstrate a strong preference for domestic stocks (Kang & Kim, 2008). Recent studies show that this so-called *home bias phenomenon* in international portfolio selection is present even in the domestic scenario, and in fact investment returns in local holdings are relatively higher. For instance, Coval & Moskowitz (1999) present evidence that U.S. mutual fund managers exhibit a strong inclination to local stocks. The same has been concluded for individual investors too (Zhu, 2002; Ivkovic & Weisbenner, 2005). The observed local bias is largely driven by information asymmetries between local and distant investors. Proximity is associated with knowledge spillovers and information advantages. For example, Malloy (2005) sums up that geographically proximate analysts issue more accurate earnings forecasts.

In the M&A universe, geographical proximity is likely to facilitate the transmission of soft information through the interactions of management, possibly sharing customer and supplier networks, financial and information intermediaries. Moreover, closely situated bidders would have more access to relevant and updated target information, which in turn

might assist them in discovering a hidden treasure in the form of undervalued target firm. Proximity may also induce higher level of synergy gains, arising from more efficient use of common facilities and human capital.

Kang & Kim (2008) use state identifiers (in-state vs. out-of-state acquisitions) as their primary measure of geographic proximity but we consider it as being much more than just a distance instrument variable. Audretsch & Feldman (1996) stress that the most relevant unit of policy making is at the level of the state. Geographic nearness and in-state have some common points but they do not fully overlap. State-level government and legal systems, including state courts and legislatures, have an essential place in the planning, operation and governance activities of acquirers. In-state bidders may enjoy serious information advantages over out-of-state ones. Acquirers in their own state are in step with news on state regulations that might influence their corporate policies, performance, and initiatives. Generally, by pure logic these information and distant advantages imply that in-state bidders could make higher earnings from mergers in their own state. What happens though when serial acquirers *switch* from deals in their own state to mergers in different state, or vice versa? How does this shifting affect bidder returns? Is their experience effect of same-state deals that extrapolates to later in- or out-of-state deals.

We are looking for answers to all those questions, and even some more that emerge in the research process, by examining a large sample of U.S. domestic deals only conducted by frequent acquirers. We find that *switch*-deals make significantly less than *non-switch* ones (CARs of 1.251% against 2.876%), and switching has significantly negative impact on acquirer announcement returns (-3.424), which is even more pronounced in later deals and in those where the shift is from same to different state.

## 2. Hypotheses

### 2.1. The Seven Deadly Sins or What Drives Performance Down

There are seven hypotheses that aim to explain the patterns of returns from multiple acquisitions. The (1) *Diminishing Returns Hypothesis* and Keynes' fundamental Marginal Efficiency of Capital principle imply that the best opportunities are taken first, therefore subsequent merger returns are naturally doomed to deteriorate. Although the process is not static, the creation of new investment opportunities cannot keep pace with demands. That is why the wider the gap between deals, the lower the fall in performance. Logically, in highly competitive industries, greater decline should be observed.

Driven by (2) *Hubris* (Roll, 1986) and *over-confidence* (Malmendier & Tate, 2004) bidding managers undertake more risky projects and over-optimistically misjudge the potential returns to their investments. This erroneous overestimation is usually triggered by initial or past success, after which the careful process of choosing next targets might

be neglected, unreasonable prices offered, or higher leverage taken on to pay for subsequent takeovers. It has been well documented in the psychology and behavioral economics literature, and recently in finance too (Billett & Qian, 2008), that a common source of that pernicious overconfidence is the *self-attribution bias*. Langer & Roth (1975, p. 951) sum it up perfectly as "*heads I win, tails it's chance*", that is to say: acquiring managers overcredit their role in creating value and blame external factors or bad luck for poor outcomes. The Self-attribution bias is also propelled by the "better-than-average" effect, namely individuals tend to overstate their skills and competencies, relative to the average. To add fuel to the fire, paraphrasing Roll (1986), we have little reason to believe that individual CEOs would refrain from bidding because they have learned from their past mistakes. Even though some firms engage in many M&As, the average manager seizes the opportunity to make only a few mergers throughout his career. Therefore, multiple acquisitions are expected to be less profitable and even become value-destroying over time.

On the contrary, the (3) *Managerial Empire-building Hypothesis* attributes serial acquisitions and their worsening performance not to some managerial myopia and self-serving biases but to a rational self-interest (Jensen & Meckling, 1976; Jensen, 1986). In fact, as agency theory alerts of the potential loss caused by the separation of ownership and control, managers have incentives to grow their trusted firms beyond optimal size and gain more power and greater resource control rather than maximize shareholder wealth. This perpetuating unprofitable corporate growth is especially typical for more mature companies with substantial "free cash flows", which would be reinvested well below the cost of capital. In the longer run market forces discipline empire-building behavior and weeds out firms that have engaged in "bad" acquisitions. For instance, constantly failing bidding firms are more likely to end up being the next takeover candidates (Mitchell & Lehn, 1990). Apart from the market for corporate control as an external discipline mechanism, an internal governance instrument functions too: CEOs who get involved in value-reducing acquisitions are more probable to get fired than those making value-enhancing deals. (Lehn & Zhao, 2006). Anecdotal example of the inner connection between "bad" acquisitions and management turnover is the *Quaker Oats* takeover of *Snapple Beverages* in 1994, which translated into a one-day loss of between \$493 and \$958 million to *Quaker's* stockholders. An even more notorious incident is the *AOL-Time Warner* deal at the stunning value of \$165 billion, usually labeled "the worst merger disaster of all time".

The (4) *Overvaluation Hypothesis* holds that inefficient market misvaluation is a vital driver of M&As: acquirers rush to complete more deals when they are in temporary good position (Dong et al., 2006). They try their best to profit either by buying undervalued targets for cash at a price below fundamental value, or by offering equity for targets that, even overvalued, are less overvalued than them. These acquirers are more prone to using stock as a method of payment, and

although in the short run everything looks bright, all that glitters is not gold – in the long run they tend to underperform.

Just as a boa constrictor takes over its prey and while digesting it may not eat for weeks up to several months, acquirers also need time to absorb targets. Normally, it takes a considerable period to combine processes, align incentive systems, join physical assets, and most of all, tie different cultural systems together (Shrivastava, 1986). The (5) *Indigestion Hypothesis* explains degenerating performance with the inability to fully integrate subsequent targets due to short pauses between takeovers or purchasing firms that do not integrate well (Guest et al., 2004). In this train of thought, Kengelbach et al. (2011) proved that an increased time between 2 consecutive deals had a pronounced positive impact: a 1-year additional “cooling-off” time leads to 2.4 pps more in the next deal’s CAR.

The (6) *Accounting Manipulations Hypothesis* links misreporting and investment (including M&A) to explain merger frequency and outcomes. For instance, acquirers play the numbers game prior to in stock for stock deals to inflate the value of shares used to take over the target’s stock (Erickson & Wang, 1999). Due to creative accounting methods stock prices of such acquirers make U-turn both before and after the merger announcement (Louis, 2004; Gong et al., 2008). One lie leads to a hundred lies: managers who misstate accounting information must then keep on and invest more than optimal in order to maintain investors’ optimistic perceptions about future growth opportunities (Kedia & Phillipon, 2009). Kravet et al. (2012) also testify that managers exploit earning overstatements to enable takeovers, which turn out to be largely value destroying. Bens et al. (2012) shed more light into the vicious information twisting cycle: misstatements are driven by bad acquisition decisions in the past. Bidders, concerned about losing their job after a pessimistic market reaction to an acquisition announcement are more prone to data maneuvers to calm the public down and retain their positions. Erickson et al. (2012) are straightforward: CEOs indeed use the market for corporate control to conceal misreporting. Their 283 sample-firms, accused of committing accounting fraud by the SEC between 1985 and 2003, completed over 300 deals valued at \$305 billion in the aggregate. Fraud firms were more active both in terms of number and size of transactions. In fact, they were 37% more likely than non-frauds to announce a merger and shift total investment expenditures to takeovers. They favor diversifying M&As, subsidiaries to stand-alone entities, and generally, targets that are harder to value, have less public information and less similar operations. Moreover, closing deals in the end of the fiscal quarter is preferred and is usually done in a hasty manner to hide the dirty laundry. On one hand, the higher the number of deals, the greater the risk that the fraud will be discovered during negotiations. On the other, successful transactions cover up misreporting by further complicating the firm’s accounting information. The truth is, in the long run these concealment benefits outweigh the incremental detections

costs: slowly but surely those managers are cutting off the branches they are sitting on.

