

## Stock Price Behavior of Acquirers and Targets Due to M&A Announcement in USA Banking

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### **Abstract**

This paper aims to analyze the financial impacts of Mergers and Acquisitions (M&As) in USA banking industry. According to this approach, this study is concentrated on M&As in banking industry across the USA to investigate the stock price behavior of targets and acquirers based on the M&A announcement over the period 2000-2010 in a sample of 154 deals. This paper has classified the deals in three main categories; target banks versus acquirer banks, means of payment in M&As (all-cash offers versus all cash and stock offers), and domestic versus cross-border M&As. This classification provides a unique opportunity for analyzing the stock price behavior in different situations and scenarios. This research assumes that there are no other special events in the estimation period (-60, +60) and therefore, has focused on the actual return rather than abnormal return. For the future researches, it's recommended to use the abnormal return instead of the actual return in order to neutralize the movements in prices that result from factors other than the specific announcement under investigation. According to the results generated by this research, M&A announcements generated positive average actual return over (-60, +60) for both target and acquirer banks in all of the scenarios. Average actual return of acquirers' shareholders in M&A announcements of all-cash offers are higher than for all cash-stock offers, but Average actual return of targets' shareholders in M&A announcements of all-cash offers are lower than for all cash-stock offers.

**Key Words:** Merger and Acquisition, Stock Price Behavior, US Banking, Event Study, Average Actual Return

### **1- Introduction**

A brief review about the merger and acquisition environment in addition to the main reasons and motivations for merger and acquisition in US banking industry has been provided in the following part.

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**1-1- Mergers and Acquisitions in Banking**

Mergers and acquisitions are undertaken for a broad variety of logics. The following purposes are frequently cited in the literature (Imberman 1985; Nevaer and Deck 1990; Weston, Chung, and Hoag 1990): to penetrate new products or geographic markets, to gain market share, to achieve corporate growth, to acquire technology where it is lacking, to improve competitiveness in a global marketplace, to achieve operating efficiencies and economies of scale, and to ensure future survival.

The primary factor favoring further consolidation in banking industry is competition, which has intensified pressure on banks to expand market share, increase geographic presence and diversification, improve efficiency, and offer a broader range of financial products.

M&A deals can help banks to fend off competition from other commercial banks as well as from nonbank providers of financial services. Banks contend that they become financially stronger following a merger because they can reduce the acquired bank's noninterest (operating) costs.

Early studies analyzed the impacts of acquisition on merging banks. Smith (1971) and Hobson, Masten and Severiens (1978) found that profitability of acquired banks was not considerably greater than that of non-merging banks. However, the performance of acquired banks was significantly dissimilar from that of non-merging banks in accordance with a number of accounting-based factors.

Another group of studies examined the effect of acquisitions on the acquiring banks holding companies' profitability following the merger. Incentives for banks acquisitions are based on perceived resultant changes in the earnings of the acquired banks and in the valuation of these earnings (Hawawini and Swary 1990). Piper and Weiss (1971), Varvel (1975) and Frieder (1980) found mixed results on this issue.

The studies in 1980s addressed these issues in details. Hannan and Rhoades (1987) examined the relationship between the likelihood of a bank being acquired and the different characteristics of the banks and the market in which it operates. They used a number of variables in their study, including market concentration, capital-asset ratio, rate of return on equity and on assets, growth in the market for banking industry and a large sample of firms involved in acquisitions between 1971 and 1982.

They concluded their research by stating “we have not found any results consistent with the belief that poorly managed firms are more likely to be acquired than better managed firms “ and “we find no support for the notion that the market for corporate control disproportionately eliminates poorly managed firms”.

James and Wier (1987a) have studied the external environment factors, such as competition, for bank acquisition by using stock market data. They have found that “the gains to acquirers are positively related to the number of alternative target firms and negatively related to the number of other potential bidders in the market.

There were some other studies of the market reaction to the announcement of bank mergers which were performed by Neely (1987), Trifts and Scanlon (1987), and de Cossio, Trifts and Scanlon (1987). All of those researchers report a substantial rise in the stock price of the target banks and a relatively smaller drop in the stock price of the bidding banks in interstate and interstate mergers during the week the merger proposal is announced.

Cornett and De (1989) found a significant and positive stock market reaction to announcements of interstate bank mergers for both bidding and target banks. They conclude by stating that “it has been verified that the results are robust to various factors such as the size of participating banks and the type of financing used in the transactions.

### **1-2- Research Question**

This research aims to analyze the impacts of the merger and acquisitions in US banking industry. Hence, this research has been done for answering the following question; do mergers and acquisitions create value for shareholders of target and acquirer firms in US banking industry?

