# Deviation from the Target Capital Structure and Acquisition Choices

Xinyu Deng<sup>1,a,\*</sup>

<sup>1</sup>University of California—Berkeley, Berkeley, California, 94030 a. xinyudeng@berkeley.edu \*corresponding author

*Abstract:* This paper aims to discuss how managers consider capital structure variations when deciding which purchases to make. Compared to their debt ratio, highly leveraged companies are less likely to decide to buy cash. These companies purchase unimportant goals at a bargain. The capital structures of over-leveraged companies are changed by their managers in anticipation of a merger or acquisition. The methodology entails the approach to the research, and the right debt-to-capital ratio was found by using Compustat and the Center for Research on Security Prices (CRSP). These data will be used in assessing the estimation model and various regression and correlation analyses. Finally, they look for acquisitions that will add the most value. This research examines the relationship between capital structure and investment choices in the context of financial frictions, highlighting the importance of capital structure in investment choices.

Keywords: capital structure, target capital structure, leverage ratio, debt capitalization

#### 1. Introduction

The best capital structure for a corporation is determined by weighing the costs and benefits of an organization's debt financing, in accordance with conventional capital structure theories. However, organizations frequently stray from their ideal capital structure in order to achieve a mix and combination of the same. The ability of the company to increase its debt capitalization affects the deviation from the intended capital structure [1][2]. The leverage deficit, which is the departure from the desired debt ratio, affects how company decisions are made in order. The goal capital structure and acquisition choice, which entail taking into account different organizations' operational, management, and even investment activities, have remained the least investigated aspects of the literature despite efforts to create a balanced capital structure between debt and equity. The following are the paper's research goals: To identify the consequences of the leverage deficiency on the firm's decision; 2. To study potential capital structure and acquisition options that diverge from the intended model; 3. To evaluate the firm's capital structure and its impact on the investment. The following sections make up this paper: brief introduction, the theoretical and empirical research on the target capital structure in merger and acquisition activities follows. The data and estimate models utilized in the research to arrive at the findings and conclusion are described in the methodology section. The empirical analysis's findings are presented in the fourth part, along with a discussion that will be utilized to determine. This study will be crucial for management in choosing the best investments, for policymakers in choosing loans, and for investors in choosing investments for the firms. The necessity

 $<sup>\</sup>bigcirc$  2023 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

for an efficient capital structure is crucial since it helps management and policy makers in the organization make better decisions about mergers and acquisitions as well as capital structure decisions. Since capital structure composition has an effect on firm's profitability and the level of the firm's tax liability, the need for having an effective combination of capital structure will aid in creating a better decision towards creating an effective implication for the managers and policy decision makers in the company.

## 2. Literature Review

Although the impact of leverage shortfall on securities issuance decisions has been extensively studied, the implications of leverage shortfall on corporate acquisitions remain poorly understood [3]. When there are financial limits, the leverage gap can play a significant role in determining whether or not to acquire anything. Firms may fund any project with a positive net present value (NPV) thanks to frictionless capital markets, but this isn't always the case. Corporations can't bid aggressively if they don't have quick access to capital, but they can't put as much cash in their offers if they can't secure additional debt. The ability of a corporation to make an acquisition is influenced by its leverage deficit.

# 2.1. Deviation from the Targeted Capital Structure and Acquisition Choices

Since leverage deficit is thought to have a big effect on acquisition behaviour, managers try to minimize the bad effects of overleverage. To move toward a target capital structure, an organization that has too much debt is thought to need to reduce its leverage deficit and issue more stock. There needs to be a balance between debt and equity, which needs to be re-balanced because firms with too much debt are more likely to buy the target firm. In most cases, the concept of capital structure is regarded as one of the two main approaches of capital structure theory. The other theory is the pecking order theory, and the new approach is the market timing approach, whose main aim is to give a new perspective in making a better explanation of the capital structure determination. Mostly, the target financial distress theory, which holds that trade–off tax benefits that is derived from debt financing against the distress cost as presented by Modigliani and Miller in 1963[4]. It also supports the agency theory proposed by Jensen and Mackling, who concluded that the target capital structure is established so as to minimize the cost of agency and the debt-to-equity ratio [5]. Ross's model says that a capital structure decision and choice sends a message to investors about the value of the firm. This leads to a weighing of the costs and benefits of a given target capital structure [6].

