Synergy Recognition: Do CFOs with Investment Banking Backgrounds Make More Acquisitions Than Their Peers?

John Sheeley
University of Iowa
SYNERGY RECOGNITION: DO CFOS WITH INVESTMENT BANKING BACKGROUNDS MAKE MORE ACQUISITIONS THAN THEIR PEERS?

by

John Sheeley

A thesis submitted in partial fulfillment of the requirements for graduation with Honors in the Business

________________________________________________
Samuel Melessa
Thesis Mentor

Fall 2017

All requirements for graduation with Honors in the Business have been completed.

________________________________________________
Jennifer Blair
Business Honors Advisor

This honors thesis is available at Iowa Research Online: https://ir.uiowa.edu/honors_theses/
Synergy Recognition: Do CFOs with Investment Banking Backgrounds Make More Acquisitions Than Their Peers?

John Sheeley
Henry B. Tippie College of Business
University of Iowa
Iowa City, IA 55240
john-sheeley@uiowa.edu

December 2017

Abstract
Numerous academic studies point out the detrimental effects of large acquisitions on the performance of acquirers, often concluding that companies rarely recognize the revenue and cost synergies that they hope to attain with an acquisition. Concurrently, a number of finance professionals propose that investment bankers tend to maintain extreme optimism about the value of acquisitions. Thus, in study I ask the following research question: Are individuals with work experience in investment banking more likely to participate in M&A activity than their non-banking peers? Specifically, I test whether the executives (specifically CFOs) of publicly traded technology companies with investment banking work experience are more likely to make acquisitions than their peers who have never worked in transaction advisory. I predict that CFOs with backgrounds in investment banking are more likely to participate in M&A activity due to the confidence they possess in their ability to realize merger synergies. I find evidence indicating that firms with CFOs with work experience in the investment banking industry make more acquisitions than firms that have CFOs with no investment banking work experience. That is, CFOs with investment banking work experience make twice as many acquisitions as firms that have CFOs with no investment banking experience.

**I would like to thank my thesis advisor, Sam Melessa, Ph.D., for his assistance throughout this project. Additionally, I would like to thank Jon Garfinkel, Ph.D., Jue Wang, and Alanson Tobias for their support in my data retrieval and analysis.**
1. Introduction

In this study, I ask the following research question: “Do former investment bankers make more acquisitive CFOs than their counterparts that do not have investment banking work experience?” I hypothesize that former investment bankers make more acquisitions than their counterparts due to their reputation as overly optimistic acquirers.

1.1 Research Question and Motivation

This study is motivated by the combination of two ideas: (1) that investment bankers tend to encourage company executives to pursue acquisitions that do not reflect their employer’s long-term interests and (2) that most M&A deals destroy shareholder value and hurt long-term company performance. Corporate executives rely on investment bankers to act as external advisors who provide objective advice to their clients, but because investment bankers are compensated upon the completion of a transaction, some argue that deal advisors are incentivized to convince acquirers to take part in M&A activities that have the highest likelihood of completion. This compensation structure can also incentivize investment bankers to rush the transaction process, which can lead to ignorance regarding the negative attributes of a potential acquisition. Simultaneously, academics have published a wealth of research suggesting that acquisitions often fail to meet the financial expectations of the acquirer and can have a negative impact on the company’s value. This typically happens because of one of three reasons: (1) the acquirer and investment bank misgauge strategic fit, (2) the acquirer is unable to take advantage of revenue and cost synergies that it hopes to gain through the acquisition, or (3) the acquirer overpays for
the target company.\textsuperscript{3} For these reasons, public companies typically trade at a price discount after announcing a large merger or acquisition.\textsuperscript{5} In combination, these opinions, research, and documented market reactions led me to examine the propensity of executives with investment banking backgrounds to make acquisitions relative to their peers. This research may help investors evaluate management teams, understand executive decision-making, and better predict which companies are most likely to partake in mergers, acquisitions, or other activities that put a company’s financial health at risk.