The (7) *Merger Program Announcement Hypothesis* / (*Capitalization Hypothesis*) interprets earnings decline as a logical consequence of the market reaction to the proclamation of serial acquisitions plan. The first deal will capitalize all or major part of the entire program’s worth (Asquith et al., 1983; Schipper & Thompson, 1983; Malatesta & Thompson, 1985). When a second merger intention is revealed, there is still some announcement gain since it is a new event but part of the value is already discounted in the share price. Since subsequent deals will not convey new information, apart from their timing, the magnitude of the excess returns they bring will diminish.

## 2.2. Practice Makes Perfect

... or at least this is how the saying goes but does it apply to the M&A story? Is know-how sufficient to ensure superior acquisition performance? Widely given examples such as *BancOne* (Szulanski, 2000) or *Cisco Systems* (Harvey, 2000) that developed and refined a complete working methodology for carrying out takeovers, show that serial acquirers have unconstrained potential to excel with practice. Organizational learning is the iterative dynamic process in which firms engage in experiences, draw inferences and store them for future tries (Levitt & March, 1988). It bears fruit in specific continuous and replicable activities, like manufacturing, but there could be numerous situations when it is futile: learning can be simply forgotten (Huber, 1991) or might lead to wrong or inappropriate inferences (Haleblian & Finkelstein, 1999). The *Organizational Learning Hypothesis* in its most simple, undifferentiated form states that pursuing multiple takeovers should automatically enhance performance (Hayward, 2002). Like mountain climbing – frequent acquirers start with small, lower-risk deals, build capabilities and ramp up to larger ones (Rovit et al., 2003). A crucial remark here: one size does not fit all – acquisitions are heterogeneous, amongst other things, they are made for different reasons. Therefore, the question of prior deals relevance to a focal transaction is dubious. Besides, since acquisition performance often fluctuates, bidders sometimes do not even look back for reference (Levinthal & March, 1993). Moreover, M&A are irregular events, so even if they learn their lesson, it might be already outdated by the time it is needed.

Although hard to achieve in general, learning is not a mission impossible: as the *specialized learning hypothesis* postulates, it is the quality rather than the quantity of deals that matters (Kengelbach et al., 2011). Hence, there is not just a single upward learning curve but also several that go down: related vs. unrelated acquisitions; domestic vs. cross-border; for private or public targets, etc. Purchasing a series of similar firms accompanied with appropriate generalization of insights leads to standardized know-how. In this connection, Hayward (2002) emphasizes that earlier mergers, too similar or dissimilar will negatively affect the current one. A chain of highly analogous takeovers echoes a singular

logic, for instance, to eliminate competition, achieve economies of scale and technical knowledge (Anand & Singh, 1997). The more identical deals are completed, a routine is established, prompting further similar acquisitions. Staying in that comfort zone makes bidders vulnerable to opponents whose M&As coevolve with markets. Yet, a sequence of diverse market-entering transactions is also tricky because it makes knowledge nontransferable – prior research often shows it brings adverse results (Lang & Stulz, 1994; Hayward, 2002). To sum up, there is an inverted U-shaped relationship between the (1) similarity of businesses of past and current mergers, (2) prior and present performance, and (3) the time elapsed. Acquirers need to develop specialist skills to exploit their existing opportunities and generalist skills to explore new ones, and most of all – to find the golden mean and balance between these two.

While the overall theoretical explanation above is focused on the bidding firm learning and the post-merger period, Aktas *et al.* (2009; 2011) propose, as they describe it, a “perhaps more palatable” alternative: *CEO learning*. If acquirer CEOs are getting more erudite from deal to deal, they improve their target selection and integration processing abilities. Thus, perfectly normal and anticipated, a CAR declining trend *should* be observed for risk averse rational and economically motivated managers. Experience aids managers to be more precise in the valuation of successive targets, which become less risky, *ceteris paribus*, and therefore – more pricey.

### 3. Literature Review

A pioneer research work is that of Schipper & Thompson (1983), who are probably the first to differentiate between single and series of mergers. With a sample of 55 firms that announced and carried out aggressive acquisition programs from 1952 to 1968, the authors argue that the expected value should be capitalized as soon as the entire program is announced or anticipated. Positive abnormal returns are evident 6 years in advance, reaching 13% in the 12 months up to and including the announcement of the program, and 0.5% in the event month. In the spirit of their proposition, market reaction to subsequent deal announcements is weak.

Asquith, Bruner & Mullins (1983) fully support the notion that mergers should not be treated as isolated events, pointing out that 72% of their sample firms make a second, and 45% make 4 or more bids during the period 1963-1979. However, they refute the capitalization hypothesis by emphasizing statistically significant cumulative excess returns of roughly comparable size throughout the first four acquisitions: 1.2% for the first bid and an average of 0.7% for the following 2-4 deals.

Malatesta & Thompson (1985) develop a model of stock price reactions that reflects both the economic importance of events and the extent to which they are expected. The attempts of 30 firms, engaged in 228 acquisitions prove to be fruitful. Consistent with Asquith *et al.* (1983), a relatively constant positive announcement effect implies that past deals

do not convey much information about the future ones. Moreover, investors cannot perfectly foresee the timing of next mergers.

With a much larger sample of 5,172 acquisitions conducted by 1,538 companies between 1966-1984, Loderer & Martin (1990) examine acquisition series that start and end with a 2-year non-acquisition hiatus. In the majority of cases bidder shareholders do benefit (average CAR of 0.7%) but the overall M&A picture might get confusing due to some large deals with negative NPV that leave an impression of an adverse correlation with target size. First acquisitions enjoy significantly larger average CARs of about 1%, compared to 0.2% for 2<sup>nd</sup>, and 0.3% for 3<sup>rd</sup> ones, suggesting that partial anticipation causes an estimation bias.

In line with behavioral learning theory, analyzing data from 449 acquisitions, Halebian & Finkelstein (1999) depict the relationship between M&A experience and performance as an U-shape. Champions of the takeover game seem to be either novices or experts. Therefore, it is not the quantity of experience that matters but its relevance: the larger the target-to-target similarity, the higher the likelihood of positive outcomes. Often, after their first deals, some acquirers inappropriately extrapolate their know-how to subsequent dissimilar acquisitions, whereas more mature players carefully discriminate between their targets. As a result of properly generalizing past knowledge, serial acquisitions within the same industry are considered to be an appealing strategy.

Fuller, Netter & Stegemoller (2002) observe 539 multiple acquirers of at least 5 firms in any 3-year window between 1990-2000. The limited time frame imposed implies that variation in bidder returns must be attributed to target and bid characteristics, rather than the bidder itself. Buying private or subsidiary targets translates into significantly positive gains regardless of the payment method, while acquiring public firms is a losing hand (especially when stock is offered). Furthermore, the 5<sup>th</sup> and higher bids are not as attractive as the initial ones (average CARs of 0.52% against 2.74%) since they convey less information. An additional explanation is that after a few quick takeovers, acquirers negotiate in a rush, leading to less synergy created in later deals.

Rovit & Lemire (2003) claim that constant acquirers in good and bad are the ones to deliver the highest value. Their 110 “frequent acquirers” (those with more than 20 deals between 1986-2001) outperform firms with 1-4 deals by a factor of 1.7. In addition, they have steadier performance and more often achieve returns exceeding their cost of capital.

Guest *et al.* (2004) scale the relative performance of single against multiple acquirers to conclude they balance out: serial bidders face lower announcement yields but higher long-run gains and profit margins. Overall, there is a distinct pattern of declining CARs with each subsequent merger. Exceptions to the rule are unsuccessful first-time bidders that apparently show some improvement. If originally you fail, you do better but you never catch up, while if initially you prosper, you will keep on doing so albeit with diminishing returns. The shorter the pause between deals, the steeper the downward curve.