According to several reports cited by Myers and Malouf, the pecking order theory is supported by the asymmetric information theory [7]. On the basis of this approach, managers are presumed not to adhere to a predetermined goal capital structure, but rather to prioritize internal financing, debt financing, and external new equity financing. Based on the new market perspective, Baker and Wurgler draw the conclusion that capital structure is the end product of numerous market-driven financing choices [8]. Graham and Harvey's empirical research indicates that 81 percent of businesses have a high goal debt ratio [9]. Additionally, Titman and Wessels hypothesized that the explanatory strength of the three major capital structure theories supports the static trade-off theory [10]. According to Rajan and Zingales, capital structure across the G-7 nations supports the target capital structure rationale towards attaining an effective and optimal capital structure combination [11]. Recently, the study undertaken by Leary and Roberts [12], and that which was done by Kayhan and Titman found that most firms tend to have a rebalance of their capital structure to obtain a specific long term target [13]. Vasiliou et al. also concluded that, based on the pecking order theory, financing does not seem to hold among the Greek firms [14]. He therefore came to the conclusion that there

was a deviation and choice of decision; these are linked to a choice that is made by the firm. Uysal contents that there is a link between the choice of acquisition and the firm's level of capital structure [15]. From the study, the main conclusion is that target capital structure and the financial deficit specifically should be considered when analyzing acquisition procedures.

# 2.2. Leverage Deficit Effects on Firm's Decision

According to Long and Malitz, the concept of underinvestment and asset substitution concerns is significant because they relate to investment possibilities and company selection, which are two of the most crucial aspects of a corporation [16]. Since investments in tangible assets, such as capital equipment, are visible, companies with a large proportion of tangible investment opportunities may always support more debt financing than companies with intangible or firm-specific business opportunities. These firm-specific investments, which are difficult to track, contribute significantly to economic growth and reduce financial leverage.

## 2.3. Firm Capital Structure and Its Implication on Investment

The need to have an effective capital structure and make a viable investment decision is basically dependent on the management viability and business rationale. According to De Crom, capital structure and investment choice and decisions are affected by many factors [17]. A complete market investment choice, according to MM proponents, has no impact on the capital structure. Furthermore, based on the trade-off theory, companies making decisions that involve debt issues need to have a weight on the taxes and benefits that come alongside each financing during a financial distress state. Other theories, for example, the agency theory, assesses the agency's problems and incentives for managers to undertake a financial leverage ratio. Lastly, the pecking order theory is one of the theories whose main consideration is the hierarchy and sources of financing as the main factor determining the capital structure of a firm. Retained earnings is deemed to be the first source with the highest level of priority, whereas equity funding is considered the last resort for financing that managers of a company needs to undertake. In the recent past, a firm's perceived flexibility has been one of the most significant variables that influences the decision to issue debt rather than equity [9]. In most cases, managers choose their leverage ratio as one way to make future investments and viable opportunities to capitalize on a firm's viability and effectiveness in making financial decisions. This financial opportunity affects the decision since there is fear to huge debt financing that might compromise the firms level of financial decisions and borrowing capacity. Odit and Chittoo claim that there is a considerable negative link between leverage and investment level among the sampled firms based on the provided empirical evidence [19].

