The Tangible Value of Experiential Learning in M&A – New Evidence from Takeover of Experienced Deal-Makers

Dr. Indrajeet Mohite*

Abstract

Organisational learning theory predicts that firms and their top executives should get better in M&A deals with experience. Yet, existing studies on acquisition learning document mixed results and point, at best, to a negative association between deal experience and acquirer returns initially, with a partial turnaround only late in a deal sequence. The lower gains in subsequent acquisition deals are likely induced by exogenous factors, such as the serial acquirer's declining investment opportunity set, which can conceal the acquirer's potential to learn with experience. To tackle this issue this study examines the value of M&A experience by concentrating on the target firms' prior acquisitiveness and investigates whether experienced deal-makers learn to negotiate the deal in favour of their shareholders when they are takeover by other firms. I find that the value created by the acquirer is inversely related to the deal-making experience of the target firm. And, the premium received by the target shareholders is positively related to the target's deal-making experience. Our findings offer valuable contributions to the M&A learning literature as they suggest that deal making skills and negotiation ability improve with experience resulting in target firms securing more benefits for their shareholders at the expense of acquirers.

Keywords: M&A Learning, Acquisition experience, Mergers and Acquisitions, Serial acquisitions, Investment decisions.

JEL classification: G02, G14, G34

^{*} Indrajeet is from ICMA Centre, Henley Business School, University of Reading, Whiteknights Campus, U.K. I would like to thank Dr. George Alexandridis, Prof. Raghavendra Rau, Dr. Carol Padgett, Prof. Chris Brooks, Prof. Gulnur Muradoglu, Prof. Jerry Coakley, seminar participants at the Behavioural Finance Working Group, the ICMA Centre and the Young Financial Scholars Conference for their useful comments and suggestions. All errors are my own.

1. Introduction

Corporations have become a dominant force in our society and their decisions shape all our daily lives.¹ This study investigates experiential learning in one of the most important corporate investment decisions, Mergers and Acquisitions. In recent years, the worldwide investment in M&A has reached record levels.² In 2013, the total global M&A volume reached \$2.9 trillion.³ M&As have, indeed, become a significant component of the world economy. However, it is rather alarming that studies on wealth created in M&As find that acquirers do not create significant value for their shareholders (Jensen and Ruback, 1983 and Andrade, Mitchell and Stafford, 2001).

It has often been argued that acquirers can improve their acquisition performance as they gain deal-making experience such that acquisitions of firms with deal-making experience will outperform those without such experience (Lubatkin, 1983). Intuitively, the inferences drawn from previous deals (Haleblian and Finckelstein, 1999) and the threat of being disciplined for undertaking poor quality deals (Mitchell and Lehn, 1990 and Lehn and Zhao, 2006) should aid the acquirers to learn from their experience, and as a result undertake better deals in the future.

The learning curve theory predicts that if acquirers learn by doing M&A then the acquirers' acquisition performance will improve with their acquisition experience (Dutton, Thomas and Butler, 1984 and Lieberman, 1987). However, external factors can affect this relationship such as the acquirer's time-varying investment opportunity set (Klasa and Stegemoller,

¹ This is best illustrated by Serafaim (2013), "In 1980 the world's largest 1,000 publically listed companies made \$2.64 trillion in revenue, or \$7.0 trillion in 2012 dollars, adjusted using the consumer price index. They directly employed nearly 21 million people, and had a total market capitalization of close to \$900 billion (\$2.4 trillion in 2012 dollars), or 33 percent of the world total. By 2012, the Global 1000 made \$34 trillion in revenue. They directly employed 73 million people, hundreds of millions in their supply chains, and had a total market cap of \$28 trillion. These companies and their supply chains have an enormous potential to confer both good and ill on society. They create goods and services for customers, wealth for their shareholders, and jobs for millions of people."

² For additional information, please see the article titled "Global M&A at 7-year high as big deals return" published on 30th June, 2014 by Reuters for www.cnbc.com.

³ For more details, please see Dealogic global M&A review, 2013.

2007). So, simply finding a relationship between acquirer gains and acquisition experience is not sufficient to test learning unless other factors that can affect this relationship are controlled for. For example, Billet and Qian (2008) find that serial acquirers' higher-order deals create less value than their initial deals and conclude that acquirers do not learn, but actually become hubristic as they gain experience. However, Klasa and Stegemoller (2007) find similar result but attribute it to the changes in the firms' investment opportunity set, rather than the acquirers' growing hubris. They show that the acquirer gains diminish along the acquirers' deal-series because of the reduction in the acquirer's investment opportunity set. Given the challenges to assess the effects of experience, certainly, serial acquirers might have the potential to learn from their past experience and create value in their subsequent deals, but in order to accurately test the value of deal-making experience in M&A; we need an appropriate platform that is free from conflicting effects of other external effects.

In this study, I provide this relevant platform to examine whether corporate managers learn from past M&As. I examine how experienced acquiring managers apply their deal-making experience when their firm is acquired by another firm. Surprisingly, this has not been examined by previous studies on experiential learning in M&A. Analysing the targeted acquirer's acquisition experience, in contrast to that of the acquirer's, can offer a robust test of whether deal-making experience can actually create value in M&A because such analysis is based on a unique sample (i.e. a sample of experienced target firms) that is not affected by the conflicting effects of diminishing returns that affects acquirers' CARs along the dealorder.

Furthermore, Fuller, Netter and Stegemoller (2002) show that the gains to the acquirer depend on the bargaining ability of the target. They argue that one of the main reasons behind negative announcement returns to the acquiring shareholders when acquiring public targets, is the strong negotiating position held by public targets. However, it remains unclear how public targets become good negotiators in acquisitions. They could naturally be skilled

negotiators or alternately, they could develop this skill from their past acquisition experience. According to the 2013 M&A outlook report, 33% of corporates mentioned 'Deal Term Negotiation' as the most difficult aspect of M&A.⁴ Even the success of 2013's largest deal -Vodafone's sale of its stake in the Verizon Wireless joint venture for \$ 130 billion was attributed to the deal making experience of the two groups⁵.

The impact of experience on negotiation performance was demonstrated experimentally by Thompson (1990). In her seminal article, Thompson (1990) shows that negotiation performance improves with experience and most importantly negotiators were able to apply the negotiation skills learned in one bargaining task to their other negotiation decisions. She finds that the improvement in performance with experience comes from greater judgement accuracy about the opponent and higher bargaining aspiration. Moreover, looking at the ability to learn negotiation skills, Boven, Nadler and Thompson (2003) show that accumulation of tacit knowledge through previous observations can increase the negotiation performance. Additionally, looking at the ability to learn in M&A, Haleblian and Fincklestein (1999) suggest that acquirers can draw inferences from their past acquisitions and apply these inferences to improve the quality of their subsequent deals. But, the question remains, can acquirers apply these inferences when they get acquired by another firm? The above findings suggest that the target firm can draw inferences from its previous acquisitions and apply them to negotiate a better deal for their shareholders, thus retaining a larger portion of the gain from the deal, which will consequently result in the reduction of the gain available from the deal to their acquirer.

I investigate if targets learn from their previous acquisition experience. Specifically, if targets learn from their previous acquisition experience, then we should see following characteristics when it is acquired. First, acquirer gains will reduce when targets have more acquisition

⁴ Source: M&A Outlook 2013, Mergermarket and R.R. Donnelly.

⁵ Source: Capital Insights from EY Transaction Advisory Services.

experience. And, this should be further supported by the second characteristic; the premium received by the target should rise with increase in target's acquisition experience. I find evidence supporting the above conjectures.

In this study, I use a sample of U.S. public acquisition during 1995 - 2010. Over this period, U.S. public companies acquired \$ 4.38 trillion (in constant year 2010 dollars) worth of other U.S. public companies. I begin by examining the acquirer cumulative abnormal returns (CARs) over the 3-day (-1,+1) event window around the announcement date classified by target's acquisition experience. I follow a conservative approach in defining target's acquisition experience. It is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. I obtain similar results when I measure the acquisition experience over the entire sample period and when I measure the recent acquisition experience in the prior 5 year period. Although the choice of 10 years is arbitrary, Billet and Qian (2008) argue that the duration of at least preceding 5 years allows sufficient time span for the acquisition history to develop and it is also short enough so that previous acquisitions are likely to be informative while drawing inferences.⁶ The mean acquirer abnormal return when targets do not have any acquisition experience is -1.16%, while it is -2.95% when targets have acquisition experience of at least 5 deals. The difference of -1.79 percentage points is significant at 1% level and reveals the negative relation between acquirer CARs and the targets' acquisition experience.

In order to isolate and capture the clean effect of the target's acquisition experience on the acquirer abnormal returns, I calculate adjusted acquirer CAR. Adjusted acquirer CAR is the difference between acquirer CAR to the acquirer of the target with acquisition experience and the median acquirer CAR to the acquirers of similar targets with no acquisition experience.

⁶ The acquisition history consists of deals that are economically significant with no restriction on the target listing status. The deal is considered to be economically significant if the relative size of the deal to acquirer's pre-deal market capitalisation is at least 1% and the transaction value is at least \$ 1 million (Moeller, Schlingemann and Stulz, 2004).

Since I match the deal and the target characteristics, it allows me to compare acquirer CARs of similar targets that were acquired during similar period, but most importantly these targets have different levels of acquisition experience.⁷ Hence, the difference in acquirer CARs (i.e. adjusted acquirer CAR) is more likely to reflect the isolated effect of target's acquisition experience on acquirer CAR.⁸ The mean adjusted acquirer CAR when targets have acquisition experience of not more than 1 deal is -0.03%, while it is -2.14% when targets have acquisition experience of at least 5 deals. The difference of -2.11 percentage points is significant at 1% level and shows that adjusted acquirer CARs are negatively related to the targets' acquisition experience.

Next, I control for other determinant of acquirer CARs. In the multivariate framework I control for deal and firm characteristics along with year and industry effects and find consistent evidence. Acquirer CARs and adjusted acquirer CARs are significantly negatively related to the targets' acquisition experience. Specifically, just 1 deal increase in the targets' acquisition experience the gains to the acquiring shareholders by 0.16 percentage points, a decline of 11.35% given the mean acquirer CAR of -1.41%.⁹ If we consider the mean value of the acquirer market capitalisation (\$ 10877.82 mil) this translates into a reduction of \$ 17.4 million in value for the acquiring shareholders over a 3 day period around the announcement date. Then, I examine the premium offered to the target shareholders. I find that premium and adjusted premium are significantly positively related to the targets' acquisition experience.¹⁰ Specifically, just 1 deal increase in the targets' acquisition

⁷ Adjusted acquirer CAR (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the same year or one year before or one year after and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%). The control sample of deals includes acquisitions of targets without acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification.

⁸ Adjusted acquirer CAR also controls for the changing opportunity set of the acquirer (Klasa and Stegemoller, 2007). If the target and the deal characteristics are a function of the acquirer's evolving opportunity set, then comparing the acquirer's acquisition performance for targets with similar firm and deal characteristics but with different level of acquisition experience will allow us to capture the genuine effect of target's acquisition experience on acquirer CARs, rather than due to acquirer's changing opportunity set.

⁹ From Table 6 - specification (3).

¹⁰ Adjusted premiums are calculated using the same methodology followed to calculate adjusted acquirer CARs.

experience increases the premium to the target shareholders by 0.70 percentage points.¹¹ If we consider the mean value of the target market capitalisation (\$ 1257.38 mil) this equals \$ 8.8 million increase in the value of the premium received by the target shareholders.