### **1-3- Hypotheses**

This hypothesis focuses on the stock price behavior of both target and acquirer banks resulted from an announcement. These behaviors have been studied in two different payment methods, cash payment and cash-stock payment.

## **108/ Stock Price Behavior of Acquirers and Targets Due to M&A...**

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- H1: M&A announcement in US banks will generate positive average actual returns for acquirers' shareholders in cash payment method.
- H2: M&A announcement in US banks will generate positive average actual returns for acquirers' shareholders in cash-stock payment method.
- H3: M&A announcement in US banks will generate positive average actual returns for targets' shareholders in cash payment method.
- H4: M&A announcement in US banks will generate positive average actual returns for targets' shareholders in cash-stock payment method.

### **2- Literature Review**

The decision to acquire another firm, like any other investment decision, should be primarily derived by the desire to increase the market value of the acquiring firm's shareholders. It could be also right that the management of the acquiring firm may be motivated by the desire to increase the acquiring firm's size regardless of whether the acquisition is a wealth-creating strategy.

Under such conditions, the management of the acquiring firm displays a non-wealth-maximizing behavior. In some cases the rationale for merger is management's desire to reduce risks in order to improve its own utility (Amihud and Lev 1981).

One of the greatest studies for understanding the main objectives and drivers of mergers and acquisition in US bank sector have been done by Hawawini and Swary (1990). They have studied several hypotheses to realize why banks involve in merger activities. Most of these hypotheses assume that the acquirer's objective is to maximize shareholders wealth. Others, such as the manager-utility-maximization hypothesis, assume that the acquirer displays a non-wealth-maximizing behavior.

### **3- Research methodology**

This research has employed the event study as its main method for measuring the impact of merger and acquisition deals on shareholders' value of target and acquirer banks. The event study method is based on the assumption of efficient market where the stock prices react in a timely and unbiased manner to new information (Fama 1970; Roberts 1967).

This method extensively is used to assess the impact of a specific occurrence on value of the firm. The most frequent events are earnings

announcement (Ball & Brown: 1968), stock splits (James Dolley: 1933, Fama et al: 1969), dividend announcements (Asquith & Mullins: 1983), and M&A announcements (Jarrel & Poulsen: 1989).

One of the key concepts in event study method is event window which includes the assessment period. This research has assessed the impacts from 60 days prior to the M&A announcement to 60 days after it (-60,+60).

This research has analyzed the actual returns instead of the abnormal returns. This approach provides a clear understanding of market reactions to the M&A announcements. According to this approach, this research has assumed that actual returns over the event window (-60,+60) is purely due to the announcement.

But, the observed changes in the stock price of a bank during the event window cannot be attributed exclusively to that announcement since stock prices are affected by a multitude of factors other than the announcement of the merger proposal. It's recommended to use abnormal return in the future researches by neutralizing the movements in prices that result from factors other than the specific announcement under investigation.

According to the main research question, this study is concentrated on the mergers and acquisitions in banking industry across the US in order to find out the stock price behavior of targets and acquirers based on the M&A announcement. This research has used the mergers and acquisitions information of Bloomberg for data collection as its main resource. The following specifications have been considered in order to gather the required data:

- Location: In one hand, this study has focused on the US banks as its main sample, but in the other hand, this research has tried to study the cross-border mergers and acquisitions as well. So, we have decided that at least one of the companies should be based on US. In order to gather this data, target or acquirer companies should be from United States.
- Industry: As described before, both target and acquirer companies must be banks.
- Time period: This research has focused on the merger and acquisition deals which occurred between 01/01/2000 to 12/31/2009 (10 years). This period of time has been applied to the announcement date.
- Deal Status: The merger and acquisition deals must be completed in order to be considered in the sample.

## **110/ Stock Price Behavior of Acquirers and Targets Due to M&A...**

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- Public/Private: Both target and acquirer companies must be from public companies in order to gather their daily stock returns too.
- Payment type: According to the hypotheses, this research has been focused on two different payment methods. The first method is cash payment, while another one is a mixture of cash and stocks as the payment method.

By considering the mentioned specifications, the total number of the merger and acquisition deals is 154. This research has divided the deals into two different parts, cash payment vs. cash and stock payment.

### **4- Results**

This section highlights the results according to the research hypotheses. The results have been classified in 3 main categories based on the mentioned hypotheses. Hence, this part analyzes each hypothesis separately.

#### **4-1- Hypothesis 1**

According to the data, the total number of acquirers in cash payment method is 48 banks. The average actual return over the event window of (-60, 60) is % 0.0554.

The *H1 is accepted* as the average actual return is a positive figure.