## 3. Methods

## 3.1. Sample Selection and Descriptive Statistics

The right debt-to-capital ratio was found by using Compustat and the Center for Research on Security Prices (CRSP) ("Data|CRSP-The Center for Research in Security Prices" [26]. Hovakimian, Fama and French, and Flannery and Rangan have all said that the data would leave out financial institutions (6000-6999) and regulated utilities from the analysis (4900-4999) [3][20][21]. Companies whose sales in 1990 were less than \$10 million will also be left out of the investigation. At the top and bottom one parent levels, it is likely that all variables have been taken out. When figuring out a target leverage ratio, 60,630 firm years are chosen at random from a sample period, and regression analysis is used to estimate the performance of the capital structure. The leverage deficiency is defined as the difference between the firm's actual leverage and its expected leverage. Each purchase of a US

domicile in the sample involved a merger, majority stake acquisition, asset purchase, or the acquisition of specific assets worth more than \$1 million, and all of these transactions were recorded in SDC's Merger and Acquisitions Database. It produces 10,807 purchases through this procedure, with an average value of \$357 million. Out of the sampled data, 15.8% of the acquisitions were done on the basis of all stock offers, whereas the remaining 84.2% were completed through a cash basis transaction.

#### 3.2. Estimation Procedure

One of the most important things to test when doing the estimation and testing procedures is the hypotheses that show the overleveraged and underleveraged firms. Based on this model, a capital structure theory can figure out how much debt an organization should have. When making these kinds of decisions, the firm's deviation from its ideal level of capital structure should be taken into account. The researcher used this method to use the two-step estimating strategy based on what Fama and French said [20]. By regressing the market leverage on the factors that determine the capital structure, equation 1 is employed in the first step of estimation to get the target capital structure. Based on this method, the factors that decide are the firm's profitability, the size of its business, its growth potential, the uniqueness of its products, and the tangible asset ratio.

For one to have control over the industry and its effects, one needs to consider the tax rates and its implications, as well as changes in macroeconomic aspects, which include the regression of years and dummies that are based on the 3-digit SIC industry groupings. The figures and values that are fitted are based on the regression models. The analysis was done based on the target leverage ratio that has been set based on the given variables. The deficit is defined as the actual minus the estimated target leverage ratio, which is the first stage of estimating, in order to attest and establish an estimation in the model.

Market Leverage 
$$it = \gamma' X i, t - 1 + \varepsilon 1 i$$
 (1)

As the second step of the estimating method, the four equations below show the relationship between the transaction value and the total asset value. As the fifth equation says, there is also a test to see if the acquirer's leverage shortfall affects the premium paid. According to Officer, the acquisition premium is calculated as the difference between the market value of the offered target during 40 days of the M&A announcement data and the total market value of the cash, shares, and other components provided [22]. The research also made an examination of whether managers need to have a rebalance of capital structure in an anticipation of the acquisition. These estimations affects the leverage deficit as well as the likelihood of being an acquirer if equity issuance as well as the changes in leverage deficit. The final section of the assessment is based on the market reaction to the merger and acquisition, and the announcement using the cumulative abnormal returns to bidders (CAR). This follows the postulations made by Fuller, Netter, and Stegemoller in making computation over the five-day event window before as well as after the days of announcement [23]. In making the estimation procedures, one of the key aspects is using the values of the weighted index of returns, which also incorporates dividends from the NYSE and the NASDAQ. Abnormal long term returns as well as the leverage deficit are also computed based on the portfolio weights.

$$P(\text{Acquirer} = 1) = \Phi(\beta 0 + \beta 1 \cdot \text{Leverage Deficit} + \beta 1 \cdot \text{Zi}$$
(2)

Total M&A Transaction/Transaction Amount = 0 + 1 Leverage Deficit + 1Zi + 2i (3)

$$P(All Cash = 1) = 0 + 1 Leverage Deficit + 1ZI + 2i$$
(4)

Acquisition Premium = 
$$\alpha 0 + \alpha 1 \cdot \text{Leverage Deficit} + \alpha 1 \cdot \text{Zi} + \epsilon 2i$$
 (5)

 $CAR I = \theta 0 + \theta 1 \text{ Leverage Deficit } + \theta 1 \cdot ZI + \varepsilon 3i$ (6)