Finally, I examine the acquirer's post-event abnormal stock performance. I document that the acquirer's post-event abnormal stock performance is significantly negatively related to the target's acquisition experience. This indicates that the market does not reverse its initial perception of the quality of the deal, and in fact it is likely to be an under-reaction. Moreover, acquirer's poor post-event abnormal stock performance might reflect the integration complexities experienced by the acquirer in realising the expected synergy from the deal while integrating targets with more acquisition experience, because such targets that previously acquired other businesses are likely to have a complex business structure, which can be challenging for the acquirer to integrate.

Taken as a whole, the combination of findings provides support for the conceptual premise that targets with experience are able to negotiate better deals for their shareholders and reduce the gains available from the deal to the acquirer. The results are robust to alternate specifications of target's acquisition experience, acquirer CAR and premium. The evidence suggests that acquirers should be particularly careful when they are acquiring experienced deal-makers.

This study has several important contributions. Firstly, it contributes to the empirical literature of behavioural finance by documenting clean evidence, for the first time, that deal-making experience can create value in M&A after examining a unique sample of target firms unaffected by the conflicting effects of diminishing returns due to external factors. Secondly, this study demonstrates for the first time that all else equal, deal-making experience can result in target shareholders extracting more benefits from the transaction through securing a higher

¹¹ From Table 7 - specification (3).

acquisition premium. This has significant implications for the literature on the value of managerial experience in improving negotiation skills. As a result of targets being able to negotiate better deals, acquiring firms are subject to more negative abnormal returns when they acquire targets having managers with superior skills. Hence, lastly, this study also provides new evidence on the importance of target deal-making experience as a determinant of returns to acquiring firms. It adds to the empirical literature of M&A by illustrating that the well-documented reduction in acquirer gains in public acquisitions is magnified by the deal-making experience of the target firm.

The paper is organised as follows. Section 2 describes the sample selection process, the methodology followed and reports the sample statistics. Section 3 presents the empirical analysis of acquirer gains. Section 4 examines the premiums. Section 5 investigates the post-event abnormal stock performance. And, I conclude in Section 6.

2. Data, Methodology and Sample Description

2.1 Data

This section describes the sample selection methodology. To begin with, I identify the acquisition history of all U.S. public acquirers and construct a database consisting of the deals completed by all U.S. public acquirers between 1990 and 2010, involving public, private or subsidiary target with transaction value of at least \$ 1 million and relative size of the deal to the acquirer's size of at least 1%.¹² From this database of acquisitions I identify acquisitions of public targets.¹³ This is the primary sample. The initial acquisition database facilitates in the identification of the acquisition history and the measurement of the acquisition experience of all public acquirers, and most importantly, of all public targets in the primary sample.

¹² All dollar values are in terms of 2010 dollar values. Monetary measures are reported in inflation-adjusted 2010 dollar values using the Consumer Price Index (CPI) from the data library on the website of Robert Shiller.

 $^{^{13}}$ For the acquisition history database, N = 21694 deals. For the primary sample, N = 2355 deals.

Next, in order to calculate the experience adjusted performance measures, I separate the sample into 2 parts: 1) sub-sample of targets with acquisition experience and 2) control sample of targets with no acquisition experience. I use the control sample of targets with no acquisition experience of the sub-sample of targets with acquisition experience. The following section describes the sample selection process, the methodology implemented and the variable definitions.

The initial acquisition history database consists of all the M&A deals from 1st January, 1990 up to 31st December, 2010 that were completed by a U.S. public listed firm. The acquisition data is obtained from SDC M&A database. I exclude spin-offs, recapitalizations, self-tenders, repurchases, minority stake purchases, acquisitions of remaining interest, exchange offers, privatizations and clustered deals.¹⁴ The target company is a U.S. or a non-U.S. firm which is either publicly held, private owned or a subsidiary of another company. The acquiring firm has sufficient coverage in the CRSP database. The ultimate parent of the acquiring firm is different from the ultimate parent of the target firm. The acquirer ownership of the target is less than or equal to 50% before the transaction and increases to greater than 50% after the transaction. Following the procedure used by Moeller, Schlingemann and Stulz (2004) and Billet and Qian (2008), the transaction value is at least \$ 1 million and the deal value is at least 1% of the acquirer's pre-bid equity value, which is measured one month before the announcement date. Last, to prevent the results from being biased because of outliers I trim the acquirer cumulative abnormal return and the premium offered to the target.¹⁵ The final acquisition history database consists of 21694 deals.

¹⁴ Clustered acquisitions are deals that are announced by the acquirer within 5 day from each other, thus it is difficult to isolate and attribute the acquirer's cumulative abnormal return for a particular clustered deal since it is affected by the announcement of another simultaneous deal by the same acquirer (Fuller et al., 2002).

¹⁵ I trim the acquirer cumulative abnormal returns at 1% and 99% levels following Alexandridis et al. (2012). The Premium paid to the Target (which is measured as the premium of the offer value to the Target's market value of equity 4 weeks prior to the announcement date, as reported by SDC) is trimmed beyond the standard acceptable range for premiums in empirical studies which is between [0,2] as suggested by Officer (2003) and Alexandridis et al. (2010).

The primary M&A sample that I examine consists of completed domestic public deals between 1995 and 2010 drawn from the initial M&A sample.¹⁶ The final primary M&A sample consists of 2355 deals. To calculate the experience adjusted performance, the primary sample is split into a sub-sample of targets with acquisition experience (N = 1216) and a control sample of targets with no acquisition experience (N = 1339).

2.2 Sample Description

Table 1 and Table 2 report the descriptive statistics of the sample by each year in the sample period and across different industries of the acquirer, respectively.¹⁷ Table 1 highlights the general trend in M&A activity during the 1990s and the 2000s. The swell in the M&A activity can be seen with increase in the number of deals and also in the average transaction value (between 1998-2000) during the 5th merger wave of the 1990s and (between 2005-2006) during the 6th merger wave of 2000s as described by Alexandridis et. al. (2012). Table 2 indicates the clustering of M&A activity by industry as illustrated by Harford (2005). While Oil, Gas, and Coal Extraction and Products industry has the largest average transaction value of \$ 5,082.39 million with 75 deals in the sample period, Consumer Durables industry had the lowest average transaction value of \$ 1,076.60 million with only 29 deals in the sample period. I control for year and industry fixed effects in multivariate regression analysis.

[Please insert Table 1 and Table 2 about here]

Table 3 presents the descriptive statistics of the target's acquisition experience which is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. Using the above mentioned research design, the final acquisition sample consists of 2355 completed public deals, out of which 1139 (48.37%) deals involved a target with no acquisition experience and

¹⁶ The primary sample begins from 1995 to allow at least previous 5 years to measure the acquisition history of the acquirer and the target.

¹⁷ Industry is classified according to Fama-French 12 industry classification.

1216 (51.63%) deals involved a target acquisition experience of at least one deal. The procedure followed to calculate the experience adjusted performance measures for the subsample of target's with acquisition experience using the control-sample of targets with no acquisition experience is explained in detail in the following methodology section. For targets with acquisition experience, the mean (median) acquisition experience is 2.59 (2) deals. The sum of target's acquisition experience is 3151 deals and represents the acquisition activity of the targeted-acquirers before becoming a target. This further shows that public targets build significant level of acquisition experience before being acquired.

[Please insert Table 3 about here]

2.3 Methodology and Variable Definitions

I follow the standard event study methodology suggested by Brown and Warner (1985) to calculate the market reaction and measure the acquisition performance of the acquirer. It is measured by calculating the cumulative abnormal return (CAR) to the acquiring firm's shareholders over a 3-day (-1,+1) event window around the deal announcement date (ACAR). I estimate the abnormal returns using the market model, where CRSP value-weighted index is used as the market benchmark.¹⁸

I calculate the experience adjusted acquisition performance variables (adjusted-acquirer CAR and adjusted-premium) to isolate the effect of target's acquisition experience on value creation. The experience adjusted performance allows me to examine the difference in the acquisition performance between acquiring a target with acquisition experience as compared to acquiring a similar target (i.e. with similar firm characteristics) but with no acquisition experience. The adjusted acquisition performance variables are defined as follows.

¹⁸ The market model parameters are estimated over a period of (-250,-15) around the deal announcement date, and the minimum estimation length is required to be equal to 30 days.

Adjusted acquirer CAR [Adjusted ACAR (-1,+1)] is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%).

Adjusted-premium is calculated as premium minus the median premium of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%). The premium is defined as the premium of the offer price to the target's share price 4 weeks prior to the deal announcement date (reported by SDC), with observations between zero and two.

The control sample of deals includes acquisitions of targets with no acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification. Since the target and the deal characteristics (including the announcement periods) are similar, the difference in acquisition performance can be attributed to the difference in the level of target's acquisition experience. This also allows adjusted-acquisition performance to control for the changes in performance due to the changes in firm's opportunity set suggested by Klasa and Stegemoller (2007). Moreover, Netter et al. (2012) mention that there is 3-fold drop in announcement returns between 1992 and 2009. Thus, if in general CARs have simply dropped over a period of time, then this will be controlled by calculating adjusted acquirer CAR.

The main explanatory variables is target's acquisition experiences and it is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. I measure acquirer's acquisition experience using the definition consistent with the definition followed for target's acquisition experience. Although, the choice of 10 years is arbitrary, it provides sufficient time span to

allow the acquisition history to develop, but is adequate enough so that past acquisitions are likely to be informative.¹⁹ That been said, I get similar results when I define acquisition experience based on 1) the entire sample period, and 2) the recent acquisition history built in the prior 5 years.²⁰

Variables related to the deal characteristics, the acquirer characteristics and the target characteristics are defined in the corresponding tables. Acquirer (and target) size and returns are calculated using information from CRSP. Accounting data is obtained from COMPUSTAT and all other deal characteristics are from SDC.

2.4 Deal and Firm Characteristics

Table 4 reports deal and firm characteristics for the full sample and for different levels of target's acquisition experience. Panel A reports deal characteristics and Panel B reports predeal acquirer and target characteristics. I examine the difference in acquisition characteristics between targets with and without acquisition experience. Column 8 presents the difference in characteristics between acquisitions of targets with acquisition experience of at least 5 deals and those without any acquisition experience.²¹ Similarly, column 9 presents the difference in acquisition characteristics between acquisitions of targets with acquisition experience of at least 5 deals and those with acquisition experience of 1 deal only. Next, to examine the direction and the strength of the linear association between a specific acquisition characteristic and the target's acquisition experience, I calculate and report the Pearson's

¹⁹ Although, it is practically difficult to disentangle the effect of firm learning and CEO learning, it is an area which demands further research. However it is important to note that firm learning is not inconsistent with CEO learning because firms can learn through CEOs. If there is no CEO turnover in the preceding years then firm acquisition experience will be the same as the CEO acquisition experience, which is more likely to be the case because CEO turnover is not common and therefore very small percentage of firms will be affected by CEO turnover events. Kaplan et al. (2012) reported that the rate of CEO Turnover from 1992 to 2007 is 15.8% with an average tenure as CEO of less than 7 years. Furthermore, given that the average CEO tenure is less than 10 years and my main results remain the same if I use 10-year, 5-year or the entire-sample pre-deal period to measure the acquisition history, suggests that the results are be robust to the CEO effect.