*Ismail (2008)* is also devoted on the multiple vs. single M&A issue and the question whether “*the busiest are really the best*”. The considerable sample of 16,221 US takeovers between 1985-2004 demonstrates that serial acquirers earn an average of 0.97% but are out-performed by one-time bidders by 1.66%. Returns for multiple acquirers decrease after the 2<sup>nd</sup> deal but remain positive through the 4<sup>th</sup>, thus refuting the capitalization hypothesis. Generally, it does not matter how experienced acquirers are because the single ones still generate more. Nevertheless, consistent with the learning hypothesis, unsuccessful initial tries improve subsequent deal performance, whereas positive first deals often lead to deteriorating outcomes.

As another related branch of research, *Billett & Qian (2008)* are the first to explore the role of individual CEOs acquisition history. First deals exhibit insignificant mean abnormal returns of -0.12% but high-order deals (with order  $\geq 2$ ) are value destructive: with CARs of -1.51%, significant at the 1% level, the difference between the two also being significant. Overconfidence, stemming from self-attribution bias, developed from past M&A experience drives CEOs to undertake more of the wealth-reducing takeovers.

*Croci & Petmezas (2009)* are looking for the root of managerial decisions to acquire multiple times. To understand the motivation of 591 U.S. bidders that engaged in minimum 5 takeovers in a 5-year interval during 1990-2002, they inspect announcement CARs by deal order, instead of average firm returns. Diametrically opposite to *Billett & Qian (2008)* and other supporters of the hubris theory, the authors are firm: serial acquisitions are not driven by overconfidence or empire building behavior. Besides, they are not the result of a single overall plan. In fact, the rationale behind some additional acquisitions is superior target selection skills, proven by the large difference between value-increasing (winners) and decreasing (losers) deals in any deal order. Winners record an average CAR of 7.13% for initial deals, while losers suffer a loss of -5.88%. On top of that, almost 60% of first-round victors are adorned with laurel wreaths in their following pursuit too. Losers drop out of the game: they either learn from their mistakes or are disciplined by the market forces.

Since the total value of M&As from developing countries reached \$189.8 billion in 2007, a 17-fold increase during 1990-2007, *Rahaleh & Wei (2012)* extend the literature by exploring 2340 deals by frequent acquirers from 17 emerging markets between 1985-2008. There is a declining pattern of returns in all countries except China and Mexico but this difference between 1st and 2nd-3rd deals is significantly negative only for the most active in terms of number of deals – South Korea.

## 4. Data and Methodology

We start the data collecting by first, searching the Thomson Financial Securities Data Corporation's (SDC) U.S. Merger and Acquisitions (M&A) Database. All deals announced by U.S. public firms between January 1, 1977 and

June 30, 2015, were selected. We then match the SDC data on deal characteristics with return and market capitalization data from the Center for Research in Security Prices (CRSP) database, and with accounting data from Compustat. All transactions, for which the acquisition value was not reported, were excluded. To be included in the sample, the following conditions must be satisfied:

1. The deal is completed and with a disclosed dollar value of at least \$1 million<sup>1</sup>.
2. The bidder controls at the most 50% of the target's voting shares before the bid, and acquires at least 50%, thus its ownership ranges from 50% to 100% after the deal.
3. The target is a U.S. public firm, a private firm, or a subsidiary of a public firm, i.e. the sample comprises of domestic deals only.
4. Acquiring firms are publicly traded on the AMEX, Nasdaq, or NYSE and have 5 days of return data around the announcement date, and at least 60 days before the first takeover announcement on the CRSP file.
5. The acquirer completes bids for 5 or more targets in any 3-year window.
6. The deal value is at least 1% of the acquirer's market value of equity, the latter measured 2 trading days before the announcement. This constraint is adopted because such relatively small targets are not expected to have a noteworthy material effect. As a result, 2,015 observations were omitted.
7. The time between announcement and completion does not exceed 1,000 days.
8. When a bidder announces more than 1 deal on the same date, since we cannot isolate his return for a particular target, the one with the highest deal value is kept.

The refinement procedures yielded a final sample of 9,310 deals conducted by 741 multiple acquirers, 591 of which are presented in the sample once, 132 – twice, 17 – 3 times, and a single firm – 4 times. To bring it out once more, similar to *Fuller et al. (2002)*, our acquirers take over a minimum of 5 targets in any 3-year period, with an average of 12 deals per bidder. Half of the firms complete 11 and less mergers, 75% make less than 15 deals, and 95% - less than 27. The most active 1% of the sample firms takes credit for 38 transactions and more, with the record-holder having 107 M&As on his balance.

Suggested by *Martin (1996)* and gradually accepted as a norm, the methods of payment were grouped into 3 separate categories: (1) Cash financing, including combinations of cash, debt, and liabilities. (2) Financing with common stock includes common stock payments or a combination of equity and options or warrants. Lastly, (3) Combination financing comprises a mix of common stock, preferred stock, cash, debt, convertibles, and methods classified by SDC as “other”.

Applying the *Fama & French (1997)* industry

<sup>1</sup> Deal value is defined as the total value of consideration paid by the acquirer, excluding fees and expenses. The dollar value includes the amount paid for all common stock, common stock equivalents, preferred stock, debt, options, assets, warrants, and stake purchases.

classification, Table 1 summarizes the most prominent industry and the year with the highest number of takeovers for both parties in a merger out of every state. Overall, for acquirers *Trading* is the top industry, accounting for 1,861 or 20% of all bidders. Second comes *Banking* (1,405 or 15%),

along with *Business Services* (1,315 or 14%).

The picture is similar for targets: *Business Services* ranks first with around 19% of all acquired firms (1,733), followed by *Banking* (1,346 or 15%), and last but not least: *Real Estate* (1,055 or 11%).

Table 1. Takeover Activity by Industry.

State	Acquirer State			Target State			
	Top Industry	N	Peak Year	N	Top Industry	N	Peak Year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Alabama	Banking	118	1996	26	Trading	22	1996
Alaska	N/A	0	N/A	0	Trading	3	1995/96
Arizona	Business Services	43	1996	24	Trading	53	1996
Arkansas	Banking	11	1996	8	Banking	15	1997
California	Trading	339	1999	124	Business Services	455	1997
Colorado	Business Services	74	1996	30	Business Services	37	1997
Connecticut	Banking	28	1993	19	Banking	33	1997
District of Columbia	Measuring & Control	32	1996	18	Real Estate	16	2004
Delaware	Chemicals	14	1996/98	12	Healthcare	15	2006/10
Florida	Healthcare	51	1996	60	Banking	98	1996
Georgia	Business Services	150	1997	45	Business Services	71	1997
Hawaii	N/A	0	N/A	0	Restaurants & Hotels	6	2003
Idaho	Computers	3	1996/00/01	1	Banking	4	1991/96/97
Illinois	Trading	157	1997	65	Banking	80	1996
Indiana	Banking	59	1994	12	Banking	61	2005
Iowa	N/A	0	N/A	0	Banking	16	1997
Kansas	Banking	11	1997	5	Banking	18	1997
Kentucky	Communication	17	1996	17	Banking	28	1993/97
Louisiana	Banking	60	1996/97	12	Banking	59	1996
Maine	Banking	16	2001/03	3	Banking	6	1996
Maryland	Trading	200	1997	39	Business Services	49	1996
Massachusetts	Business Services	134	1997	37	Business Services	126	1997
Michigan	Banking	43	1993	11	Business Services	20	1997
Minnesota	Banking	41	1995	15	Business Services	27	1995
Mississippi	Banking	19	1997	8	Banking	12	1993
Missouri	Banking	54	1997	13	Banking	32	1995
Montana	Banking	16	2003/04	3	Banking	8	1995
Nebraska	Food Products	28	1997	13	Business Services	6	1995
Nevada	Restaurants & Hotels	9	1997/98/04	2	Banking	9	1996/97/98
New Hampshire	Healthcare/Electronic Equipment	9	1995	10	Business Services	10	1997/04
New Jersey	Pharmaceutical Products	71	1996	57	Business Services	55	1996
New Mexico	Healthcare	15	1991/93	5	Petroleum & Natural gas	13	1996
New York	Trading	274	1997	61	Business Services	133	1996
North Carolina	Banking	115	1997	27	Banking	45	1997
North Dakota	Banking	10	1994	4	Petroleum & Natural gas	7	2011
Ohio	Banking	112	1996	31	Banking	53	1996
Oklahoma	Petroleum & Natural gas	48	2003	11	Petroleum & Natural gas	46	2002
Oregon	Electronic Equipment	19	1996/98	7	Business Services	19	1997
Pennsylvania	Banking	89	1996	47	Real Estate	59	1996
Rhode Island	Recreational Products	13	1985	6	Business Services	7	1995
South Carolina	Trading	15	1997	12	Banking	17	1997
South Dakota	N/A	0	N/A	0	Business Services	2	1995/01/11
Tennessee	Trading	96	1997	35	Banking	48	1996
Texas	Petroleum & Natural gas	246	1996	106	Petroleum & Natural gas	191	1996
Utah	Banking	30	1997	11	Business Services	23	1996
Vermont	N/A	0	N/A	0	Business Services	4	2000/06
Virginia	Banking/ Trading	43	1994	25	Business Services	71	1997
Washington	Business Services	39	1998	12	Business Services	46	1997/98
West Virginia	Banking	38	1997	6	Banking	21	1996/97
Wisconsin	Banking	37	2011	8	Banking	18	1994
Wyoming	N/A	0	N/A	0	Petroleum & Natural gas	11	1996