#### **4-2- Hypothesis 2**

According to the data, the total number of acquirers in cash-stock payment method is 53 banks. The average actual return over the event window of (-60, 60) is % 0.050988.

The *H2 is accepted* as the average actual return is a positive figure.

#### **4-3- Hypothesis 3**

According to the data, the total number of targets in cash payment method is 39 banks. The average actual return over the event window of (-60, 60) is % 0.227235.

The *H4 is accepted* as the average actual return is a positive figure.

#### 4-4- Hypothesis 4

According to the data, the total number of targets in cash-stock payment method is 35 banks. The average actual return over the event window of (-60, 60) is % 0.287421.

The *H4 is accepted* as the average actual return is a positive figure.

#### 5- Conclusion

As described in this paper, there are variety of motivations for mergers and acquisitions. It's still debatable to surely name a specific motive or reason since every deal has a different situation. It also depends on the type of the acquirers.

Risk-takers, entrepreneurs and market leaders usually have a different set of aims than the market followers. The motives can be affected by internal and external factors such as bank size, cash flow situation, market condition, economy, competition level, etc.

Therefore, in order to find out the accurate reason/s for mergers and acquisitions, they have to be studied and analyzed comprehensively and specially case by case. The mentioned motives are just the general drivers for mergers and acquisitions and sometimes potential acquirers may consider a mix of different motives as well.

A review of average actual return of targets and acquirers in different situations has been shown on table 1.

**Table 1: Average Actual Return Comparison**

Types	Number of Banks	% Average Actual Return over (-60,+60)	% Average Actual Return on T=0
<i>Targets in Domestic and Cash Payment</i>	18	0.362455	20.97421
<i>Targets in Domestic and Cash-Stock Payment</i>	33	0.302165	18.04026
<i>Targets in Cash-Stock Payment</i>	35	0.287421	16.9097
<i>Targets in Cash Payment</i>	39	0.227235	14.02967
<i>Targets in Cross-Border and Cash Payment</i>	21	0.111332	8.07722
<i>Acquirers in Cross-Border and Cash Payment</i>	19	0.055871	0.410884
<i>Acquirers in All Cash Offers</i>	48	0.055428	0.571
<i>Acquirers in Cash Payment</i>	48	0.0554	0.571471
<i>Acquirers in Domestic and Cash Payment</i>	29	0.055137	0.676683
<i>Acquirers in Domestic and Cash-Stock Payment</i>	51	0.052714	-0.87413
<i>Acquirers in Cash-Stock Payment</i>	53	0.050988	-0.97591
<i>Targets in Cross-Border and Cash-Stock Payment</i>	2	0.044154	-1.7445
<i>Acquirers in Cross-Border and Cash-Stock Payment</i>	2	0.006976	-3.5713

## **112/ Stock Price Behavior of Acquirers and Targets Due to M&A...**

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As these returns have been classified in two different period of time [(-60, +60), T=0], it's possible to compare the results according to their event window.

The highest average actual return over (-60,+60) is % 0.362455 for targets in domestic and cash payment deals. The total number of banks in this situation is 18 cases. It's interesting to know that the highest average actual return on T=0 is for the same situation as well which is % 20.97421.

The lowest average actual return over (-60,+60) is % 0.006976 for acquirers in cross-border and cash-stock payment deals. The total number of banks in this situation is 2 cases. The lowest average actual return on T=0 is for the same situation which is % -3.5713.

This study has not found any negative average actual return over (-60, +60), but there were some negative results on T=0.

According to the results, M&A announcements generated positive average actual return over (-60, +60) for both target and acquirer banks in all of the scenarios. Average actual return of acquirers' shareholders in M&A announcements of all-cash offers are higher than for all cash-stock offers, but Average actual return of targets' shareholders in M&A announcements of all-cash offers are lower than for all cash-stock offers.

This study has also found some interesting facts for international deals. For acquirer banks, the average actual return of acquirers' shareholder in domestic and cash payment M&As are lower than for cross-border M&As, but average actual return of acquirers' shareholder in domestic and cash and stock payment M&As are higher than for cross-border M&As.

For target banks, the average actual return of targets' shareholder in domestic M&As are higher than for cross-border M&As in both cash and cash-stock payment.

This study has analyzed the actual returns due to some reasons such as data validity. Uniqueness and focusing on a relatively new aspect of M&A deals has been considered as one of the main motivations for analyzing the actual return rather than the abnormal return. The majority of the previous researches have included the abnormal return in their studies, but it's very rare to find a specific research considering the actual return.

But, for the future researches, it's recommended to use the abnormal return in the same scenarios in order to compare the results. It's also

recommended to study the other countries from Europe, Africa and Asia as well.

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