²⁰ As an additional robustness check, I winsorize the target's and the acquirer's acquisition experience at 10 deals and re-run the tests. I find qualitatively similar results.

²¹ The difference tests are based on two-sample t-tests for means and Wilcoxon-sign rank tests for medians. ***,** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

correlation coefficient between the given acquisition characteristic and the target's acquisition experience in column 10.

[Please insert Table 4 about here]

I find significant differences between acquisitions involving targets that develop acquisition experience as compared to acquisitions of targets that do not develop acquisition experience. Targets with acquisition experience and their acquirers are significantly larger in size. This is not surprising because firms grow as they acquire companies while it also takes larger firms to acquire more experienced (and hence larger) targets. This also reveals the intertwined nature of experience and size. While Schwert (2000) suggests that the bargaining power of the target firm depends on the firm size, Fuller, Netter and Stegemoller (2002) argue that larger the target relative to the acquirer, the stronger the target's negotiating position. However, Alexandridis et al. (2013) show that acquirers do not pay higher premiums but pay lower premiums for larger targets and still destroy value as they fail to deliver the expected synergy due to integration complexity involved in integrating large targets. Table 4 - Panel A shows that the relative size of the target to the acquirer is significantly larger for targets with acquisition experience as compared to those without any acquisition experience. This suggests that targets with acquisition experience hold a stronger position while negotiating the premium for their shareholders. To ensure that the experience effect that I document is beyond the size effect, I control for both acquirer and target size in cross-sectional regressions presented in the next section.²²

Acquisitions of targets with acquisition experience are less likely to have a pure cash payment or a pure stock payment, but more likely to have a mixed payment. If targets with

²² Another way to ensure that the target experience effect is free from the size effect is by examining the relation of premiums with experience. In their study, Alexandridis et al. (2013) show that acquirers pay lower premiums for larger targets due to high value-at-stake and deal complexity inherent in large deals. In contrast, I conjecture that targets with acquisition experience (and hence larger targets) will negotiate higher and not lower premiums because of the improvement in their ability to negotiate better deals as they learn with their experience from previous deals. I examine the predictions related to the premium received by the target in the following section and find evidence consistent with the above conjecture.

acquisition experience are larger targets than they are less likely to be financed with cash. (DeAngelo et al. 1984, Faccio and Massulis, 2005 and Alexandridis et al., 2013). Also, acquisitions driven by acquirer overvaluation are more likely to be paid for with stock (Shleifer and Vishny, 2003). The absence of significant relationship of pure cash and pure stock method of payment with target's acquisition experience suggests that under/over-valuation of experienced targets is less likely to motivate such acquisitions. Moreover, Travlos (1987) and Fuller et al. (2002) show that acquisitions of public targets paid with stock destroy value for the acquiring shareholders. I control for the effect of method of payment in multivariate analysis.

The differences seen in column (8) and (9) suggest that deal characteristics are not significantly different between targets with acquisition experience as compared to targets without acquisition experience. This is further supported by the corresponding insignificant correlation coefficients seen in column (10), however, I find that deals during merger waves are significantly negatively correlated with target's acquisition experience, whereas deals with target termination fee are significantly positively correlated with target's acquisition experience.

Mitchell and Lehn (1990) argue that value-destroying acquirers that get disciplined by the market are likely to resist their take-over and hence have a hostile attitude towards their acquirer's offer. Interestingly, results in Panel A highlight that target's attitude towards acquirer's offer does not become hostile or less friendly if the target has more acquisition experience. This suggests that targets with acquisition experience are not likely to be value-destroying acquirers that get disciplined by the market for corporate control.

Table 4 - Panel B shows that acquirers' Tobin's q, MTB and leverage (debt/assets) are not significantly different between acquisitions of targets with acquisition experience and those without any acquisition experience. If the firm's Tobin's q reflects its growth opportunities

(Billet and Qian, 2008) and management efficiency (Servaes, 1991 and Lang, Stulz and Walking, 1989) then we can conclude that acquirers of targets with acquisition experience do not have higher growth opportunities and do not employ better management teams relative to acquirers of targets without any acquisition experience. Moreover, the correlation coefficient of acquirer's FCF/assets with target's acquisition experience is significantly positive. Furthermore, although acquirer's acquisition experience increases with the target's acquisition experience, it does not happen at the same rate. On a closer look, the difference in acquirer's acquisition experience seen in column (8) (and column 9) suggests that when target's acquisition experience increases by 5 deals (4 deals), acquirer's acquisition experience on average increases by only 2.04 deals (1.89 deals). This suggests that targets with low level of acquisition experience interact with acquirers with high level or at the same level of acquisition experience, but targets with high level of acquisition experience interact with acquirers with low level of acquisition experience, which can give targets with high level of acquisition experience a stronger position while negotiating the deal. Lastly, I study the % of deals in which the acquirer remains independent till the end of the sample period (Non-Targeted Acquirer). In the full sample, 83.69% of deals involved non-targeted acquirers. When I classify the deals based on the target's acquisition experience, I find that for targets with no acquisition experience, 80.07% of deals involved non-targeted acquirers, but for targets with acquisition experience of 5 or more deals, 94.09% of deals involved non-targeted acquirer. The corresponding significantly positive correlation coefficient in column (10) suggests that the acquirers are more likely to remain independent after acquiring another experienced acquirer, and supports the defensive take-over argument suggested by Gorton, Kahl and Rosen (2009).²³

The characteristics of targets with acquisition experience are different from the characteristics of their acquirers. Statistics in Panel B show that target's debt/asset and FCF/assets are

 $^{^{23}}$ A defensive acquirer may take-over other acquirers (experienced targets/ targeted acquirers) to reduce the threat of their own take-over.

significantly higher for targets with higher level of acquisition experience relative to targets without acquisition experience. Furthermore, the relation between target's Tobin's q and acquisition experience is significantly negative, which might hint that targets with acquisition experience face lower growth opportunities relative to targets without acquisition experience. The correlation coefficient between target's MTB ratio and acquisition experience is positive but insignificant, although the difference in median values of target's MTB for different levels of target's experience, seen in column (8) and (9) is positive and significant. Overall, the statistics of target characteristics in Panel B suggest that, targets with acquisition experience have higher debt/assets and FCF/assets, face limited growth opportunities and are likely to be valued higher relative to targets without acquisition experience.

In next section, I present and discuss the empirical results.

3. Empirical Results

In this section I investigate the relation of acquire CARs and adjusted acquirer CARs with target's acquisition experience. Table 5 presents the results from the univariate tests, and Table 6 presents the results from the multivariate tests. Overall, the evidence from univariate and multivariate tests shows that acquirer announcement returns decrease significantly with target's acquisition experience and is consistent with my hypothesis.

3.1 Univariate Analysis

Table 5 reports the acquirer CARs and adjusted acquirer CARs around the announcement date classified by the acquisition experience of the target. The mean acquirer CAR for the full sample is -1.41%. When I classify the deals based on target's acquisition experience, I find that mean acquire CAR is -1.16% for targets with no acquisition experience but it is -2.95% for targets with acquisition experience of at least 5 deals. The difference of -1.79 percentage points is statistically significant at 1% level.

Furthermore, I report adjusted acquirer CAR calculated after using 2 different matching criteria. Adjusted ACAR1 is calculated when the sub-sample deals are matched with the control sample of deals based only on year of announcement and target's industry and listing status.²⁴ In adjusted ACAR2 I execute a more stringent matching criteria which is based on year of announcement, target's industry, listing status, similar relative size (+/-10%) and similar MTB ratio (+/-10%).²⁵ A more stringent matching criterion ensures that I compare highly similar deals while calculating adjusted acquirer CAR. Although I get similar results for adjusted ACAR1 and adjusted ACAR2, I focus on adjusted ACAR2 in the univariate and multivariate analysis since adjusted ACAR2 is calculated after using a stringent matching criterion.

The mean adjusted acquirer CAR (adjusted ACAR2) for the sub-sample of targets with acquisition experience is -0.60%. The negative difference indicates that overall the acquirer CARs of deals that involve targets with acquisition experience are lower than the acquirer CARs of similar deals that involve similar targets with no acquisition experience. When I classify adjusted acquirer CAR based on target's acquisition experience, I find that adjusted acquirer CAR becomes more negative with increase in target's acquisition experience, suggesting that acquisition performance of acquirers that take-over targets with acquisition experience is worse than the acquisition performance of acquirer CAR is -0.03% for deals involving targets with acquisition experience of 1 deals, but it is -2.14% for deals involving

²⁴ The sub-sample of deals consists of deals of targets with acquisition experience. The control sample of deals consists of deals of targets with no acquisition experience.

²⁵ The full sample consists of 2355 deals consisting of 1139 deals of targets with no acquisition experience and 1216 deals of targets with acquisition experience. To calculate the adjusted acquirer CAR I match deals of targets with acquisition experience to deals of similar targets without acquisition experience. Therefore, when I analyze adjusted acquirer CAR the sub-sample size depends on the number of deals for which a match has been found. When I use a more stringent matching criterion the sub-sample size reduces because it is difficult to find the right match for some deals due to the strong restrictions imposed on the matching procedure. Hence, a stringent matching criterion ensures comparison of highly similar deals but reduces the sub-sample size.

targets with acquisition experience of at least 5 deal. The difference of -2.11 percentage points is significant at 1% level. Figure 1 graphically illustrates the relation of acquirer's acquisition performance (acquirer CAR and adjusted acquirer CAR) with target's acquisition experience. The reduction in acquirer's gains with increase in target's acquisition experience is evident from the graph.

[Please insert Figure 1 about here]

In summary, the results from the univariate analysis suggest that acquirer CARs and adjusted acquirer CARs decline with increase in the targets' acquisition experience which is consistent with my hypothesis, and support the conjecture that experienced targets learn from their past deals and negotiate better deals which leads to the reduction in the extent of gains captured by the acquirer. However, in the above discussed comparisons I ignored that firms and deals differ in other dimensions, which could be driving the results. I take these determinants of acquirer CARs into account in the multivariate analysis and present it in the next section.

3.2 Multivariate Analysis

Table 6 presents the results of ordinary least squares regression of the acquirer's 3-day cumulative abnormal return [ACAR (-1,+1)] and adjusted cumulative abnormal return [ACAR (-1,+1)] on the target's acquisition experience and other control variables.²⁶ In this multivariate framework I control for acquirer's acquisition experience, deal and firm characteristics along with year and industry effects.

In all the specifications, I find evidence consistent with my hypothesis that predicts significant negative relation between acquirer gains (acquirer CAR and adjusted acquirer CAR) and the target's acquisition experience.²⁷ The coefficient estimates of the target's

 $^{^{26}}$ To ensure robustness, I also calculate abnormal returns using the modified market model and after altering the event window to (-2,+2). The results remain qualitatively unaltered from the main results.

²⁷ Performing the regression analysis based on White-adjusted standard errors produces qualitatively similar results.

acquisition experience are negative and statistically significant in all the specifications.²⁸ In specification (3), just 1 deal increase in the target's acquisition experience reduces the gains to the acquiring shareholders by 0.16 percentage points, a reduction of 11.35% given the mean acquirer CAR of -1.41%. If we consider the mean value of the acquirer's market capitalisation (\$ 10,877.82 mil) this translates into an average drop in value of \$ 17.4 million for the acquiring shareholders over a 3-day period around the announcement date. Furthermore, columns (8) and (9) indicate significant negative relation between adjusted acquirer CARs and target's acquisition experience, which suggests that the acquisition performance of acquirers that take-over target's with acquisition experience is worse than the acquisition performance of acquirers that take-over similar target's with no acquisition experience.