The table reports, by U.S.A. States, the top industry and peak year for acquirers and targets. Industry data are organized using the *Fama & French (1997)* industry classification. Acquirers take over 5 or more firms in any 3-year window. Targets are comprised of public, private, and subsidiaries. Columns 2-5 display the industry and year with the most completed transactions for bidders, and columns 6-9 for targets, respectively.

About 53% of acquisitions (4,935) are in the same or related industry (deals between firms that share the same 2-digit SIC code are referred to as related transactions). Of these, a quarter is in the field of *Banking* (1,179), 20% in *Business Services* (958), and less than 10% in *Communications* (412).

As it is evident from the table, the peak year for the majority of deals is in the late 1990s – the boom of the *Fifth M&A Wave*, when intense acquisition activity coincided and was fueled by economic globalization and technological revolution. Not by chance, 6 of the 10 largest mergers in history took place exactly between 1998 and 2000<sup>2</sup>. As a whole, 1998 is the year with the most transactions in our sample – 874 (a little less than 10% of all mergers), shortly ahead of 1997 (852 deals, 9%). The third place is left for the last year of the prior century, 1999 – with 533 mergers (5%).

The *Six Merger Wave* flowed from 2003 to 2008, when the world economy was ruthlessly hit by the most severe economic crisis after the Great Depression. M&As slow down, reaching rock bottom in 2009 with only 121 completed deals, the lowest level since the early 1990s. In the last few years of the sample, activity is reviving but still far behind the best years of the pre-financial crisis period.

Table 2 reports the yearly mean and median bidder and target size. Panel A consists of all deals, while Panel B includes only the completed transactions in same state, i.e. where both sides in the merger have their headquarters in the same state. By acquirer size is meant the market value of equity, which is calculated as the price per share 2 days before the announcement date times the number of common shares outstanding as reported in CRSP. The target's market capitalization is assumed to be the deal value paid. The row before the last provides the average and median size for all deals conducted, while the final row of each panel shows the mean and median size for each unique bidder and target, counted only once. Thus, the mean (median) acquirer size in the full sample is \$5.47 billion (\$703 million) and \$287 million (\$33 million) for the targets.

Looking more closely into the table, we would see the general M&A trend reflected: the already discussed increase in activity during the late 1990s and early 2000s, plus the accompanying it apparent surge in size of the firms involved. Worthy to note, the year 2000 set a new climax as the average acquirer size reached the outstanding \$31.8 billion. An intriguing observation is that for a few years in the beginning of the century before the financial crisis of 2008, the mean size of the same state acquires exceeds the full sample average. For instance, in 1999 the average in-state bidder was worth almost \$20 billion, in 2001 - \$27 billion, and in 2000 - over \$40 billion. Obviously, this relatively higher mean size is due to some large-scale in-state mergers in these years. Generally, however, same state acquirers and targets tend to be smaller.

Table 3 continues with the comparative statistics of mean

acquirer and target size but across different deal characteristics, which became a norm in the M&A research: target status, methods of payment, industry relatedness (same 2-digit SIC code), and deal order (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, etc.). Once more, panel B displays the takeovers that happened in the same state only.

A bit over half of all targets are private firms (52% in the same state sub-sample), around 30% are subsidiaries (25% in the in-state sub-sample), and the rest 19% (21%) are public firms. A known fact in the M&A literature, deal value and acquirer size are larger when the target is a public entity. Besides, deals settled with equity are also larger compared to equity or mixed acquisitions.

Cash is the most frequent form of payment in the whole sample, used in roughly 40% of the cases but when acquiring in the same state, paying with banknotes is the second best choice (36%) after equity (38%).

Observing the full sample, 53% of all cases are horizontal mergers (in a related or same industry) and this tendency is intensified in the same state sub-sample, where 57% of the takeovers are in related industries. Possibly because of rival pressure especially in some highly competitive industries, the mean deal value in within-industry acquisitions is almost double the value of unrelated mergers. At the same time, acquirers are much larger on average in non-related businesses, which makes sense because in order to start expanding in diversifying acquisitions, one needs to reach certain capacity.

Consistent with the diminishing returns and hubris hypotheses, there is a general pattern of increasing amounts paid for subsequent targets. Numbers speak louder than words: there is a 118% rise in the average deal value of fifth and higher deals in comparison with the initial ones. Interestingly, with mean deal value of \$159 million for first targets against \$443 million for fifth and higher ones, this effect strengthens in the in-state sub-sample where multiple acquirers spend about 180% more on their later choices.

Analogous to *Fuller et al. (2002)*, we follow *Brown & Warner's (1985)* standard event study methodology to estimate CARs for the 5-day period (-2, 2) around the announcement date. We calculate the abnormal returns using a modified market model:

$$AR_i = R_i - R_m \quad (1)$$

where  $R_i$  is the return on firm  $i$  and  $R_m$  is the value-weighted market index return. The  $t$ -statistics are estimated using the cross-sectional variation of abnormal returns. In the plot where multiple acquirers play the leading role, market parameters based on time period before each bid are not estimated because there is alarming probability that previous takeover attempts might be included in the estimation period. Moreover, it has been proven for short-window event studies that weighting the market return by the firm's beta does not significantly improve estimation.