1.2 Background and Related Research

1.2.1 Impact of Acquisitions on Acquirers

A significant amount of literature examines the post-merger performance of acquiring companies. In 1991, Franks, Harris, and Titman released a paper that highlights some of the earliest research on the topic. The researchers examined 399 acquisitions made by NYSE and AMEX firms over a ten year period. Using an equally-weighted index of sample companies, the scholars’ findings confirm former research which claims that companies experience poor post-merger performance. Franks, Harris and Titman claim that under different measures (a non-equally-weighted index), though, the study’s sample acquirers experience no statistically significant abnormal performance in the post-merger period.\textsuperscript{4}

Scholars continue to debate the efficacy of corporate acquisitions, but Agrawal, Jaffe, and Mandelker attempt to clarify the divided literature on the topic by conducting a study with a more exhaustive sample of mergers than previously
considered. Agrawal, Jaffe, and Mandelker find that acquirers, on average, suffer a 10% decrease in stock price in the 5-year post-merger period.\(^1\)

1.2.2 Investment Banker Optimism

Very little academic research exists that focuses on investment banking professionals’ confidence in the ability of companies to effectively execute large mergers or acquisitions. Anecdotally, I find that investment bankers have a reputation for over-optimism in the value that M&A transactions provide to acquirers. Because investment bankers are compensated with deal fees, many professionals assume that investment bankers are likely to seek acquisitions with quick processes and high-likelihood of completion. If this assumption is true, it’s feasible to believe that investment bankers spend a significant amount of time highlighting the positive and ignoring the negative attributes of target firms, further fueling their willingness to conduct M&A activity.

1.2.3 Assumptions and Research Impact

The validity of my hypothesis rests on the assumption that the results of Agrawal, Jaffe, and Mandelker are more representative than the results of Franks, Harris, and Titman. My research is more relevant to investors if acquisitions negatively affect shareholder value than if they positively affect shareholder value.

If one assumes that acquisitions are typically destructive to shareholder value, and CFOs with investment banking experience make acquisitions more frequently than their counterparts (per my hypothesis), then it is possible that CFOs with investment banking experience make more acquisitions during their tenure at a company, negatively impacting long-term shareholder value.
2. Data and Research Design

2.1 Sample Selection

To test my hypothesis, I use a sample consisting of companies with membership in the Russell 3000 Index between November of 2012 and November of 2017. The data considers only companies in the technology sector and acquisitions that happened between November of 2012 and November of 2017. In this dataset, I exclude a single outlier that skews the results of the data. Observations with missing data are also removed. The resulting dataset consists of 39 observations.

2.2 Data Collection

I use several different data sources to collect all of the information needed to construct my sample, including Thomson Reuters SDC Platinum, FRED Economic Data from the Federal Reserve Bank of St. Louis, company websites, and LinkedIn.

First, I gather the acquisitions made by Russell 3000 companies since 1994, including the effective date, the acquirer, the target company, and the deal value. I proceed to cut the data to only include companies that were a part of the Russell 3000 from November of 2012 to November of 2017. After narrowing the list of acquirers to a random sample of 40, I collect each of their acquisitions that occurred from November of 2012 to November of 2017. I eliminate one of the companies due to its outlier status, which heavily influenced the statistics of the dataset.

After finalizing my sample companies and acquisitions, I use LinkedIn and manually pull the names and work history of each CFO from the 39 companies in my sample. I then link the CFOs to the number of acquisitions their company made
during the aforementioned 5-year period. From that point, I determine if the CFO’s company made above the median number of acquisitions for the data set or below the median number of acquisitions for the data set. Table 1 shows a breakdown of data for all 39 of my observations.

The information in the dataset may be influenced by the many large acquirers that employ executives with investment banking backgrounds. This research assumes that each sample company’s current CFO held their current role from November of 2012 to November of 2017.

2.3 Variables of Interest

2.3.1 Dependent Variable

My dependent variable is the number of acquisitions a company made in the 5-year period starting in November of 2012 and ending in November of 2017. From my sample of 39 firms, I was able to gather data on 92 acquisitions.

2.3.2 Independent Variable

My independent variable is a dummy variable that indicates whether a CFO has investment banking work experience. If the CFO does have investment banking work experience, the variable equals one. If the CFO does not have investment banking work experience, the variable equals zero. For the sample of 39 firms, eight firms had a CFO with investment banking work experience, while the remaining 31 companies had CFOs with no investment banking work experience.
2.4 Empirical Methods

To test my research question, I estimate the following linear equation using ordinary least squares:

\[ \text{Dependent Variable} = \beta_0 + \beta_1 \times X \text{ Variable} \]

The dependent variable in the formula refers to the number of acquisitions a company makes in the 5-year period starting in November of 2012 and ending in November of 2017, while the independent variable (X Variable) refers to whether or not a CFO has investment banking work experience.