[Please insert Table 6 about here]

The coefficient estimate of the acquirer's acquisition experience is statistically insignificant, indicating that the acquirer's acquisition experience does not affect acquirer gains. Acquirers unable to learn with experience (because of hubris) predicts significant negative relation between acquirer gains and acquirer's acquisition experience (Billet and Qian, 2008), whereas learning predicts the opposite. However, considering that public deals mostly destroy value (Fuller, Netter and Stegemoller, 2002), no value destruction with acquirer's acquisition experience could be interpreted as value preservation as the acquirer gains experience. I also examined for a U-shaped relation between the acquirer gains and the acquirer's (as well as the

²⁸To ensure that the target experience effect documented in this study is beyond the size effect noted in previous studies it is essential to control for both acquirer and target size, however there is a possibility that the correlations between these variables could affect the results, especially because the correlation between target size and acquirer size is 50.9%. To verify that my results are not affected by model specifications, I run the following ACAR regressions 1) only with target's experience, 2) with target size, acquirer size and relative size, each separately and 3) with target size, acquirer size and relative size, altogether. In all the specifications, I find qualitatively similar results; the coefficient of the target's acquirer size in their abnormal-returns model specification include Officer (2003) and Baker et al., (2012).

target's) acquisition experience, but did not find any evidence to support that. The coefficient estimates of control variable are consistent with the finding of previous papers.

Since more experienced targets are larger and tend to be acquired by larger bidder, it is important to control for acquirer and target size in the cross-sectional regressions. Acquirer CARs are significantly negatively related to the size of the target. Alexandridis et al. (2013) find that acquirer announcement returns are significantly lower for larger targets even though they are paid lower premiums by the acquirer after anticipating the integration complexity associated with combining a larger target. Although target's with acquisition experience are more likely to be larger targets, I do not expect them to accept lower premium if they learn to negotiate effectively from their previous deals. I examine premiums in the next section and find that targets with acquisition experience do not accept lower premiums but negotiate higher premiums for their shareholders. To completely rule out the possibility that target size is driving the results to any extent, I re-run the regressions for small targets only (i.e. market cap. below the median target in our sample). The coefficient of target's acquisition experience (= -0.0037) remains significant at 5% level indicating that the negative association between acquirer CARs and target experience persists among deals involving smaller targets.

Furthermore, I find that all stock public deals have lower acquirer CARs, consistent with Travlos (1987) and Fuller, Netter and Stegemoller (2002). However, similar to Schwert (2000) I do not find that larger acquirers experience lower CARs as suggested by Moeller, Schlingemann and Stulz (2004). Moreover only in specifications (1) and (2), I find weak evidence that acquirer tobin's q is negatively related to acquirer CAR in line with Moeller, Schlingemann and Stulz (2004, 2005), but inconsistent with Servaes (1991) who finds that for public acquisition high q bidders have higher abnormal returns. For other specifications I find insignificant relation between acquirer Tobin's q and acquirer abnormal returns. Other control variables such as diversifying deal dummy, hostile deal dummy, competed deal dummy and target's tobin's q have insignificant coefficients.

Overall, after controlling for deal and firm characteristics along with year and industry fixed effects, I find that acquirer gains decline with increase in the target's acquisition experience. In the next section, I examine the driver behind the reduction in acquirer gains with the target's acquisition experience.

4. Premium and Target's Acquisition Experience

So far, we have seen that acquirer gains reduce with increase in the targets' acquisition experience. In this section, I investigate whether the source of this reduction in acquirer gains is related to the higher premiums negotiated by experienced targets. If targets negotiate higher premiums because of their acquisition experience then that could explain the reduction in acquirer CARs with increase in the target's acquisition experience. Certainly, as targets learn from their previous acquisitions and draw inferences from their past deals, it can enable them to precisely evaluate the synergies associated with the acquirers (Aktas et al., 2009), and hence set an effective reserve price to negotiate higher premiums (Fuller et al., 2002) for their shareholders. Therefore, I examine the relation between the premium and the target's acquisition experience after controlling for other factors that affect premium.

Table 7 reports the results of ordinary least squares regression of the premium and adjustedpremium on the target's acquisition experience and other control variables. Premium is defined as the premium of the offer price to the target's share price 4 weeks prior to the deal announcement date, with observations between zero and two.²⁹ Adjusted-premium is the difference in the premium received by a target with acquisition experience and the median value of premium received by similar targets with no acquisition experience around the same time period. Similar to adjusted acquirer CARs, adjusted premium is more likely to isolate

²⁹ The values of premium are reported by SDC. For robustness, I also examine other alternate definitions of premiums such as a) the Schwert's premium defined as the cumulative abnormal return to the target shareholders for the (-63,126) window around the deal announcement date following Schwert (2000) and b) the premium of offer price reported by SDC over the target's share price one month prior to the deal announcement date obtained from CRSP. I find qualitatively similar results.

the effect of target's acquisition experience on premiums. As seen in the previous multivariate analysis, I control for the acquirer's acquisition experience, deal and firm characteristics along with year and industry effects.

[Please insert Table 7 about here]

In all the specifications, I find significant positive relation between premium and target's acquisition experience. The coefficient estimates of the target's acquisition experience are positive and statistically significant in all the specifications. In specification (3), just 1 deal increase in the target's acquisition experience increases the premium to the target shareholders by 0.7 percentage points. If we consider the mean value of the target's market capitalisation (\$ 1257.38 mil) this translates into \$ 8.8 million increase in the value of the premium received by the target shareholders. Furthermore, columns (8) and (9) indicate significant positive relation between adjusted premium and target's acquisition experience, which suggests that targets with acquisition experience bargain higher premiums relative to similar targets without any acquisition experience.

The coefficient estimate of the acquirer's acquisition experience is statistically insignificant in all the specifications, indicating that acquirer's acquisition experience does not affect premium in public deals. The coefficient estimates of other control variable are in line with those suggested by previous papers. Consistent with Moeller, Schlingemann and Stulz (2004), I find that larger acquirers pay higher premiums. Moeller, Schlingemann and Stulz (2004) suggest that higher premiums paid by larger acquirers drive the negative relationship between acquirer size and returns. However, Alexandridis et al. (2013) attribute this effect to target size and report a robust inverse association between target size and acquirer returns after documenting that larger targets receive lower premiums.

As in Schwert (2000) and Alexandridis et al. (2013), I find that larger targets receive lower premiums. Interestingly, as more experienced targets will tend to be larger targets, the prior

evidence on target size reported by Alexandridis et al. (2013) suggests that acquirers pay lower premiums for larger targets (and therefore more experienced targets) after considering the complexities involved in acquiring a larger target, but even after that these acquirers of larger targets fail to create value. This might imply that the negative effect of target experience on acquirer CAR documented in this study could be due to the target size effect. However, I conjecture that although more experienced targets would be larger targets, these targets should negotiate higher premiums after learning to negotiate better deal from their past deal-making experience. Moreover, larger size should in fact increase their bargaining power (Schwert, 2000 and Fuller, Netter and Stegemoller, 2002). Indeed, I find significant positive relation between premium and target experience which shows that the significant negative association documented between acquirer CARs and target experience in this study is not likely to be driven by the target size. Furthermore, I find that resistance/hostility by the target management toward the acquirer's offer is positively related to the takeover premia, as shown by Schwert (2000). Moreover, takeover premia is positively related to bidding competition (Officer, 2003). I further control for the method of payment, and acquirer and target valuations (Moeller et al., 2004). The coefficient estimates of pure stock payment and target tobin's q are insignificant in all the specifications, but acquirer tobin's q is significant and positive only when the specifications do not include year and industry fixed effects.

Target management has a potential conflict of interest with their shareholders when their firm is taken-over. On one hand, the target management can bargain to be retained by the acquirer and accept lower premiums. However, I do not find that targets with acquisition experience accept lower premium, rather they bargain higher premium which contradicts the management retention hypothesis. This also supports Bargeron et al. (2009), who do not find reduction in premium when the target CEO is retained by the acquirer. On the other hand, target management can resist the acquirer's offer to protect their private benefits, and the acquirer has to adjust the premium upwards to overcome the resistance and 'sweeten the deal' for the target shareholders. Schwert (2000) finds that target's resistance to the acquirer's offer leads to higher premiums. I control for target's hostile attitude towards the acquirer's offer in the multivariate framework. Most importantly, it is essential to note that, in contrast to the target learning hypothesis, both the above mentioned conjectures do not predict decline in acquirer gains. In first case acquirers are expected to gain by paying a small proportion of the synergy to the target shareholders, whereas in the second case acquirers are expected to gain by removing the incompetent target management and efficiently using the acquired assets.

Overall, I find that acquirer gains reduce with the target's acquisition experience and the premium received by the target shareholder is positively related to the target's acquisition experience. When an experienced acquirers get acquired, they negotiate deals in favour of their shareholders using their past deal-making experience, which lowers the gains available to their acquirers. In the next section, I examine if the market reverses its initial opinion about the deal by analysing the acquirer's post-event abnormal stock performance.

5. Post-Event Stock Performance

I have investigated the relation of short-run acquisition performance of the acquirer with the target's acquisition experience. In this section I verify if the market re-estimates its initial perception of the deal quality and re-adjusts the short-run acquisition performance in its 12-month post-event abnormal stock reaction.

Table 8 reports the results of OLS regressions of the acquirer's post-event (12-month) abnormal stock performance - a) buy-and-hold abnormal returns (BHAR), b) calendar-time abnormal returns (CTAR) on target's acquisition experience after controlling for firm and deal characteristics along with industry and year fixed effects, following Klasa and Stegemoller (2007).

[Please insert Table 8 about here]

For BHAR and CTAR estimation acquirers enter the portfolio on the month following the deal announcement month and remain for 12 months. If the acquiring firm acquires another target within the 12 month window then this runs up until the month prior to the announcement month of the next deal. If the acquiring firm has missing returns in the post acquisition period then I exclude those months. BHAR is estimated as BHAR_i = $\prod_{t=1}^{T} (1 + R_{i,t}) - \prod_{t=1}^{T} (1 + R_{Size-BM Benchmark,t})$ where $R_{i,t}$ is the return of acquirer *i* at month *t*, $R_{Size-BM Benchmark,t}$ is the return of the corresponding 25 size and book-to-market reference portfolio for the same month *t*, and *T* is the number of months in the post acquisition period. CTAR is estimated as $CTAR_i = \frac{\sum_{t=1}^{T} R_{i,t} - R_{Size-BM Benchmark,t}}{T}$ where $R_{i,t}$ is the return of acquirer *i* at month *t* and $R_{Size-BM Benchmark,t}$ is the return of the corresponding 25 size and book-to-market acquisition period. CTAR is estimated as $CTAR_i = \frac{\sum_{t=1}^{T} R_{i,t} - R_{Size-BM Benchmark,t}}{T}$ where $R_{i,t}$ is the return of acquirer *i* at month *t* and $R_{Size-BM Benchmark,t}$ is the return of the corresponding 25 size and book-to-market reference portfolio for the same month *t* and $R_{Size-BM Benchmark,t}$ is the return of the corresponding 25 size and book-to-market reference portfolio for the same month *t* and $R_{Size-BM Benchmark,t}$ is the return of the corresponding 25 size and book-to-market reference portfolio for the same month *t* as in Mitchell and Stafford (2000), and *T* is the number of months in the post acquisition period. Specifications (1) and (2) are based on acquirer BHAR, whereas specification (3) and (4) are based on acquirer CTAR.