<sup>2</sup> Institute of Mergers, Acquisitions and Alliances

*Table 2. Mean and Median Size of Acquirers and Targets.*

Panel A: Full sample						Panel B: Same state sample					
Bidder			Target			Bidder			Target		
N	Mean	Median	Mean	Median		N	Mean	Median	Mean	Median	
(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
1978	1	3,723	3723	133	133	1978					
1979	1	4,955	4955	138	138	1979					
1980	1	4,183	4183	145	145	1980					
1981	27	3,731	786	524	30	1981	8	1,393	477	1,400	23
1982	43	1,620	569	152	20	1982	15	592	291	26	22
1983	65	2,111	550	119	23	1983	21	361	265	82	20
1984	68	718	394	90	26	1984	33	496	387	88	25
1985	63	1,599	389	139	55	1985	19	374	224	47	27
1986	107	2,935	894	313	83	1986	26	1,376	662	132	60
1987	72	2,304	1,087	162	59	1987	17	1,106	876	94	50
1988	81	3,596	1,080	250	50	1988	17	2,325	477	358	37
1989	83	3,288	772	134	46	1989	26	1,285	764	82	32
1990	92	1,779	363	112	21	1990	36	878	334	52	16
1991	91	1,941	518	124	17	1991	33	1,401	311	42	15
1992	179	1,532	499	79	18	1992	50	1,351	557	113	19
1993	255	1,606	643	122	19	1993	69	1,480	358	207	17
1994	402	1,837	502	99	23	1994	105	1,192	427	57	21
1995	453	1,933	581	170	24	1995	111	1,691	464	115	20
1996	616	2,616	590	207	28	1996	133	2,858	532	183	28
1997	852	3,513	667	194	30	1997	191	2,475	454	122	35
1998	874	5,250	901	461	44	1998	227	3,925	696	217	44
1999	533	17,233	1,334	522	50	1999	164	19,584	1,313	279	46
2000	448	31,810	3,130	790	100	2000	126	40,537	2,731	960	123
2001	311	17,850	1,901	1,209	57	2001	69	27,375	1,688	1,186	80
2002	333	8,337	1,361	266	50	2002	75	6,074	1,117	201	43
2003	325	7,736	1,175	340	48	2003	88	5,072	1,218	159	52
2004	331	11,694	1,693	513	69	2004	77	21,378	2,697	256	89
2005	392	12,532	1,431	519	58	2005	102	22,436	2,680	513	74
2006	362	10,637	1,550	441	58	2006	77	16,181	1,698	709	79
2007	356	16,923	1,913	420	75	2007	71	29,034	2,823	612	135
2008	230	19,230	2,261	536	75	2008	53	19,818	1,479	685	60
2009	121	16,389	2,384	1,096	60	2009	38	20,888	2,545	1,315	54
2010	224	11,949	2,058	402	101	2010	73	19,565	2,940	687	131
2011	233	11,385	1,700	329	87	2011	50	5,291	1,617	238	114
2012	247	10,084	1,604	346	62	2012	62	10,496	2,046	370	80
2013	216	12,391	1,612	368	66	2013	40	11,583	1,876	407	128
2014	222	10,226	1,826	511	72	2014	46	7,709	1,376	448	46
Total deals	9,310	9,179	1,053	385	44	Total Deals	2,348	11,005	905	351	44
Total firms	741	5,477	703	287	33	Total firms	192	5,090	598	249	27

The table reports the number of domestic mergers per year, the mean and median size of bidder and target firms. Acquirers take over 5 or more firms in any 3-year window. Targets are comprised of public, private, and subsidiaries. All acquirers are publicly traded companies listed on the NYSE, Nasdaq, or AMEX. Panel A presents the full sample, while Panel B – only the deals in the same state, i.e. where acquirer and target originate from the same state. Bidder size is the market value of equity 2 days prior to the acquisition announcement. Target size is the deal value paid. Dollar amounts are in millions.



**Table 3.** Comparative Sample Statistics: mean size across different deal characteristics.

	N	Deal value (\$M)	Min	Max	Acquirer size (\$M)	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Full sample	9,310	385	1	164,747	9,179	3	523,796
Target public status							
Private	4,724	99	1	27,861	7,744	3	523,796
Public	1,779	1,436	1.8	164,747	16,908	13.5	518,168
Subsidiary	2,699	197	1	16,600	6698	3	378,482
Payment method							
Cash	3,766	370	1	67,286	10,418	8	415,276
Equity	3,002	799	1	164,746	9629	3	523,796
Mixed	1,562	489	1	41,907	5337	7	518,168
Industry scope							
Related	4,935	473	1	89,168	8053	3	482,659
Unrelated	4,375	286	1	164,747	10,449	3	523,796
Deal order							
First	910	214	1	25,440	2930	3	246,499
Second	894	293	1	58,663	3308	6	261,219
Third	846	278	1	62,592	4066	4.5	482,659
Forth	811	208	1	41,143	4162	7	368,517
≥ Fifth	5,849	466	1	33,555	12,483	3	523,796

The table reports comparative sample statistics across different deal characteristics. Acquirers take over 5 or more firms in any 3-year window. Targets are comprised of public, private, and subsidiaries. All acquirers are publicly traded companies listed on the NYSE, Nasdaq, or AMEX. Panel A presents the full sample, while Panel B – only the deals in the same state, i.e. where acquirer and target originate from the same state. Bidder size is the market value of equity 2 days prior to the acquisition announcement. Target size is the deal value paid. Dollar amounts are in millions.

## 5. Results

### 5.1. Univariate Results

Table 4 reports the 5-day cumulative abnormal returns (CARs) to multiple domestic acquirers for the whole sample, and the subsamples, classified as *switch* and *non-switch*. *Switch* deals are all those transactions in which the acquirer changes, i.e., “switches” from acquiring in his own state to a different one, or vice versa: taking over in other than his own state, and then – in his state. On the contrary, *non-switch* are all those deals in which any two consecutive mergers occurred in-state (acquirer and target were from the same state) or out-of-state (acquirer purchased targets in different than his own state). The announcement returns are presented across different deal characteristics, including: target public status, payment method, industry and geographic scope, and deal order. Bidder and target belong to the same industry if they both share the same 2-digit SIC code. In-state acquisitions are those in which both parties are located in the same state, while out-of-state deals are those in which the acquirer takes over a target in a different than his own state.

For all bids, the CAR is a statistically significant positive 2.48%. This significant positive result is consistent with previous studies on frequent acquirers, more notably: for all bids Fuller *et al.* (2002) find the CAR is a statistically significant positive 1.77% (1990-2000). Ismail (2008) reports significant 1.22% (1985-2004) but his sample includes single acquirers too. Probably the closest study as a design and idea – Uysal *et al.* (2008), which is devoted to analyzing returns of acquirers in local and non-local transactions (based on geographical proximity), reports significant positive abnormal returns of 2.4%. We find that non-switch deals generate significantly higher returns than switch mergers,

2.88% vs. 1.25%, with the difference of 1.63 also being significant at the 1% level. Non-switch deals consistently perform better across all deal characteristics, except when acquiring public targets but the difference in this case is almost negligible. On the other hand, non-switch deals for private targets translate into positive significant announcement returns of 3.63% against the insignificant 1.18% for switch deals. The story remains the same when focusing on the settlement method: non-switch mergers thrive considerably better, with the greatest difference observed when mixed payment is being used: 3.39% vs. 0.30%. The highest return is generated through non-switching mergers in the same state, i.e., bidder and target headquarters are located in the same state, 7.75%, while the worst results are from unrelated-industry switch deals (-0.34%). Looking at deal order, irrespective of other characteristics, later deals destroy more value: switch transactions make on average 3.13% for the first 5 deals, while later on they make bidders suffer -0.21% abnormal announcement returns. First 5 non-switch deals bring 4.98% CARs, while transactions after the fifth carry on average 1.03%. Evidently, the process of changing from same to different state (different to same) has a negative impact on bidder announcement returns. In the following section, we try to shed more light on this particular problem.

### 5.2. Regression Analysis

In this section, we perform multivariate test on the determinants of acquirer's returns. In table 5, we present the results of regressing bidder CARs on numerous controls. As a standard notion in the literature, returns are estimated as a function of the following characteristics: method of payment (dummies for cash and equity exchange), and target public status (dummy variables for public and private targets).

Other variables include the log of acquirer's market value of equity, size (log of total assets), relative bidder-target size, market-to-book ratio, and market leverage. Each explanatory variable has been suggested by theory as a determinant of the market's perception. Dummy variables are included for time between deals (takes a value of one if the days between two consecutive deals exceed 365), competing bid, and hostile takeover. *Toehold* (at least a 5% ownership in the target firm prior to the acquisition announcement) is included, similar to *Ismail (2008)* who found a positive association between the same dummy and acquiring firm returns. Presumably, such preceding ownership reinforces the bidder's negotiating positions and/or it could lessen information asymmetries about the target's true value. Ultimately, this could lead to a Pareto improvement and paying a lower premium. Indeed, *Ismail (2008)* documented that bidders with toehold paid a mean premium of 56.7%, while others – nearly 70%.