# 3.3. Analysis and Findings

Leverage plays a key role in every organization, and the need to assess its viability and decision choice is based on the decisions variables. This section examines whether a leverage imbalance impacts the premium paid for a target company. The officer expected the acquisition premium to be equal to the target's market valuation forty days prior to the M&A announcement divided by the total cash, stock, and other instruments transferred to the target [22]. To provide an appropriate approach strategy, the range between zero and two is reduced to zero depending on the target firm's cumulative abnormal return. Additionally, the control variables indicated in the preceding sections, the market-to-book ratio, stock return, and profitability of the target company are considered in premium regressions.

	Acquisition p	premium	Target CAR (-20,+1)		
	(1)	(2)	(3)	(4)	
Market Leverage Deficit	0.018		0.013		
	(0.841)		(0.832)		
Overleveraged Firm		-0.083*		-0.054*	
		(0.037)		(0.024)	
Underleveraged Firm		-0.035		-0.02	
		(0.164)		(0.293)	
sales	0.007	0.005	0.014**	0.013**	
	(0.286)	(0.470)	(0.004)	(0.010)	
Market-to-Book	0.050**	0.053**	0.026**	0.027**	
	(0.000)	(0.000)	(0.000)	(0.000)	
EBITD/TA	-0.082	-0.071	0.1	0.106	
	(0.495)	(0.554)	(0.201)	(0.178)	
Stock Return	0.012	0.008	-0.023	0.026+	
	(0.545)	(0.684)	(0.122)	(0.090)	
Within-Industry Acquisition	-0.012	-0.013	-0.015	-0.015	
	(0.612)	(0.585)	(0.376)	(0.362)	
All Cash	0.037	0.032	0.099**	0.095**	
	(0.101)	(0.161)	(0.000)	(0.000)	
Competed	0.014	0.021	0.080**	-0.075**	
	(0.750)	(0.637)	(0.005)	(0.009)	
Hostile	0.135**	0.143**	-0.003	0.001	
	(0.009)	(0.007)	(0.946)	(0.980)	
Industry M&A Liquidity	-0.161	-0.167	-0.034	-0.041	
	(0.280)	(0.261)	(0.773)	(0.733)	
Herfindahl Index	-0.051	-0.048	0.103	0.107	
	(0.525)	(0.554)	(0.147)	(0.134)	
Market-to-Book( Target Firm)	-0.030**	-0.031**	-0.020*	-0.020**	
	(0.008)	(0.006)	(0.011)	(0.009)	
EBITD/TA (Target Firm)	0.257**	0.259**	-0.149+	-0.150+	

Tabla	1.	Dromium	ragraggiong
Table	1.	1 ICIIIIUIII	regressions.

	(0.003)	(0.002)	(0.070)	(0.068)
Stock Return (Target Firm)	-0.015	-0.015	-0.034*	-0.033*
	(0.433)	(0.431)	(0.019)	(0.024)
Observations	1005	1005	1220	1220
R-squared	0.066	0.073	0.13	0.134

· · · · · · · · · · · · · · · · · · ·
---------------------------------------

Table 1 demonstrates that the consequences of leverage deficiency on the acquisition premium for the Target CAR are negligible. The results reveal that the influence of leverage becomes important when the effects of over- and under-leveraged enterprises are separated. In particular, it is assumed that an acquirer that is overleveraged will pay 8.3% lower premiums, whereas acquirers that are underleveraged will be similar to the model indicated in equation. 2. Based on the results, it shows that using the model, equation 4 will hold since an overleveraged firm is deemed to have high pay premiums on the target. Based on its approach to assessing the all cash offering for acquisition, there is a high likelihood, as reported in Table 2 below:

	All Acquisitions				Firm Acquisitions				Asset Acquisitions			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Market	-	-			-	-			-	-		
Leverage	0.15	13.3			0.21	17.8			0.09	7.04		
	(0.0	(0.00			(0.0	(0.00			(0.0	(0.0		
	00)	0)			00)	0)			12)	81)		
Over			-	-			-	-			-	-
Leveraged			0.06	5.09			0.09	8.07			0.03	2.25
			(0.0	-			(0.0	(0.0)			(0.0	(0.2
			00)	0.00			00)	00)			18)	04)
Under			0.00	0.55			0.00	-			0.00	0.43
Leveraged			3	9			1	0.17			1	7
			(0.7	(0.6			(0.9	(0.9			(0.9	(0.7
			99)	20)			67)	11)			47)	67)
Sales	0.00	1.09	0.00	1.03	-	0.51	-	0.42	0.02	1.96	0.02	1.88
	9**	5**	8**	2**	0.00		0.00	9	1**	6*	0**	4**
	(0.0	(0.00	(0.0	(0.0	(0.3	(0.31	(0.2	(0.3	(0.0	(0.0	(0.0	(0.0)
	03)	2)	10)	03)	85)	5)	37)	96)	00)	00)	00)	00)
Relative Size	-	0.47	-	0.46	-	-	-	-	-	3.65	-	3.65
	0.03	3	0.03	7	0.06	2.95	0.06	2.95	0.00	5**	0.00	0**
	(0.0	(0.19	(0.0	(0.1	(0.0	(0.00	(0.0	(0.0)	(0.2	(0.0	(0.2	(0.0)
	00)	2)	00)	98)	00)	0)	00)	00)	29)	00)	19)	00)
Market-to-	-	-	-	-	-	-	-	-	0.01	0.64	0.01	0.69
Book	0.00	2.21	0.00	2.14	0.02	3.67	0.01	3.62	5**		6**	5

Table 2: Cash acquisition.

	(0.0	(0.00	(0.1	(0.0	(0.0	(0.00	(0.0	(0.0	(0.0	(0.2	(0.0	(0.1
	96)	0	66)	00)	00)	0)	00)	00)	02)	18)	01)	81)
EBITD/TA	0.22	17.6	0.22	17.0	0.37	26.1	0.37	25.6	0.09	6.06	0.09	5.70
	8**	38**	0**	97*	9**	92**	3**	49*	7*	1	1+	2
	(0.0	(0.00	(0.0	(0.0	(0.0	(0.00	(0.0	(0.0	(0.0	(0.2	(0.0	(0.2
	00)	0)	00)	00)	00)	0)	00)	00)	37)	22)	50)	79)
Stock Return	-	-	-	-	-	-	0.00	0.03	-	-	-	-
	0.03	2.49	0.02	2.21	0.00	0.48	0	4	0.04	3.59	0.04	3.46
	(0.0	(0.00	(0.0	(0.0	(0.5	(0.57	(0.9	(0.9	(0.0	(0.0	(0.0	(0.0
	00)	0)	00)	01)	66)	7)	64)	69)	00)	00)	00)	00)
Within-	-	- 2.08	-	-	-	-	-	-	-	-	-	-
Industry	0.01		0.01	2.14	0.01	1.24	0.01	1.31	0.01	2.77	0.01	2.80
	(0.0	(0.04	(0.0	(0.0	(0.1	(0.41	(0.1	(0.3	(0.2	(0.0	(0.1	(0.0
	74)	7)	66)	41)	57)	8)	53)	89)	03)	31)	96)	30)
Public Target	-0.03	- 3.02	-0.03	- 2.93	0.06 8**	3.32 7	0.06 7**	3.32 5	- 0.10	1.06 9	- 0.10	0.99 3
	(0.0	(0.05	(0.0	(0.0	(0.0	(0.13	(0.0	(0.1	(0.0	(0.8	(0.0	(0.8
	08)	9)	10)	68)	02)	7)	02)	39)	65)	62)	66)	72)
Private Target	-	-	-	-	-	-	-	-	-	-	-	-
	0.10	5.54	0.10	5.51	0.09	8.20	0.09	8.22	0.08	2.12	0.08	2.09
	(0.0	(0.00	(0.0	(0.0	(0.0	(0.00	(0.0	(0.0	(0.0	(0.0	(0.0	(0.0
	00)	0)	00)	00)	00)	0)	00)	00)	00)	83)	00)	88)
Competed	0.20	21.3	0.20	21.2	0.23	23.8	0.23	23.6	0.03	11.4	0.03	11.6
	8**	56*	7**	85*	3**	45**	1**	01*	2	17	7	86
	(0.0	(0.02	(0.0	(0.0	(0.0	(0.00	(0.0	(0.0	(0.7	(0.3	(0.7	(0.3
	00)	3)	00)	20)	00)	8)	00)	06)	77)	37)	44)	24)
Industry M&A	- 0.20	- 17.3	- 0.20	- 17.8	- 0.23	- 14.3	- 0.25	- 15.5	- 0.19	- 21.0	-0.20	- 21.3
	(0.0	(0.02	(0.0	(0.0	(0.0	(0.11	(0.0	(0.0	(0.0	(0.0	(0.0	(0.0
	04)	8)	03)	22)	21)	5)	13)	88)	33)	48)	30)	43)
Herfindahl Index	- 0.02	0.21	- 0.22	0.49 2	- 0.00	7.85	0.00 7	8.64 9+	- 0.03	- 3.43	- 0.03	- 3.33
	(0.3	(0.94	(0.4	(0.8	(0.9	(0.13	(0.8	(0.0	(0.3	(0.3	(0.3	(0.3
	93)	7)	60)	75)	68)	2)	74)	93)	33)	64)	71)	77)
Observations	108 07	1080 7	108 07	108 07	422 1	4221	422 1	422 1	658 6	658 6	658 6	658 6
(Pseudo) R- square	0.06 7	0.07	0.06 9	0.06 9	0.14 6	0.16	0.14 8	0.16	0.04 2	0.04 8	0.04 2	0.04 8