Overall, I find that acquirer's long-run stock performance is significantly negatively related to the target's acquisition experience, which suggests that the market does not reverse its initial reaction to the deal, but in fact the initial market reaction to the acquisition of a target with acquisition experience is more likely to be an under-reaction.³⁰

6. Conclusion

Certainly, the corporations' quest for superior performance is universal and one way to achieve this goal is by learning from past experiences. This study has studied the impact of experiential learning on value-creation in M&A. Previous papers on acquisition experience

³⁰ The 12-month post-event period is also likely to include the deal-completion announcement and hence it possible that the market initially adjusts its reaction for the probability of deal completion and therefore the observed short-run market reaction is lower than the market's actual perception of the quality of the deal.

focus on the acquirer's acquisition experience (Haleblian and Finckelstein, 1999, Hayward, 2002, Billet and Qian, 2008 and Kengelbach et al., 2012). However, the negative effect of external factors such as serial-acquirer's diminishing investment opportunity set can mute the findings of these studies and mask the acquirer's potential to learn with acquisition experience. Given the limitations involved in measuring the direct effect of experience on acquirer gains, this study, provided a new platform to examine whether corporate managers learn from past M&A deals. Unlike previous papers that investigate whether acquirers learn to create value in their subsequent deal, I investigate whether experienced deal-makers learn from their previous acquisition experience and negotiate the deal in favour of their shareholders when they are taken over.

I find that, indeed, the abnormal returns to the acquirers around the deal announcement date decline when the target firms have superior acquisition experience. Moreover, the premium received by the target shareholders is positively related to the target's acquisition experience. The results are robust to alternative return and premium measures, experience specifications and the inclusion of other controls. Additionally, the market's initial reaction does not reverse over time.

Taken as a whole, this study provides clean evidence that acquisition experience can create value in M&A after examining a unique sample of target firms unaffected by the conflicting effects of external factors. It shows that all else equal, as a result of targets being able to negotiate better deals, acquiring firms are subject to more negative abnormal returns when they acquire targets having managers with superior skills. In light of the evidence presented in this study, indeed, acquirers should be particularly cautious while negotiating with experienced deal-makers.

7. References

- Andrade, G., Mitchell, M.L. and E. Stafford, 2001, New evidence and perspectives on mergers, Journal of Economic Perspectives 15 (2), 103-120.
- Aktas, N., de Bodt, E. and R. Roll, 2009, Learning, hubris and corporate serial acquisitions, Journal of Corporate Finance 15, 543-561.
- Alexandridis, G., Fuller, K.P., Terhaar, L. and N.G. Travlos, 2013, Deal size, acquisition premia and shareholder gains, Journal of Corporate Finance 20, 1-13.
- Alexandridis, G., Mavrovitis, C.F. and N.G. Travlos, 2012, How have M&As changed: Evidence from the 6th merger wave, European Journal of Finance 18, 663–688.
- Alexandridis, G., Petmezas, D. and N.G. Travlos, 2010, Gains from mergers and acquisitions around the world: New evidence, Financial Management 39, 1671-1695.
- Andrade, G., Mitchell, M.L. and E. Stafford, 2001, New evidence and perspectives on mergers, Journal of Economic Perspectives 15 (2), 103-120.
- Baker, M., Pan, X. and J. Wurgler, 2012, The effect of reference point prices on mergers and acquisitions, Journal of Financial Economics 106, 49-71.
- Bargeron, L., Moeller, S., Schlingemann, F. and C. Zutter, 2009, Do target CEOs sell out their shareholders to keep their job in a merger, ECGI: Finance Working Paper No. 236/2009
- Billet, M.T. and Y. Qian, 2008, Are overconfident CEOs born or made? Evidence of self-attribution bias from frequent acquirers, Management Science 54, 1037-1051.
- Boven, L., Nadler, J. and L. Thompson, 2003, Learning negotiation skills: Four models of knowledge creation and transfer, Management Science 49(4), 529-540.
- Brown, S.J. and J.B. Warner, 1985, Using daily stock returns The case of event studies, Journal of Financial Economics 14, 3-31.
- Burch, T., 2001. Locking out rival bidders: the use of lockup options in corporate mergers. Journal of Financial Economics 60, 103–142.
- Camerer, C., 1995, Individual decision making. J. H. Kagel, A. E. Roth, eds., The Handbook of Experimental Economics, Princeton University Press, Princeton, NJ, 587–703.
- DeAngelo, H., DeAngelo, L. and E.M. Rice, 1984, Going private: Minority freezeouts and stockholder wealth, Journal of Law and Economics 27, 367-401.
- Dutton, J., Thomas, A. and J. Butler, 1984, The history of progress functions as a managerial technology, Business History Review, 58, 204-233.
- Faccio, M. and R. Masulis, 2005, Choice of payment method in European mergers and acquisitions, Journal of Finance 60(3), 1345-1388.
- Fuller, K., Netter, J. and M. Stegemoller, 2002, What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions, Journal of Finance 57, 1763–1793.
- Gervais, S. and T. Odean, 2001, Learning to be overconfident, Review of Financial Studies 14, 1–27.
- Gorton, G., Kahl, M. and R. Rosen, 2009, Eat or be eaten: A theory of mergers and firm size, Journal of Finance 64(3), 1291-1344.
- Haleblian, J. and S. Finkelstein, 1999, The influence of organizational acquisition experience, Administrative Science Quarterly 44, 29–56.
- Harford, J., 2005, What drives merger waves?, Journal of Financial Economics 77(3), 529-560.
- Hayward, M.L.A., 2002, When do firms learn from their acquisition experience? Evidence from 1990–1995, Strategic Management Journal 23, 21–39.

- Jarrell, G.A., Brickley, J.A. and J.M. Netter, 1988, The market for corporate control: The empirical evidence since 1980, Journal of Economic Perspectives 2, 49-68.
- Jensen, M., 1986, Agency costs of free cash flow, corporate finance and takeovers, American Economic Review 76 (2), 323-329.
- Kaplan, S. and B. Minton, 2012, How has CEO turnover changed?, International Review of Finance 12(1), 57-87.
- Kengelbach, J., Klemmer, D.C, Schwetzler, B. and M.O. Sperling, 2012, An anatomy of serial acquirers, M&A learning and the role of post-merger integration, SSRN working paper No. 1946261.
- Klasa, S. and M. Stegemoller, 2007, Takeover activity as a response to time-varying changes in investment opportunity sets: Evidence from takeover sequences, Financial Management 36, 19-43.
- Lang, L., Stulz, R. and R. Walkling, 1989, Managerial performance, tobin's q, and the gains from successful tender offers, Journal of Financial Economics 24 (1), 137-154.
- Lehn, K. and M. Zhao, 2006, CEO turnover after acquisitions: are bad bidders fired?, Journal of Finance 61, 1759–1811.
- Lieberman, 1987, The learning curve, diffusion and competitive strategy, Strategic Management, 8, 441-452.
- Lubatkin, M.H., 1983, Mergers and the performance of the acquiring firm, Academy of Management Review 8, 218-225.
- Malmendier, U. and G.A. Tate, 2008, Who makes acquisitions? CEO overconfidence and the market's reaction, Journal of Financial Economics 89, 20–43.
- Mandelker, G., 1974, Risk and return: The case of merging firms', Journal of Financial Economics 1, 303-335.
- Mitchell, M.L. and K. Lehn, 1990, Do bad bidders become good targets? Journal of Political Economy 98, 372–398.
- Mitchell, M. and E. Stafford, 2000, Managerial decisions and long-term stock price performance, Journal of Business 73, 287-329.
- Moeller, S.B., Schlingemann, F.P. and R.M. Stulz, 2004, Firm size and the gains from acquisitions, Journal of Financial Economics 73, 201-228.
- Moeller, S.B., Schlingemann, F.P. and R.M. Stulz , 2005, Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave, Journal of Finance 60(2), 757-782.
- Morck, R., Shleifer, A. and R.W. Vishny, 1990, Do managerial objectives drive bad acquisitions?, Journal of Finance 45, 31-48.
- Netter, J., Stegemoller, M. and M.B. Wintoki, 2011, Implications of data screens on merger and acquisition analysis: A large sample study of mergers and acquisitions from 1992 to 2009, Review of Financial Studies 24, 2316-2357.
- Officer, M. S., 2003, Termination fees in mergers and acquisitions, Journal of Financial Economics 69, 431 467.
- Roll, R., 1986, The hubris hypothesis of corporate takeovers, Journal of Business 59, 97–216.
- Schwert, W. G., 2000, Hostility in takeovers: In the eyes of the beholder?, Journal of Finance 55, 2599-2640.
- Servaes, H., 1991, Tobin's Q and the gains from takeovers, Journal of Finance 46 (1), 409-419.
- Shleifer, A. and R. Vishny, 2003, Stock market driven acquisitions, Journal of Financial Economics 70, 295–311.
- Thompson, L., 1990, The influence of experience on negotiation performance, Journal of Experimental Social Psychology 26(6), 528-544.

Travlos, N.G., 1987, Corporate takeover bids, methods of payment, and acquiring firms stock returns, Journal of Finance 42, 943-963.



Figure 1: Acquirer's deal performance and target's acquisition experience

This figure shows the acquirer's deal performance for different levels of target's acquisition experience. The acquisition sample and sub-sample of targets with acquisition experience meets the sample selection criteria presented in Table 1.

The plot shows the variations in the mean acquirer's 3-day cumulative abnormal return [ACAR (-1,+1)] and adjusted cumulative abnormal return [ACAR1 (-1,+1) and ACAR2 (-1,+1)] with target's acquisition experience. Target's acquisition experience is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available.

ACAR (-1,+1) is the cumulative abnormal return to the acquirer's shareholders during the 3-day (-1,+1) event window around the deal announcement date. Adjusted-ACAR1 (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same target industry. Adjusted-ACAR2 (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/-10%) and similar target MTB (+/-10%). The control sample of deals includes acquisitions of targets with no acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification.