Conjectured by previous studies, especially the ones focused on manager's hubris, we also include a dummy *Previous deal success*: takes the value of one if the immediate preceding deal has CARs exceeding zero. Supposedly, overconfidence stemming from self-attribution bias predicts that value destructive deals follow successful ones, the source of the overconfidence (*Billett & Qian, 2008, p. 1038*). On the other hand, disappointing previous experience disciplines.

The results are similar to what we have already noticed in the Univariate section, and in line with the general M&A findings that have already become standard. Evidently, relative size has a significant positive effect because, as already discussed earlier in the theoretical section, the larger the target relative to its acquirer, the more pronounced an effect of the acquisition, and the greater the market reaction. Contrariwise, size has a significantly negative effect since small firms fare much better than large ones when announcing an acquisition (*Moeller et al., 2002*).

Column 1 examines the following set of questions: first, what about experience from same and different states? How does a prior in-state deal influence later transactions conducted in a different state? We define two dummy variables “*in-state-experience*” which takes a value of one if the immediate preceding deal was in the acquirer's own state, and zero otherwise, and “*out-of-state-experience*” which equals one if the prior bid was in a different state. Then, we observe the different-state-subsample only to see if these two types matter and differ. There is near unanimous agreement in the M&A literature that acquisition history does not improve following deals but rather lead to value destruction. *Billet & Qian (2008, p. 1038)* comment: “*the negative return associated with frequent acquirers is only found in deals following previous acquisition experience.*” Bidders with no acquisition story show no evidence of hubris, i.e., overconfidence is developed from past acquisition experience. In this train of thought, both our experience-coefficients are negative. As a matter of fact, in-state-experience value is more negative (although less significant), possibly implying that managers become even more self-

assured after completing a deal in their own state.

Column 2 focuses on the effect of switching states on bidder returns. We define the dummy variable *Switch*, equals one if there is a shift in any two consecutive deals from same to different state, or vice versa. If two successive transactions are conducted both in-state or both out-of-state, there is no switch, in such case the dummy has a value of zero. It seems that the market for corporate control penalizes such shifts – the effect of the dummy is negative and significant -3.424% at the 10% level.

Column 3 is devoted to the idea of the change in serial acquisitions from same (different) to different (same) state, and deal order. As we already stated earlier, irrespective of same or different state, diminishing returns are evident in later deals – as the number of bids goes up, acquirer CARs go down. The negative influence of switching is more prominent in later deals: the coefficient for shifting during the first five deals is negative but insignificant -0.951, while later changes (deals after the fifth one) have a more negative and significant effect -5.179. Switching in later deals seems more detrimental, however, it is a Herculean task to attribute how much of this negative coefficient is due to the diminishing returns in later deals, and how much to the shift itself. Tackling this problem remains an open question for further research.

In Column 4 we develop the idea to check if there is difference between switching from same or from different state, and thus, introduce 2 new dummy variables: *Switch from same to different state* and *Switch from different to same state*. We find that decreasing bidder announcement return is due more to switching from same to different state: -3.424, significant at the 5% level against an insignificant -1.190. The explanation is some combination of lack of complete relevance of in- to out-of-state experience, inadequate extrapolating and maybe the already mentioned higher management confidence. At first sight it might look that in-state/out-of-state experience and switch are the same concept but this is not so. For instance, in two same-state-deals one after the other, there is no shift but there is the experience-factor.

### 5.3. Robustness Check

To test the robustness of our results, we try different event windows (-1, 1), (-5, 5), and also use the CRSP equally-weighted index returns as the benchmark (instead of the value-weighted). Moreover, we apply the market model as a supplement to the market adjusted model.

In addition, the statistical significance of the returns was tested using the *Patell (1976)* (see *Moller et al., 2004*) test corrected for time-series and cross-sectional variation of abnormal returns.

Furthermore, we try different definitions of a “multiple acquirer”, namely, instead of the imposed condition of a minimum of 5 completed deals in any 3-year-window, we use the more relaxed “at least 2 deals within a 5-year period” (*Billet & Qian, 2008*).

Table 4. Cumulative Abnormal Returns.

	Full sample			Switch sample			Non-switch sample			
	N	CAR	t-stat.	N	CAR	t-stat.	N	CAR	t-stat.	Switch – Non-switch
	9,310	2.481	(4.67)***	2,169	1.251	(1.16)	7,238	2.876	(4.77)***	-1.625***
By deal characteristics:										
Target public status:										
Private	4,724	3.030	(3.61)***	1,087	1.178	(0.71)	3,657	3.627	(3.75)***	-2.449**
Public	1,779	0.045	(2.15)**	455	2.931	(1.21)	1,386	2.641	(1.83)*	0.290
Subsidiary	2,711	1.464	(2.13)**	586	0.120	(0.07)	2,125	1.835	(2.44)**	-1.714**
Payment method:										
Cash	3,766	2.277	(3.70)***	846	2.221	(1.05)	2,974	4.559	(2.95)***	-2.338**
Stock	3,002	1.701	(3.00)***	779	1.460	(1.02)	2,255	2.524	(3.78)***	-1.064*
Mixed	1,562	2.709	(2.02)**	340	0.296	(0.10)	1,243	3.394	(2.28)**	-3.099*
Industry scope:										
Related	4,935	3.232	(3.97)***	1,189	2.561	(1.67)*	3,804	3.518	(3.73)***	-0.957*
Unrelated	4,414	1.609	(2.47)**	980	-0.340	(0.23)	3,434	2.165	(3.00)***	-2.505**
Geographical scope:										
In-state	2,348	5.329	(4.19)***	1,060	2.470	(1.55)	1,313	7.753	(4.13)***	-5.283***
Out-of-state	6,962	1.520	(2.69)***	1,109	0.085	(0.06)	5,925	1.795	(2.96)***	-1.710*
Deal order:										
Deal 1-5	4,281	4.627	(5.48)***	899	3.313	(1.79)*	3,382	4.976	(5.25)***	-1.664*
Deal > 5	5,126	0.726	(1.10)	1,270	-0.209	(0.16)	3,856	1.034	(1.35)	-1.243*

The table presents cumulative abnormal returns for all, switch and non-switch deals across different deal characteristics. Switch deals are those, in which acquirer changes from in-state to out-of-state or vice versa. Non-switch deals are those, in which acquirer conducts two consecutive transactions in his own state or in different states, i.e., there is no switching. CARs are calculated for the 5 days (-2, 2) around the announcement of a takeover (day 0) using the market model and the CRSP value-weighted index as a benchmark. Acquirers take over 5 or more firms in any 3-year window. Targets are comprised of public, private, and subsidiaries. All acquirers are publicly traded companies listed on the NYSE, Nasdaq, or AMEX.

\*\*\*, \*\*, \* Denote significance at the 1%, 5%, and 10% levels respectively.

Table 5. Cross Sectional regression Analysis of Cumulative Abnormal Returns.

	(1)	(2)	(3)	(4)
In-state-experience	-5.324 (1.80)*			
Out-of-state-experience	-4.733 (2.10)**			
Switch		-3.424 (1.76)*		
Switch deals 1-5			-0.951 (0.35)	
Switch deals > 5			-5.179 (2.05)**	
Switch from same to different				-3.424 (1.58)**
Switch from different to same				-1.190 (0.49)
Same state		3.428 (1.53)	3.489 (1.56)	
Previous deal success	3.493 (2.41)**	4.467 (3.32)***	4.320 (3.22)***	
Cash	3.192 (1.50)	3.678 (1.86)*	3.649 (1.84)*	3.753 (1.89)*
Stock	0.210 (0.16)	-0.364 (0.27)	-0.375 (0.28)	-0.273 (0.20)
Public	-5.264 (1.97)**	-1.636 (0.63)	-1.645 (0.63)	-1.587 (0.61)
Private	-1.520 (1.08)	0.400 (0.31)	0.430 (0.33)	0.460 (0.35)
Ln (Market value of equity)	7.057 (2.13)**	8.629 (2.70)***	8.632 (2.70)***	9.245 (2.91)***
Industry relatedness	1.463 (0.70)	0.637 (0.32)	0.663 (0.33)	0.619 (0.31)
Relative size	1.134 (0.99)	1.782 (1.54)	1.745 (1.51)	1.773 (1.53)
Size	-8.220 (2.70)***	-9.399 (2.97)***	-9.207 (2.90)***	-9.597 (3.03)***
Time to completion	0.023 (2.05)**	0.033 (2.93)***	0.033 (2.92)***	0.033 (2.96)***
Time between deals	2.170 (1.24)	1.445 (1.04)	1.353 (0.98)	1.553 (1.12)
Rival	12.702 (1.69)*	5.464 (1.02)	5.460 (1.02)	5.563 (1.04)
Toehold	-0.806 (0.32)	0.464 (0.18)	0.539 (0.21)	0.334 (0.13)
Hostile	3.102 (0.40)	-0.694 (0.10)	-0.364 (0.05)	-0.512 (0.07)
Market-to-book	-3.427 (1.05)	-1.965 (0.62)	-1.966 (0.62)	-2.066 (0.65)
Market leverage	10.605 (1.65)*	17.815 (3.13)***	18.209 (3.19)***	18.462 (3.24)***
Constant	41.700 (3.14)***	34.858 (3.01)***	33.734 (2.86)***	33.804 (2.88)***
Year and firm fixed effects	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.20	0.12	0.12	0.12
N	5,799	7,462	7,462	7,462