Table 2: (continued).

The model's probity analysis for odd numbers is shown in the table above. All models include the year dummies with the symbols \*\*, \*, and +. These stand for statistical significance at the 1%, 5%,

and 10% levels, respectively. Capital structure adjustments prior to acquisitions. Future acquisition opportunities have a tendency to impact ex-ante capital structure decisions, according to Morelli and Zhdanov [24]. Ex ante leverage deficits are more likely to be reduced by organizations with a higher probability of acquisition. As such, in this analysis, a suggestion of leverage adjustment based on the issuance likelihood is stated to satisfy the model. Three proxies are employed in this model when undertaking the aspect of acquisition. The first approach includes the use of Harford that classifies the firm as expected as well as unexpected based on table 2 on the prohibit model [25].

	All Acquitions		Firm Acquitions		Asset Acquisitions		Within-I Acquisit	ndustry ions	Cross-Industry Acquitions	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Market Leverage Deficit	- 0.10 8**	- 0.27 5**	- 0.04 8**	- 0290 **	- 0.07 1**	- 0.14 4*	- 0.047* *	- 0.174* *	- 0.071**	- 0.22 7**
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.000)	(0.000)	(0.000)	(0.00 0)
Sales	0.01 2**	0.01 9**	0.00 9**	0.04 6**	0.00 6**	0.00 4*	0.006	0.015* *	0.008**	0.01
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.02 5)	(0.000)	(0.000)	(0.000)	(0.00 0)
Stock Return	0.02 0**	0.06 5**	0.01 0**	0.07 0**	0.01 4**	0.03 3**	0.010* *	0.044* *	0.014**	0.04 8**
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.000)	(0.000)	(0.000)	(0.00 0)
Market-to- Book	0.01 0**	0.03 6**	0.01 0**	0.06 7**	0.00 0	- 0.00 0	0.006* *	0.028* *	0.004**	0.01 7**
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.94 3)	(0.91 6)	(0.000)	(0.000)	(0.000)	(0.00 0)
EBITD/TA	0.15 1**	0.41 1**	0.04 3**	0.25 7**	0.12 5**	0.28 7**	0.091* *	0.364* *	0.069**	0.23 5**
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.000)	(0.000)	(0.000)	(0.00 0)
Industry M&A Liquidity	0.31 1**	0.78 7**	0.13 5**	0.80 4**	0.22 4**	0.45 1**	0.303* *	1.150* *	0.002	- 0.02 5
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.000)	(0.000)	(0.927)	(0.77 7)
Herfindahl Index	- 0.07 2**	- 0.18 8**	- 0.04 2**	- 0.25 7**	- 0.04 3**	- 0.08 4**	- 0.095* *	-0.378	0.005	0.02 9
	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.00 0)	(0.000)	(0.000)	(0.543)	(0.31 3)
Observations	6063 0	6063 0	6063 0	6063 0	6063 0	6063 0	60630	60630	60630	6063 0