Table 1:	Sample	description	by year
----------	--------	-------------	---------

	Deals	Transact	ion Value	Acquir	er Size		Method of	Payment	
Year	N (1)	Mean (2)	Median	Mean	Median	All Cash % N	All Stock % N (7)	Mixed % N (8)	Unknown % N (9)
	(1)	(-)	(0)		(0)	(0)	(.)	(0)	(2)
1995	201	983.76	207.23	4,435.27	1,212.53	20.40	59.20	13.43	6.97
1996	207	1,110.87	230.36	5,015.94	1,360.06	18.36	49.76	24.64	7.25
1997	274	1,022.26	333.81	6,100.34	1,465.51	15.33	56.93	22.99	4.74
1998	276	3,020.17	360.66	10,519.24	2,113.17	13.04	57.25	25.72	3.99
1999	252	1,889.90	404.07	12,689.89	2,588.09	17.46	50.00	26.98	5.56
2000	199	2,862.56	449.14	13,880.40	2,766.54	20.60	46.23	26.13	7.04
2001	148	1,401.30	199.76	8,323.79	1,442.16	18.92	43.92	33.11	4.05
2002	82	1,459.53	143.44	12,638.50	1,461.42	35.37	25.61	34.15	4.88
2003	121	948.32	199.14	7,916.52	1,257.91	27.27	30.58	38.02	4.13
2004	110	1,235.29	325.75	7,871.74	2,361.55	33.64	27.27	35.45	3.64
2005	102	3,459.60	454.54	20,984.20	4,628.44	30.39	20.59	45.10	3.92
2006	98	2,504.21	676.18	18,215.07	3,205.57	46.94	16.33	32.65	4.08
2007	106	1,578.01	828.41	21,057.21	3,473.95	48.11	15.09	34.91	1.89
2008	58	2,142.81	271.64	9,114.24	1,502.05	44.83	20.69	32.76	1.72
2009	62	4,174.49	398.07	22,164.73	2,935.42	30.65	24.19	40.32	4.84
2010	59	1,238.43	444.04	16,952.10	2,875.30	64.41	10.17	23.73	1.69
Full Sample	2355	1,862.71	322.82	10,877.82	1,998.08	24.63	42.17	28.32	4.88

This table presents the descriptive statistics of the sample by each year in the sample period. The acquisition sample meets the following sample selection criteria.

The initial acquisition sample consists of all the M&A deals from 1st January, 1990 up to 31st December, 2010 that were completed by a U.S. public listed firm. The initial M&A sample is acquired from SDC M&A database. The acquiring firm has sufficient coverage in the CRSP database. The transaction value is at least \$ 1 million and the deal value is at least 1% of the acquirer's pre-bid equity value, which is measured one month before the announcement date. The target listing status is Public, Private or Subsidiary. The acquirer ownership of the target is less than or equal to 50% before the transaction and increases to greater than 50% after the transaction. Spin-offs, recapitalizations, self-tenders, repurchases, minority stake purchases, acquisitions of remaining interest, exchange offers, privatizations and clustered deals are excluded.

The primary M&A sample consists of completed public deals between 1995 and 2010 drawn from the initial M&A sample. The primary sample is further divided into a sub-sample of targets with acquisition experience and a control sample of targets with no acquisition experience. Target's (Acquirer's) acquisition experience is defined as the number of deals completed by the target (acquirer) in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available.

Transaction value (in \$ million) is the total value of consideration paid by the acquirer, excluding fees and expenses. Acquirer Size (in \$ million) is the acquirer's market value of equity measured one month prior to the announcement date. Method of payment is All Stock or All Cash if the payment included 100% stock payment or 100% cash payment, respectively. Method of payment is Mixed if combination of cash, stock and other forms of consideration was used to make the payment and the method of payment is Unknown if the form of payment is not identified by SDC.

Table 2: Sample description by industry

	Deals	Transact	ion Value	Acquir	er Size		Method of	Payment		Targets per Industry
Acquirer's Industry					,	All Cash	All Stock	Mixed	Unknown	
	Ν	Mean	Median	Mean	Median	%N	%N	%N	%N	Ν
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Business Equipment	532	1,103.50	295.45	11,256.49	2,119.80	34.21	45.86	16.92	3.01	539
Chemicals and Allied Products	33	4,085.52	725.47	16,555.77	3,520.25	39.39	12.12	45.45	3.03	30
Consumer Durables	29	1,076.60	577.90	2,772.68	1,547.39	41.38	10.34	34.48	13.79	30
Oil, Gas, and Coal extraction and Products	75	5,082.39	664.23	18,839.83	1,947.57	9.33	29.33	61.33	0.00	74
Healthcare, Medical Equipment and Drugs	217	2,691.15	370.54	17,208.21	2,373.27	28.11	41.94	25.35	4.61	229
Manufacturing	143	1,816.60	579.63	8,233.66	1,996.02	28.67	23.08	37.06	11.19	147
Finance related	774	1,593.06	195.19	9,192.99	1,578.99	17.70	55.43	22.87	4.01	758
Consumer Non-Durables	72	1,646.89	403.76	6,799.57	2,496.53	38.89	16.67	36.11	8.33	69
Wholesale, Retail, and other services	140	1,267.39	392.00	6,873.41	2,075.49	30.00	34.29	33.57	2.14	134
Telephone and Television Transmission	95	4,596.95	1,403.92	31,176.78	5,587.59	16.84	31.58	45.26	6.32	78
Utilities	61	2,917.19	1,079.37	5,610.81	3,844.87	11.48	27.87	47.54	13.11	55
Others	184	1,439.99	383.60	4,381.53	1,435.97	18.48	32.61	41.30	7.61	212
Full Sample	2355	1,862.71	322.82	10,877.82	1,998.08	24.63	42.17	28.32	4.88	2355

This table reports the descriptive statistics by acquirer's industry as per Fama and French 12 industry classification. The acquisition sample meets the sample selection criteria described in Table 1. Transaction value (in \$ million) is the total value of consideration paid by the acquirer, excluding fees and expenses. Acquirer Size (in \$ million) is the acquirer's market value of equity measured one month prior to the announcement date. Method of payment is All Stock or All Cash if the payment included 100% stock payment or 100% cash payment, respectively. Method of payment is Mixed if combination of cash, stock and other forms of consideration was used to make the payment and the method of payment is Unknown if the form of payment is not identified by SDC.

Table 3: Target's acquisition experience statistics

		Al	l Public Targ	ets								
Deals	Targets with no acquisition experience		Targe	ts with acqu	uisition exper	ience						
	Deals	Deals	Deals Previous Acquisition Experience									
N (1)	N (2)	N (3)	Mean (4)	Median (5)	Std. Dev. (6)	Min. (7)	Max. (8)	Sum (9)				
2355	1139 (48.37%)	1216 (51.63%)	2.59	2	2.21	1	16	3151				

This table reports the descriptive statistics of the target's acquisition experience. The acquisition sample meets the sample selection criteria described in Table 1. Target's acquisition experience is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available.

Table 4: Summary statistics sorted by target's acquisition experience

Panel A: Deal Characteristics

Variable			Т	arget's acc	uisition e	xperience					Pearson's
		Full Sample	Control sample of targets with no acquisition experience	Sub-sa	mple of targ	ets with acq	uisition exp	erience	Diff1	Diff2	Correlation with Target's Acq. Exp.
Target's Acquisition Experience				1	2	3	4	>= 5	(>=5 - 0)	(>=5 - 1)	· · · · · · · · · · · · · · · · · · ·
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Deals	Ν	2355	1139	509	276	170	75	186			
Acquiring Firms	Ν	1454	865	441	251	156	73	153			
Pure cash deals (%)	Mean	24.63%	26.08%	22.40%	22.46%	29.41%	25.33%	20.43%	-5.65%*	-1.97%	-4.19%**
Pure stock deals (%)	Mean	42.17%	45.83%	40.08%	38.41%	36.47%	37.33%	38.17%	-7.66%**	-1.91%	-5.1%**
Mixed payment deals (%)	Mean	28.32%	22.74%	32.22%	35.14%	28.82%	36.00%	38.17%	15.43%***	5.95%	11.2%***
% Cash in payment	Mean	35.87	35.62	34.67	38.33	38.97	37.73	33.46	-2.16	-1.21	-1.7%
% Stock in payment	Mean	55.89	57.54	54.91	53.42	51.17	53.80	57.29	-0.25	2.38	-0.1%
% Other types of payment	Mean	4.96	3.16	6.58	6.56	6.11	7.14	7.20	4.05***	0.62	9.83%***
Relative size	Mean	39.72%	33.91%	40.39%	49.75%	50.59%	48.35%	45.18%	11.27***	4.78	7.54%***
	Median	19.79%	17.49%	22.65%	20.77%	20.24%	18.75%	29.13%	11.64***	6.48*	
Transaction value (\$ million)	Mean	1862.71	1079.00	1841.68	2994.51	1751.84	3060.06	4658.55	3579.55***	2816.87***	14.95% ***
	Median	322.82	187.56	350.48	587.91	573.80	819.87	1502.71	1315.14***	1152.23***	
Target Size (\$ million)	Mean	1257.38	713.28	1253.71	1999.18	1172.40	1802.49	3353.56	2640.28***	2099.86***	13.8%***
	Median	205.13	120.44	225.75	377.32	350.75	523.91	934.51	814.08***	708.77***	
Acquirer size (\$ million)	Mean	10877.82	7091.38	12001.73	13179.69	11460.17	20553.66	23139.48	16048.09***	11137.74***	15.91% ***
	Median	1998.08	1329.52	2004.14	3105.74	3725.52	3783.02	5846.19	4516.67***	3842.06***	
Diversifying deals (%)	Mean	30.74%	28.62%	31.04%	36.96%	29.41%	33.33%	33.87%	5.25%	2.83%	2.93%
Friendly deals (%)	Mean	98.47%	98.95%	97.84%	98.55%	97.06%	98.67%	98.39%	-0.56%	0.55%	-1.15%
Hostile deals (%)	Mean	1.10%	0.53%	1.96%	1.09%	2.35%	1.33%	1.08%	0.55%	-0.89%	1.43%
Merger wave deals (%)	Mean	88.92%	89.64%	89.00%	91.67%	83.53%	84.00%	87.10%	-2.54%	-1.9%	-3.75%*
Acquirer toehold deals (%)	Mean	2.46%	2.81%	2.36%	1.45%	2.35%	2.67%	2.15%	-0.66%	-0.21%	-1.28%
Acquirer lock-up agreement deals (%)	Mean	16.74%	17.56%	16.73%	16.67%	10.06%	10.67%	20.43%	2.87%	3.7%	0.61%
Tender offer deals (%)	Mean	16.23%	14.66%	18.50%	18.48%	17.16%	16.00%	15.59%	0.93%	-2.91%	0.4%
Competing bid deals (%)	Mean	3.99%	3.78%	4.72%	4.71%	3.55%	2.67%	3.23%	-0.55%	-1.5%	-1.24%
Take-over defence deals (%)	Mean	17.47%	18.09%	17.52%	17.39%	12.43%	10.67%	20.97%	2.88%	3.45%	0.73%
Litigated deals (%)	Mean	1.95%	2.19%	2.17%	1.45%	0.59%	0.00%	2.69%	0.49%	0.52%	-0.53%
Target Termination Fee deals (%)	Mean	70.59%	65.76%	72.83%	79.35%	79.88%	80.00%	68.82%	3.06%	-4.02%	4.03%*
Acquirer Termination Fee deals (%)	Mean	19.85%	18.17%	21.06%	23.91%	20.12%	21.33%	19.89%	1.72%	-1.17%	1.89%