OLS regressions of the bidder's 5-day (-2, 2) CARs on numerous control variables. Switch is a dummy=1 if in any 2 consecutive deals bidder changes from same (different) to different (same) state. Controls include dummies for cash, stock, public, private, previous success, industry scope, time between deals, rival, toehold, and hostile. Coefficients, t-statistics (in parentheses), and economic sig. are reported. Robust standard errors adjust for heteroscedasticity (White, 1980) and clustering at the firm level. Year fixed effects for calendar years are included.

\*\*\*, \*\*, \* Denote significance at the 1%, 5%, and 10% levels respectively.

## 6. Conclusions

With a comprehensive U.S. domestic sample of multiple acquirers, we explore the announcement returns of bidders that *switch* from deals conducted in their own state to taking over targets located in different than their own state, and vice versa: shifting from out-of-state to in-state acquisitions. Overall, we find that the market for corporate control penalizes such shifts – the effect negative and significant – 3.424% at the 10% level. Switching in later deals is more detrimental, as well as changing from same to different state. Furthermore, we look at the influence of in-state and out-of-state experience on next deals, and discover that same-state-experience is even more negative, possibly implying that hubris is even more of a problem in local acquisitions. Our study contributes to the existing literature by providing and examining an original idea, which is an integral part of the growing literature on multiple acquisitions, and more precisely on frequent acquirer announcement returns. In evaluating the role of information and geographic proximity (shifting between same-state and different-state) in acquisition outcomes, we extend the literature by delivering a missing piece of the puzzle – we link the sources on serial acquisition, local bias evidence, and diminishing returns theories.

## References

- [1] Agrawal, A., Jaffe, J. & Mandelker, G. (1992). The Post Merger Performance of Acquiring Firms: A Re-Examination of An Anomaly, *The Journal of Finance*, vol. XLVII, Sep. 1992, pp. 1605-1621
- [2] Aktas, N., de Bodt, E., & Roll, R. (2009). Learning, hubris and corporate serial acquisitions. *Journal of Corporate Finance*, 15(5), 543–561. doi:10.1016/j.jcorpfin.2009.01.006
- [3] Aktas, N., de Bodt, E., & Roll, R. (2011). Serial acquirer bidding: An empirical test of the learning hypothesis. *Journal of Corporate Finance*, 17(1), 18–32. doi:10.1016/j.jcorpfin.2010.07.002
- [4] Anand, J., & Singh, H. (1997). Asset redeployment, acquisitions and corporate strategy in declining industries. *Strategic Management Journal*, 18, 99–118. doi:Article
- [5] Asquith, P., Bruner, R. F., & Mullins, D. W. (1983). The gains to bidding firms from merger. *Journal of Financial Economics*, 11(1), 121–139. doi:10.1016/0304-405X(83)90007-7
- [6] Asquith, P., & Kim, E. H. (1982). The Impact of Merger Bids on the Participating Firms' Security Holders. *Journal of Finance*, 37, 1209–1228. doi:10.1111/j.1540-6261.1982.tb03613.x
- [7] Audretsch, D. B., & Feldman, M. P. (1996). R&D spillovers and the geography of innovation and production, *American Economic Review* 86, 630–640.
- [8] Bens, D., Goodman, T., Neamtiu, M., (2012). Does investment-related pressure lead to misreporting? An analysis of reporting following M&A transactions. *The Accounting Review* 87, 839 – 865.
- [9] Berkovitch, E., & Narayanan, M. P. (1993). Motives for takeovers: An empirical investigation. doi:10.2307/2331418
- [10] Billett, M. T., & Qian, Y. (2008). Are Overconfident CEOs Born or Made? Evidence of Self-Attribution Bias from Frequent Acquirers. *Management Science*, 54(6), 1037–1051. doi:10.1287/mnsc.1070.0830
- [11] Bradley, M., Desai, A., & Kim, E. H. (1988). Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms. *Journal of Financial Economics*, 21, 3–40. doi:10.1016/0304-405X(88)90030-X
- [12] Bruner, R. F. (2001). Does M&A Pay? A Survey of Evidence for the Decision-Maker. *Journal of Applied Finance*, 12, 48. doi:10.2469/dig.v33.n1.1205
- [13] Chatterjee, R., & Meeks, G. (1996). The financial effects of takeover: Accounting rates of return and accounting regulation. *Journal of Business Finance and Accounting*, 23, 851–868. doi:10.1111/j.1468-5957.1996.tb01155.x
- [14] Cording, M., Christmann, P., & Bourgeois, L. J. (2002). A Focus on Resources in M & A Success: A Literature Review and Research Agenda to Resolve Two Paradoxes, 40.
- [15] Coval, J. D., & Moskowitz T., J. (1999). Home bias at home: Local equity preference in domestic portfolios, *Journal of Finance* 54, 2045–2073.
- [16] Croci, E. & Petmezas, D. (2009) Why Do Managers Make Serial Acquisitions? An Investigation of Performance Predictability in Serial Acquisitions.
- [17] Available at SSRN: <http://ssrn.com/abstract=727503> or <http://dx.doi.org/10.2139/ssrn.727503>
- [18] Datta, D. K., Pinches, G. E., & Narayanan, V. K. (1992). FACTORS INFLUENCING WEALTH CREATION FROM MERGERS AND ACQUISITIONS: A META-ANALYSIS. *Strategic Management Journal*, 13, 67–84. doi:10.1002/smj.4250130106
- [19] Dong, M., Hirshleifer, D., Richardson, S., & Teoh, S. H. (2006). Does investor misvaluation drive the takeover market? *Journal of Finance*, 61(2), 725–762. doi:10.1111/j.1540-6261.2006.00853.x
- [20] Erickson, M., Heitzman, S., & Zhang, X. F. (2012). The effect of financial misreporting on corporate mergers and acquisitions.
- [21] Erickson, M., & Wang, S. (1999). Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics*, 27, 149–176. doi:10.1016/S0165-4101(99)00008-7
- [22] Firth, M. (1980). Takeovers, Shareholder Returns, and the Theory of the Firm. *The Quarterly Journal of Economics*, 94, 235. doi:10.1111/j.1540-5915.1990.tb01250.x
- [23] Fuller, K., Netter, J. M., & Stegemoller, M. (2002). What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions. *The Journal of Finance*, 67(4), 1763–1793. doi:10.1111/1540-6261.00477