Table 3: Bidder percentage of every non-bidder interval analysis.

Pseudo	R-	0.04		0.05		0.03		0.045	0.033	0.033	
square		0				2					
P-value		0.00	0.00	0.00	(0.00	0.00	0.00	0.000	0.000	0.000	0.00
		0	0	0	0)	0	0				0

Table 3: (continued).

From the model, the figure above presents a bidder's percentage of every non-bidder interval. This leads to a generation of two distributions of bidders and non-bidders based on the cut off percentage and model requirement based on the data presented. Based on equation 1, it shows that the overleveraged firm reduces its leverage deficit to a tune of 3.8% and underleverage increases its percentage to a tune of 4.4% making a confirmation that their capital structure moves towards the target debt ratio. The author also find that firms with too much debt reduce their leverage deficit by another 3.4% when they are likely to be bought. When the M&A industry is based on cluster enterprises, it is based on the rebalancing mode, as shown in equations 2 and 3. The fourth equation demonstrates that an overleveraged firm is more likely to issue stock with a higher probability of acquisition. The favorable impact of M&A liquidity also contributes to equations or models 5 and 6. Model 5 is unbalanced because the findings indicate that active rebalancing of the capital structure to alleviate the effects of high leverage deficit in acquisition plays a significant role.

# 4. Conclusion

According to the research, a company's leverage deficit diminishes the likelihood that it will pursue an acquisition. Between underleveraged and overleveraged enterprises, the impact of a leverage deficit on the likelihood of an acquisition is not seen to be equal. With the increased effect of being overleveraged and having a negative significance with the acquisition decision, the need to create an effective system is placed on an impact which should determine the level of acquisition choice for the business. It was also found that overleveraged firms that acquire a business are deemed to have a lower premium as well as have a lower cash component in their offers. It is further noted from the analysis that managers of over-leveraged companies aim to reduce the leverage deficit as well as create an equity issue to mitigate the impact of the company's over-leverage. From the analysis, it was also found that the reaction to the market before the acquisition of an overleveraged firm creates some aspects of selectiveness and only enhances an increased level of market valuation and the creation of an effective value enhancing acquisition. Since the main rationale for this paper is making an investment choice, the need to create an effective financing friction decision before acquisition is key in the long run. By using an acquisition approach, the results of the study show that excessive leverage limits managers' investment decisions and also limits the equilibrium level of a firm's financing leverage structure. This therefore means that a firm that is highly leveraged creates an increased level of change and, in the long run, affects the level of financing and investment decisions. Therefore, to the policy makers and managers in a firm, the usefulness of target capital structure when making managerial decisions and acquisition is key concept that needs to be capitalized through assessing the leverage decision by the company. There is a higher chance of foregoing the acquisition opportunities since it yields a higher result for an overleveraged firm. The limitation of the research is determining how the financial constraints for future acquisitions. Since acquisitions are considered to have a long-term impact on valuation, it is more likely that the after-tax capital structure will not mitigate the negative impact of overleveraging the company.