3. Results

Table 2 displays the regression results. The results in this table are estimated using the entire dataset excluding a single outlier. The independent variable, whether or not a CFO has investment banking work experience, has a positive coefficient, supporting the idea that CFOs with investment banking work experience make more acquisitions than their counterparts without investment banking work experience. The regression results demonstrate an increase in M&A activity for CFOs with investment banking work experience. Specifically, if a company’s CFO has investment banking work experience, the company makes on average 3.75 acquisitions over the five-year period (1.879 + 1.871 = 3.75). The p-value on the coefficient of interest is less than five percent and indicates that this results is statistically significant. This represents double the amount of acquisitions made by firms with CFO with no investment banking experience (1.871). Overall, this result supports my hypothesis that former investment bankers would have increased optimism in their ability to recognize
synergies in a merger and therefore participate in more acquisitions than CFOs without investment banking experience.

The dataset’s Adjusted R Square is 0.114060937, which implies that 11.40% of the variation in the number of acquisitions made by firms can be explained by whether their CFO has worked in the investment banking industry.

Tables 3 and 4 display the distribution of CFO by the number of acquisitions to illustrate the connection between a company CFO’s experience in investment banking and the number of acquisitions made by his/her employer. Table 3 communicates the number of acquisitions made by CFOs without investment banking work experience. Table 4 reports the number of acquisitions made by CFOs with investment banking work experience.

**4. Next Steps**

After a careful analysis of the limited data I used for this project, I conclude that the topic is worthy of further study by academic researchers.

My analysis could be extended to include a larger sample size, as expanding the sample would allow for stronger and more generalizable results. I believe the improved sample should also include the remaining business sectors as classified by Standard & Poor’s, as technology companies are often run by executives with engineering backgrounds which makes the development of a data difficult considering the sample requires a significant number of CFOs with investment banking work experience. The entire business sector list should include companies in the information technology, consumer discretionary, consumer staples, energy, financials, health care, industrials, materials, telecommunications, and utilities sectors.
Any new research on the topic should control for firm size, industry, and changes in CFOs over the 5-year period used to analyze M&A activity.

If a similar study with an improved sample provides the same results as my study, continued research could attempt to determine whether CFOs with investment banking work experience make more effective acquisitions, which could speak to the idea that CFOs with investment banking work experience are value destructive to shareholders due to their acquisitive nature. The effectiveness of acquisitions can be measured by a number of variables, including:

- Short-Term Stock Price Fluctuations
- Long-Term Stock Price Fluctuations
- Goodwill Impairments Resulting from Over-Priced Acquisitions
References


5. Investopedia. (2017, June 07). What happens to the stock prices of two companies involved in an acquisition?
Table 1

CFO Work Experience and Acquisition Data

<table>
<thead>
<tr>
<th></th>
<th>CFOs w/ Investment Banking Experience</th>
<th>CFOs w/o Investment Banking Experience</th>
<th>All CFOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFOs Observed</td>
<td>8.00</td>
<td>31.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Total Acquisitions</td>
<td>30.00</td>
<td>58.00</td>
<td>88.00</td>
</tr>
<tr>
<td>Median Acquisitions</td>
<td>3.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Average Acquisitions</td>
<td>3.75</td>
<td>1.87</td>
<td>2.26</td>
</tr>
</tbody>
</table>
Table 2

Regression Analysis (Number of Acquisitions / Investment Banking Work Experience)

<table>
<thead>
<tr>
<th>Regression Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>t Stat</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.87067742</td>
<td>5.336583306</td>
</tr>
<tr>
<td>X Variable 1</td>
<td>1.879032258</td>
<td>2.427414375</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>df</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-value</th>
<th>Lower 95%</th>
<th>Upper 95%</th>
<th>Lower 95.0%</th>
<th>Upper 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.87067742</td>
<td>0.350592811</td>
<td>5.336583306</td>
<td>4.96649E-06</td>
<td>1.160599231</td>
<td>2.581336253</td>
<td>1.160599231</td>
</tr>
<tr>
<td>X Variable 1</td>
<td>1.879032258</td>
<td>0.774087967</td>
<td>2.427414375</td>
<td>0.020192031</td>
<td>0.310581054</td>
<td>3.447483462</td>
<td>0.310581054</td>
</tr>
</tbody>
</table>
Table 3

Normal Distribution of the Executives without Investment Banking Experience
Table 4

Normal Distribution of the Executives with Investment Banking Experience