- [24] Gong, G., Louis, H., & Sun, A. X. (2008). Earnings management, lawsuits, and stock-for-stock acquirers' market performance. *Journal of Accounting and Economics*, 46(1), 62–77. doi:10.1016/j.jacceco.2008.03.001
- [25] Guest, P. M., Cosh, A., Hughes, A., & Conn, R. L. (2004). Why Must All Good Things Come To an End? the Performance of Multiple Acquirers. *Academy of Management Proceedings*, (February), S1–S6. doi:10.5465/AMBP.2004.13863814
- [26] Gugler, K., Mueller, D. C., Yurtoglu, B. B., & Zulehner, C. (2003). The effects of mergers: An international comparison. *International Journal of Industrial Organization*, 21, 625–653. doi:10.1016/S0167-7187(02)00107-8
- [27] Halebian, J., & Finkelstein, S. (1999). The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective. *Administrative Science Quarterly*, 44(1), 29–56. doi:10.2307/2667030
- [28] Halpern, P. (1983). Corporate Acquisitions: A Theory of Special Cases? A Review of Event Studies Applied to Acquisitions. *The Journal of Finance*, 38, 297. doi:10.2307/2327962
- [29] Hansen, R. G., & Lott, J. R. (1996). Externalities and Corporate Objectives in a World with Diversified Shareholder/Consumers. *Journal of Financial and Quantitative Analysis*, 31, 43–68. doi:10.2307/2331386
- [30] Harvey P. (2000). Cisco's secret for success. *Red Herring* 6 March: 36–37.
- [31] Hayward, M. L. A. (2002). When do firms learn from their acquisition experience? Evidence from 1990-1995. *Strategic Management Journal*, 23(1), 21–39. doi:10.1002/smj.207
- [32] Healy, P. M., Palepu, K. G., & Ruback, R. S. (1992). Does corporate performance improve after mergers? *Journal of Financial Economics*. doi:10.1016/0304-405X(92)90002-F
- [33] Huber, G. P. (1991). Organizational Learning: The Contributing Processes and the Literatures. *Organization Science*, 2(1), 88–115. doi:10.1287/orsc.2.1.88
- [34] Ismail, A. (2008). Which acquirers gain more, single or multiple? Recent evidence from the USA market. *Global Finance Journal*, 19(1), 72–84. doi:10.1016/j.gfj.2008.01.002
- [35] Ivkovic, Z. & Weisbenner S., J. (2005) Local does as local is: Information content of the geography of individual investors' common stock investments, *Journal of Finance* 60, 267–306.
- [36] Jensen, M. C. (1986). Agency Costs of Free Cash Flow , Corporate Finance , and Takeovers Agency Costs of Free Cash Flow , Corporate Finance , and Takeovers. *American Economic Review*, 76(2), 323–329. doi:10.2139/ssrn.99580
- [37] Jensen, M. C., & Meckling, W. H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS AND OWNERSHIP STRUCTURE Michael C. JENSEN and William H. MECKLING. *Journal of Financial Economics*, 3, 305–360.
- [38] Kang, J. K., & Kim, J. M. (2008). The geography of block acquisitions. *Journal of Finance*, 63(6), 2817–2858. doi:10.1111/j.1540-6261.2008.01414.x
- [39] Kaplan, S. N., & Weisbach, M. S. (1992). The Success of Acquisitions: Evidence from Divestitures. *Journal of Finance*, 47, 107–138. doi:10.2307/2329092
- [40] Kedia, S., & Philippon, T. (2009). The economics of fraudulent accounting. *Review of Financial Studies*, 22(6), 2169–2199. doi:10.1093/rfs/hhm016
- [41] Kengelbach, J., Klemmer, D., & Schwetzler, B. (2011). An Anatomy of Serial Acquirers, M&A Learning, and the Role of Post-Merger Integration. doi:10.2139/ssrn.1946261
- [42] Kravet, T., Myers, L. A., Sanchez, J. M., & Scholz, S. (2012). Do Financial Statement Misstatements Facilitate Corporate Acquisitions? *Papers.ssrn.com*, 806–834. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2029953](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2029953)
- [43] Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, Corporate Diversification, and Firm Performance. *Journal of Political Economy*, 102(6), 1248–1280. doi:10.2307/2138786
- [44] Langer, E. J., & Roth, J. (1975). Heads I win, tails it's chance: The illusion of control as a function of the sequence of outcomes in a purely chance task. *Journal of Personality and Social Psychology*, 32(6), 951–955. doi:10.1037/0022-3514.32.6.951
- [45] Leeth, J. D. & Borg, J., R. (1994). The Impact of Mergers on Acquiring Firm Shareholder Wealth: The 1905-1930 Experience. *Empirica*, 21, 1994: 221-244.
- [46] Leeth, J. D., & Borg, J. R. (2000). The Impact of Takeovers on Shareholder Wealth during the 1920s Merger Wave. *The Journal of Financial and Quantitative Analysis*, 35, 217. doi:10.2307/2676191
- [47] Lehn, K. M., & Zhao, M. (2006). CEO turnover after acquisitions: Are bad bidders fired? *Journal of Finance*, 61(4), 1759–1811. doi:10.1111/j.1540-6261.2006.00889.x
- [48] Levinthal and March. (1993). The Myopia of Learning. *Strategic Management Journal*, 95–112. doi:10.1017/CBO9781107415324.004
- [49] Levitt, B., & March, J. G. (1988). Organizational Learning. *Annual Review of Sociology*, 14(1), 319–338. doi:10.1146/annurev.so.14.080188.001535
- [50] Loderer, C., & Martin, K. (1990). Corporate Acquisitions by Listed Firms: The Experience of a Comprehensive Sample. *Financial Management*, 19(4), 17–33. doi:10.2307/3665607
- [51] Louis, H. (2004). Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74(1), 121–148. doi:10.1016/j.jfineco.2003.08.004
- [52] Malatesta, P. H. (1983). The wealth effect of merger activity and the objective functions of merging firms. *Journal of Financial Economics*. doi:10.1016/0304-405X(83)90009-0
- [53] Malatesta, P. H., & Thompson, R. (1985). Partially anticipated events: A model of stock price reactions with an application to corporate acquisitions. *Journal of Financial Economics*, 14(2), 237–250. doi:10.1016/0304-405X(85)90016-9
- [54] Malloy, C., (2005). The geography of equity analysis, *Journal of Finance* 60, 719–755.
- [55] Malmendier, U., & Tate, G. (2005). CEO overconfidence and corporate investment. *Journal of Finance*, 60(6), 2661–2700. doi:10.1111/j.1540-6261.2005.00813.x

- [56] Mitchell, M. L., & Lehn, K. (1990). Do Bad Bidders Become Good Targets? *Journal of Political Economy*, 98(2), 372. doi:10.1086/261682
- [57] Rahahleh, N., & Wei, P. P. (2012). The performance of frequent acquirers: Evidence from emerging markets. *Global Finance Journal*, 23(1), 16–33. doi:10.1016/j.gfj.2012.01.002
- [58] Roll, R. (1986). The Hubris Hypothesis of Corporate Takeovers. *The Journal of Business*. doi:10.1086/296325
- [59] Rovit, S., Harding, D., & Lemire, C. (2003). Turning Deal Smarts into M&A Payoffs: frequent buyers usually score the best deals, provided that they add skills in each transaction. *Merger and Acquisitions: The Dealmakers Journal* (09/01/03)
- [60] Salter, M. S., & Weinhold, W. A. (1978). Diversification via acquisition: Creating value. *Harvard Business Review*, 56, 166–176. doi:Article
- [61] Schipper, K., & Thompson, R. (1983). Evidence on the Capitalized Value of Merger Activity for Acquiring Firms. *Journal of Financial Economics*, 11(1-4), 85–119. doi:10.1016/0304-405X(83)90006-5
- [62] Servaes, H. (1991). Tobin's Q and the Gains from Takeovers. *The Journal of Finance*, 46, 409–419. doi:10.2307/2328702
- [63] Shrivastava, P. (1986). Postmerger Integration. *Journal of Business Strategy*, 7(1), 65–76. doi:10.1108/eb039143
- [64] Szulanski, G. (2000). Appropriability and the Challenge of Scope: Banc One Routinizes Replication. *Nature & Dynamics of Organizational Capabilities*, 69. doi:10.1093/0199248540.001.0001
- [65] Zhu, N. (2002). the Local Bias of Individual Investors. *SSRN Electronic Journal*, (02). doi:10.2139/ssrn.302620