#### Acknowledgement

I would like to thank my teachers for their help in writing the paper and for providing the best guidance in the development and implementation of the topic. I also want to express my gratitude to my family for their unwavering support and for allowing me the time to apply for this paper.

#### References

- [1] Leary MT, Roberts MR. Do firms rebalance their capital structures? The journal of finance. 60(6):2575-619. (2005).
- [2] Frank MZ, Goyal VK. Testing the pecking order theory of capital structure. Journal of financial economics. 67(2):217-48. (2003).
- [3] Hovakimian A, Hovakimian G, Tehranian H. Determinants of target capital structure: The case of dual debt and equity issues. Journal of financial economics. 71(3):517- 40. (2004)
- [4] Modigliani F, Miller MH. The cost of capital, corporation finance and the theory of investment. The American economic review. 48(3): 261-97. (1958).
- [5] Jensen MC. Agency costs of free cash flow, corporate finance, and takeovers. The American economic review. 76(2):323-9. (1986).
- [6] Ross SA. Capital structure and the cost of capital. Journal of Applied Finance (Formerly Financial Practice and Education) Journal of Applied Finance. 15(1). (2005).
- [7] Myers SC, Malouf NS. Corporate financing and investment decisions when firms have information that investors do not have. Journal of financial economics. 13(2):187-221. (1984).
- [8] Baker M, Wurgler J. Market timing and capital structure. The journal of finance.57(1):1-32. (2002).
- [9] Graham JR, Harvey CR. The theory and practice of corporate finance: Evidence from the field. Journal of financial economics. 60(2-3):187-243. (2001).
- [10] Titman S, Wessels R. The determinants of capital structure choice. The Journal of finance. 43(1):1-9. (1988).
- [11] Rajan RG, Zingales L. What do we know about capital structure? Some evidence from international data. The journal of Finance. 50(5):1421-60. (1995).
- [12] Leary MT, Roberts MR. Do firms rebalance their capital structures? The journal of finance. 60(6):2575-619. (2005).
- [13] Kayhan A, Titman S. Firms' histories and their capital structures. Journal of financial Economics. 83(1):1-32. (2007).
- [14] Vasiliou D, Daskalakis N. Institutional characteristics and capital structure: A cross-national comparison. Global Finance Journal. 19(3):286-306. (2009).
- [15] Uysal VB. Deviation from the target capital structure and acquisition choices. Journal of financial economics. 102(3):602-20. (2011).
- [16] Long MS, Malitz IB. Investment patterns and financial leverage. InCorporate capital structures in the United States. (pp. 325-352). University of Chicago Press. (1985)
- [17] De Crom F. Impact of capital structure choice on investment decisions. Bachelor Thesis Finance. (2011).
- [18] Byoun S. How and when do firms adjust their capital structures toward targets?. The Journal of Finance. 63(6):3069-96. (2008).
- [19] Odit MP, Chittoo HB. Does financial leverage influence investment decisions? The case of Mauritian firms. Journal of Business Case Studies (JBCS). 4(9):49-60. (2008).
- [20] Fama EF, French KR. The cross-section of expected stock returns. the Journal of Finance. 47(2):427-65. (1992).
- [21] Flannery MJ, Rangan KP. Partial adjustment toward target capital structures. Journal of financial economics. 79(3):469-506. (2006).
- [22] Officer MS. Termination fees in mergers and acquisitions. Journal of Financial economics. 69(3):431-67. (2003).
- [23] Fuller K, Netter J, Stegemoller M. What do returns to acquiring firms tell us? Evidence from firms that make many acquisitions. The journal of finance. 57(4):1763-93. (2002).
- [24] Morellec E, Zhdanov A. Financing and takeovers. Journal of Financial Economics. 87(3):556-81. (2008).
- [25] Harford J. Corporate cash reserves and acquisitions. The Journal of Finance. 54(6):1969-97. (1999).
- [26] "Data\CRSP-The Center For Research In Security Prices". Crsp.Org. https://www.crsp.org/resources/data. (2002).