Variable	Variable			Target's a	cquisition	experience					Pearson's
		Full Sample	Control sample of targets with no acquisition experience	Sub-	sample of targ	gets with acqu	usition exper	ience	Diff1	Diff2	Correlation with Target's Acq. Exp.
Target's Acquisition Experience				1	2	3	4	>= 5	(>=5 - 0)	(>=5 - 1)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (7) - (2)	(9) = (7) - (3)	(10)
Aconirer's Pre-Deal Characto	eristics										
Acquirer 's Tobin's a	Mean	2,0639	1 9918	2 1823	2,1765	2.0417	2,2025	1 9789	-0.013	-0.203	0.03%
requirer 5 room 5 q	Median	1.4152	1.2876	1.5379	1.5739	1.5523	1.5090	1.3982	0.111**	-0.14	0.0070
Acquirer's market-to-book ratio	Mean	3.4128	3.2345	3.6370	3.6251	3.0959	3.9551	3.6446	0.41	0.008	2.65%
	Median	2.3000	2.1442	2.5754	2.5361	2.2233	2.4588	2.5833	0.439***	0.008	
Acquirer's debt/assets	Mean	0.1424	0.1408	0.1380	0.1428	0.1427	0.1607	0.1553	0.014	0.017	3.15%
1	Median	0.1171	0.1155	0.1128	0.1102	0.1205	0.1172	0.1420	0.027**	0.029**	
Acquirer's FCF/assets	Mean	0.0089	-0.0030	0.0055	0.0181	0.0322	0.0251	0.0332	0.036	0.028	6.83%***
	Median	0.0415	0.0397	0.0415	0.0473	0.0421	0.0299	0.0402	0**	-0.001	
Acquirer's acquisition experience	Mean	3.4514	3.0070	3.1572	3.6884	4.4765	5.0533	5.0430	2.036***	1.886***	16.52%***
	Median	2.0000	2.0000	2.0000	3.0000	3.0000	4.0000	4.0000	2***	2***	
Non-targeted Acquirer deals (%)	Mean	0.8369	0.8007	0.8507	0.8551	0.8765	0.8800	0.9409	0.14***	0.09***	10.53%***
Target's Pre-Deal Character	istics										
Target 's Tobin's a	Mean	1 7865	1 7970	1 8569	1.8361	1 5958	1 8366	1 6166	-0 18**	-0.24**	-386%*
Target's Tobil's q	Median	1.2531	1.1550	1.3191	1.4685	1.3098	1.3886	1.2596	0.105***	-0.059	5.0070
Target's market-to-book ratio	Mean	2.6616	2.5270	2.8163	2.8962	2.5003	2.7132	2.7869	0.26	-0.029	1.32%
	Median	1.8360	1.6577	1.9179	2.0611	1.8119	1.9631	2.1185	0.461***	0.201**	
Target's debt/assets	Mean	0.1468	0.1346	0.1521	0.1451	0.1716	0.1735	0.1713	0.037***	0.019	7.8% ***
0	Median	0.1039	0.0802	0.1208	0.1058	0.1313	0.1269	0.1392	0.059***	0.018	
Target's FCF/assets	Mean	-0.0344	-0.0697	-0.0205	-0.0055	0.0010	-0.0072	0.0242	0.094***	0.045***	11.83%***
0	Median	0.0212	0.0140	0.0265	0.0335	0.0271	0.0198	0.0416	0.028***	0.015**	

This table presents the sample statistics for the full sample and by target's acquisition experience. The acquisition sample meets the sample selection criteria described in Table 1. Target's (Acquirer's) acquisition experience is defined as the number of deals completed by the target (acquirer) in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. Panel A and B report the summary statistics of the deal characteristics and the pre-deal acquirer & target characteristics, respectively. The difference tests are based on two-sample t-tests for means and Wilcoxon-sign rank tests for medians. Pearson's Correlation Coefficients for various deal, acquirer and target characteristics with the target's acquisition experience are reported in column 10. ***,** and * denote statistical significance at the 1%, 5% and 10% level, respectively. **Panel A**: Pure Cash, Pure Stock, Mixed payment and Unknown payment deals (%) is the percentage of deals in which the method of payment included 100% cash, 100% stock, combination of cash, stock and other forms of consideration, and not known, respectively. Relative Size is the transaction value relative to the market value of the acquirer, measured one month prior to the announcement date. Transaction value (in \$ million) is the total value of consideration paid by

the acquirer, excluding fees and expenses. Acquirer (Target) Size (in \$ million) is the acquirer's (target's) market value of equity measured one month prior to the announcement date. Diversifying deals (%) is the percentage of deals that involve targets with a 2-digit SIC code different from that of the acquirer. Friendly deals (%) is the percentage of deals in which the target management had friendly attitude towards acquirer's offer. Hostile deals (%) is the percentage of deals in which the target management had a hostile attitude towards acquirer's offer i.e. the target board officially rejects the offer, but the acquirer continues with the takeover. Merger wave deals (%) is the percentage of deals involved in the merger wave periods i.e. 1993-2001 and 2003-2007. Acquirer toehold deals (%) is the percentage of deals in which the acquirer held shares of the target at the time of deal announcement. Acquirer Lock-up Agreement deals (%) is the percentage of deals in which the acquirer launches a Tender Offer for the target. Competing Bid deals (%) is the percentage of deals in which the target employed any defensive tactic such as poison pills, lock-ups, greenmail, white knights, etc. to hinder the take-over attempt. Litigated deals (%) is the percentage of deals in which the target Termination Fee deals (%) is the percentage of deals in which the target is liable for "Termination fee" / "Break-up" fee to the target if the transaction is not consummated. Acquirer Termination fee" / "Break-up" fee to the target if the transaction is not consummated.

Panel B: Tobin's q is defined as the firm's market value of total assets relative to its book value of total assets. Market-to-Book ratio is defined as the firm's market value of equity relative to its book value of equity. Debt/Assets is defined as firm's book value of debt relative to its market value of total assets. The firm market value of assets is total book value of assets minus the book value of equity plus the market value of equity. FCF/Assets is defined as firm's Free Cash Flow relative to its book value of assets. Free Cash Flow is operating income before depreciation minus interest expense, total expense, and capital expenditure. The above mentioned pre-deal characteristics are reported for the acquiring firms and for the target firms and are estimated one year before the announcement of the deal. Non-Targeted Acquirer deals (%) is the percentage of deals by acquirers who were not taken-over in the sample period.

Table 5	: Univariate analy	sis of acquirer's	s cumulative abnormal	return with targ	get's acquisition	experience
	· · · ·	1				

Variable	⁷ ariable			Target's a	acquisition	experience					Pearson's
		Full Sample	Control sample of targets with no acquisition experience	Sub-	sample of tar	gets with acq	uisition exper	ience	Diff1	Diff2	Correlation with Target's Acq. Exp.
Target's Acquisition Experien	nce		0	1	2	3	4	>= 5	(>=5 - 0)	(>=5 - 1)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) = (7) - (2)	(9) = (7) - (3)	(10)
	Mean	-1.41%	-1.16%	-1.17%	-1.41%	-1.57%	-2.53%	-2.95%	-1.79%***	-1.78%***	-8.37%***
ACAR (-1,+1)	Median	-1.23%	-0.93%	-1.34%	-1.45%	-1.31%	-1.66%	-2.80%	-1.87%***	-1.46%***	
	(N)	(2355)	(1139)	(509)	(276)	(170)	(75)	(186)			
	Mean	-0.32%		0.16%	-0.04%	-0.20%	-1.44%	-1.72%		-1.88%***	-10.66%***
Adjusted ACAR1(-1,+1)	Median	-0.36%		-0.11%	-0.07%	-0.35%	-0.94%	-1.31%		-1.2% ***	
	(N)	(1209)		(506)	(272)	(170)	(75)	(186)			
	Mean	-0.60%		-0.03%	-0.25%	-0.53%	-2.16%	-2.14%		-2.11%***	-11.86%***
Adjusted ACAR2 (-1,+1)	Median	-0.85%		-0.45%	-0.70%	-0.88%	-1.98%	-2.27%		-1.82%***	
	(N)	(1080)		(455)	(243)	(150)	(66)	(166)			

The acquisition sample meets the sample selection criteria described in Table 1. This table reports the 3-day Acquirer Cumulative Abnormal Return (ACAR) and Adjusted-Cumulative Abnormal Return (Adjusted ACAR) for the full sample and by target's acquisition experience. Target's acquisition experience is defined as the number of deals completed by the target in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. CARs are estimated using the market model. ACAR (-1,+1) is the cumulative abnormal return to the acquirer's shareholders during the 3-day (-1,+1) event window around the deal announcement date. Adjusted ACAR1 (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same industry and the same listing status. Adjusted ACAR2 (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%). The control sample of deals includes acquisitions of targets with no acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification. Relative Size is the transaction value relative to the market value of the acquirer, measured one month prior to the announcement date. MTB (Market-to-Book) ratio is defined as the firm's market value of equity relative to its book value of equity estimated one year before the announcement of the deal. The difference tests are based on two-sample t-tests for means and Wilcoxon-sign rank tests for medians. Pearson's Correlation Coefficients of CARs with the target's acquisition experience are reported in column 10. ***,** and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 6: Multivariate analysis of ACAR and adjusted-ACAR with target's acquisition experience

Sample		Full Sample			Sub-sampl	e of Targets w	ith acquisition	experience	
Variable	Асф	irer CAR (-	1,+1)	Асф	uirer CAR (-	1,+1)	Adjusted	Acquirer C	AR (-1,+1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	0.0136** (0.0310)	0.0127** (0.0451)	0.0221** (0.0157)	0.0129 (0.1646)	0.0155* (0.0948)	0.023* (0.0882)	0.0302*** (0.0063)	0.0324*** (0.0033)	0.0288* (0.0673)
Target's acquisition experience		-0.002*** (0.0064)	-0.0016** (0.0374)		-0.0033*** (0.0005)	-0.0029*** (0.0029)		-0.004*** (0.0005)	-0.0043*** (0.0003)
Acquirer's acquisition experience	-0.0006	-0.0005	-0.0002	-0.0006	-0.0003	-0.0002	-0.0006	-0.0003	-0.0003
Ln of target size	-0.0069***	-0.006*** (0.0000)	-0.0066***	-0.0061***	-0.0048*** (0.0071)	-0.0054*** (0.0034)	-0.0015	0.0002	0.0014
Ln of acquirer size	0.0031***	0.003**	0.0035***	0.0025	0.0024	0.0029*	-0.0026	-0.0029	-0.0033
All stock deal dummy	-0.0182***	-0.0186***	-0.0179***	-0.0219***	-0.0224***	-0.0225***	-0.0182***	-0.0186***	-0.0223***
Diversifying deal dummy	0.0050	0.0052	0.0023	0.0052	0.0052	0.0029	0.0012	0.0015	0.0013
Hostile deal dummy	0.0081	0.0076	0.0018	0.0008	-0.0018	-0.0020	-0.0023	-0.0061	-0.0093
Competed deal dummy	-0.0055	-0.0064	-0.0067	-0.0064	-0.0080	-0.0090	-0.0039	-0.0052	-0.0101
Acquirer's Tobin q	-0.0023**	-0.0021** (0.0353)	-0.0013	-0.0007	-0.0007	0.0001	0.0011	0.0012	0.0003
Target's Tobin's q	-0.0003 (0.7904)	-0.0007 (0.5717)	-0.0003 (0.8427)	-0.0011 (0.5578)	-0.0017 (0.3685)	-0.0013 (0.5140)	0.0007 (0.7486)	0.0001 (0.9729)	-0.0004 (0.8667)
Industry and year dummies	No	No	Yes	No	No	Yes	No	No	Yes
n p ²	2191	2191	2191	1171	1171	1171	1052	1052	1052
R^2 Adjusted - R^2	0.0436 0.0397	0.0469	0.0764 0.0609	0.0449	0.0549 0.0467	0.0801	0.0229	0.0341	0.0630

This table reports the results of ordinary least squares regression of the acquirer's 3-day cumulative abnormal return [ACAR (-1,+1)] and adjusted cumulative abnormal return [Adj-ACAR (-1,+1)] on target's acquisition experience and other control variables, using the acquisition sample and the sub-sample of targets with acquisition experience. The sample meets the sample selection criteria described in Table 1. Target's (Acquirer's) acquisition experience is defined as the number of deals completed by the target (acquirer) in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. ACAR (-1,+1) is the cumulative abnormal return to the acquirer's shareholders during the 3-day (-1,+1) event window around the deal announcement date. Adjusted-ACAR (-1,+1) is calculated as acquirer CAR minus the median acquirer CAR of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%). The control sample of deals includes acquisitions of targets with no acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification. CARs are estimated using the market model. The market model parameters are estimated over (-250,-15) window relative to the announcement date. Relative Size is the transaction value relative to the market value of the acquirer, measured one month prior to the announcement date. MTB (Market-to-Book) ratio is defined as the firm's market value of equity relative to its book value of equity. Ln of target (acquirer) size is the natural log of target's (acquirer's) market value of equity measured one month prior to the announcement date. Target's (Acquirer's) Tobin's q is the market value of target's (acquirer's) total assets relative to its book value of total assets. All stock deal dummy, Diversifying deal dummy, Hostile deal dummy and Competed deal dummy are dummy variables that take the value of one for acquisitions that involve 100% stock payment, targets with industry classification different from that of the acquirer as per Fama and French 49 industry classification, targets with hostile attitude towards the acquirer's offer and targets that received other competing offers in addition to the acquirer's offer, respectively. Industry dummies based on Fama and French 12 industry classification and Year dummies are included in models (3), (6) and (9), but are not reported individually in the results. p-values are reported in brackets below the parameter estimates. ***,**, and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Sample		Full Sample			Sub-sampl	e of Targets w	ith acquisition	experience	
Variable		Premium			Premium		Ad	justed Prem	ium
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	0.5499*** (0.0000)	0.5546*** (0.0000)	0.5928*** (0.0000)	0.6402*** (0.0000)	0.6345*** (0.0000)	0.6515*** (0.0000)	0.0996** (0.0390)	0.0957** (0.0474)	0.2265*** (0.0007)
Target's acquisition experience		0.0085** (0.0130)	0.007 ** (0.0405)		0.0091** (0.0312)	0.0097 ** (0.0221)		0.0098 * (0.0502)	0.0105 ** (0.0356)
Acquirer's acquisition experience	-0.0017 (0.3759)	-0.0024 (0.2160)	-0.0008 (0.6916)	-0.0018 (0.4530)	-0.0025 (0.2998)	-0.0001 (0.9745)	-0.0032 (0.2402)	-0.0040 (0.1495)	-0.0021 (0.4588)
Ln of target size	-0.0809*** (0.0000)	-0.0848*** (0.0000)	-0.082*** (0.0000)	-0.0815*** (0.0000)	-0.0851*** (0.0000)	-0.0834*** (0.0000)	-0.0431*** (0.0000)	-0.0472*** (0.0000)	-0.0565*** (0.0000)
Ln of acquirer size	0.0364***	0.037***	0.0368***	0.0273***	0.0276***	0.0288***	0.0163*	0.0167*	0.0157*
All stock deal dummy	0.0032	0.0051	0.0102	0.0063	0.0077	0.0008	0.0442**	0.0457**	0.0242
Diversifying deal dummy	0.0192	0.0187	0.0020	0.0155	0.0160	0.0065	-0.0191	-0.0191	-0.0168 (0.4600)
Hostile deal dummy	0.1807*** (0.0029)	0.1827***	0.154**	0.2055***	0.2125***	0.1844***	0.2529*** (0.0024)	0.262***	0.272***
Competed deal dummy	0.1652***	0.1688***	0.1567***	0.1227***	0.1266***	0.1218***	-0.0600	-0.0578	-0.0100
Acquirer's Tobin q	0.0187*** (0.0000)	0.0181*** (0.0001)	0.0075	0.0178*** (0.0038)	0.0176*** (0.0041)	0.0095	-0.0080	-0.0082	0.0043
Target's Tobin's q	0.0067 (0.2519)	0.0083 (0.1561)	0.0058 (0.3309)	0.0074 (0.3796)	0.0089 (0.2904)	0.0085 (0.3288)	0.0122 (0.2034)	0.0137 (0.1551)	0.0181* (0.0650)
Industry and year dummies	No	No	Yes	No	No	Yes	No	No	Yes
n	2071	2071	2071	1113	1113	1113	996	996	996
R^2	0.1189	0.1215	0.1664	0.1337	0.1373	0.1831	0.0381	0.0418	0.1246
Adjusted - R^2	0.1151	0.1173	0.1517	0.1266	0.1295	0.1558	0.0293	0.0321	0.0918

Table 7: Multivariate analysis of premium and adjusted-premium with target's acquisition experience

This table reports the results of ordinary least squares regression of the premium and adjusted-premium on target's acquisition experience and other control variables, using the acquisition sample and the sub-sample of targets with acquisition experience. The sample meets the sample selection criteria described in Table1. Target's (Acquirer's) acquisition experience is defined as the number of deals completed by the target (acquirer) in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. Premium is the ratio of the offer price to the target's share price 4 weeks prior to the deal announcement date (SDC), with observations between zero and two. Adjusted-Premium is calculated as premium minus the median premium of control sample of deals that were completed in the year around the announcement year and involved target in the same industry, same listing status, similar relative size (+/- 10%) and similar target MTB (+/- 10%). The control sample of deals includes acquisitions of targets with no acquisition experience. For matching the deals, target industry is classified according to Fama and French 12 industry classification. Relative Size is the transaction value relative to the market value of the acquirer, measured one month prior to the announcement date. MTB (Market-to-Book) ratio is defined as the firm's market value of equity relative to its book value of equity. Ln of target (acquirer) size is the natural log of target's (acquirer's) market value of equity measured one month prior to the announcement date. Target's (Acquirer's) Tobin's q is the market value of target's (acquirer's) total assets relative to its book value of total assets. All stock deal dummy, Diversifying deal dummy, Hostile deal dummy, and Competed deal dummy are dummy variables that take the value of one for acquisitions that involve 100% stock payment, targets with industry classification different from that of the acquirer as per Fama and French 49 industry classification, targets with hostile attitude towards the acquirer's offer and targets that received other competing offers in addition to the acquirer's offer, respectively. Industry dummies based on Fama and French 12 industry classification and Year dummies are included in models (3), (6) and (9), but are not reported individually in the results. p-values are reported in brackets below the parameter estimates. ***,**, and * denote statistical significance at the 1%, 5% and 10% level, respectively.

Table 8: OLS regression analysis of acquirer's long-run (12 month) abnormal stock performance with target's acquisition experience

Sample	Full Sample										
	I	ong-Term Sto	ck Performand	e							
Variable	BH	IAR	СТ	AR							
	(1)	(2)	(3)	(4)							
Intercept	0.0013	0.0078	0.0042	0.0096							
	(0.8390)	(0.3909)	(0.4902)	(0.2670)							
Target's acquisition experience	-0.0015**	-0.0015**	-0.0014**	-0.0015**							
	(0.0492)	(0.0465)	(0.0478)	(0.0372)							
Acquirer's acquisition experience	0.0001	0.0001	0.0002	0.0002							
	(0.8625)	(0.8429)	(0.5786)	(0.5675)							
Ln of target size	0.0005	0.0005	0.0011	0.0013							
-	(0.7116)	(0.6887)	(0.3719)	(0.2858)							
Ln of acquirer size	0.0006	0.0007	-0.0003	-0.0003							
-	(0.6206)	(0.5839)	(0.7905)	(0.8155)							
All stock deal dummy	-0.0023	-0.0014	-0.0027	-0.0015							
	(0.4405)	(0.6743)	(0.3470)	(0.6186)							
Diversifying deal dummy	-0.0038	-0.0037	-0.0016	-0.0017							
	(0.2227)	(0.2494)	(0.5849)	(0.5686)							
Hostile deal dummy	-0.0116	-0.0111	-0.0121	-0.0118							
	(0.3226)	(0.3533)	(0.2759)	(0.2940)							
Competed deal dummy	0.0032	0.0031	0.0014	0.0012							
	(0.6449)	(0.6521)	(0.8283)	(0.8578)							
Acquirer's Tobin q	0.0005	-0.0004	0.0005	-0.0005							
	(0.6236)	(0.6796)	(0.5755)	(0.6127)							
Target's Tobin's q	-0.0025**	-0.0029**	-0.0021*	-0.0026**							
	(0.0321)	(0.0164)	(0.0522)	(0.0223)							
Industry and year dummies	No	Yes	No	Yes							
n	1420	1420	1420	1420							
R^2	0.0086	0.0376	0.0072	0.0425							
Adjusted - R^2	0.0016	0.0125	0.0001	0.0176							

This table reports the results of ordinary least squares regression of the acquirer's long-run (12 month) buy-and-hold abnormal returns (BHAR) and calendar-time abnormal returns (CTAR) on target's acquisition experience and other control variables, using the full acquisition sample. The full acquisition sample meets the sample selection criteria described in Table 1. Target's (Acquirer's) acquisition experience is defined as the number of deals completed by the target (acquirer) in the prior 10 years or at least prior 5 years when the acquisition history of prior 10 years in not available. The dependent variable is BHAR and CTAR in columns (1)-(2) and (3)-(4), respectively. For BHAR and CTAR estimation acquirers enter the portfolio on the month following the deal announcement month and remain for 12 months. If the acquire acquires another target within the 12 month window then this runs up until the month prior to the announcement month of the next deal. If the acquiring firm has missing returns in the post acquisition period then I exclude those months. BHAR is estimated as BHAR_i = $\prod_{t=1}^{T} (1 + R_{i,t}) - \prod_{t=1}^{T} (1 + R_{Size-BM Benchmark,t})$ where $R_{i,t}$ is the return of acquirer i at month t, and T is the number of months in the post acquisition period. CTAR is estimated as CTAR_i = $\sum_{t=1}^{T} \frac{R_{i,t} - R_{Size-BM Benchmark,t}}{r}$ where $R_{i,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Benchmark,t}$ is the return of acquirer i at month t and $R_{Size-BM Ben$

of the corresponding 25 size and book-to-market reference portfolio for the same month t as in Mitchell and Stafford (2000), and T is the number of months in the post acquisition period. Relative Size is the transaction value relative to the market value of the acquirer, measured one month prior to the announcement date. Ln of target (acquirer) size is the natural log of target's (acquirer's) market value of equity measured one month prior to the announcement date. Target's (Acquirer's) Tobin's q is the market value of target's (acquirer's) total assets relative to its book value of total assets. All stock deal dummy, Diversifying deal dummy, Hostile deal dummy and Competed deal dummy are dummy variables that take the value of one for acquisitions that involve 100% stock payment, targets with industry classification different from that of the acquirer as per Fama and French 49 industry classification, targets with hostile attitude towards the acquirer's offer and targets that received other competing offers in addition to the acquirer's offer, respectively. Industry dummies based on Fama and French 12 industry classification and Year dummies are included in models (2) and (4), but are not reported individually in the results. p-values are reported in brackets below the parameter estimates. ***,**, and * denote statistical significance at the 1%, 5% and 10% level, respectively.