

## Artículo de investigación

**Impact of Capital Structure on Business Performance: A case of Emirates Airline****Impacto de la estructura de capital en el rendimiento empresarial: un caso de Emirates Airline****Impacto da estrutura de capital no desempenho dos negócios: um caso da Emirates Airline**

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**Abstract**

This study investigated the impact of capital structure on business performance of emirates airline. To that end, a time series analysis conducted over the period 1990 to 2015. Econometric models were developed and tested. In this regard three econometric models were developed. The dependent variable were Return on Assets, Return on Equity and Net Profit Margin while the Independent variable were Debt to Assets and Debt to Equity. Time series data assumption stationary was checked through Augmented Dickey Fuller test. To examine the impact of capital structure on business performance multiple regression and correlation analysis were applied. Results showed that there is no significant impact of debt to asset (DTA) on business performance, while debt to equity (DTE) has significant impact on the business performance of Emirates Airline.

**Keywords:** Capital Structure, Business Performance, Return on Asset, Return on Equity, Net Profit Margin, Debt to Asset, Debt to Equity.

**Resumen**

Este estudio investigó el impacto de la estructura de capital en el desempeño comercial de la aerolínea Emirates. Con ese fin, se desarrollaron y probaron modelos econométricos durante un período de 1990 a 2015. En este sentido se desarrollaron tres modelos econométricos. La variable dependiente fue Retorno sobre activos, Retorno sobre patrimonio y Margen de utilidad neta, mientras que la variable independiente fue Deuda con activos y Deuda con patrimonio. La suposición de datos de series de tiempo estacionaria se verificó mediante la prueba de Dickey Fuller aumentada. Para examinar el impacto de la estructura de capital en el rendimiento del negocio, se aplicaron regresión múltiple y análisis de correlación. Los resultados mostraron que no hay un impacto significativo de deuda a activo (DTA) en el desempeño comercial, mientras que la deuda a capital (DTE) tiene un impacto significativo en el desempeño comercial de Emirates Airline.

**Palabras clave:** estructura de capital, rendimiento del negocio, rendimiento del activo, rendimiento del patrimonio, margen de utilidad neta, deuda a activo, deuda al patrimonio.

**Resumo**

Este estudo investigou o impacto da estrutura de capital no desempenho empresarial dos emirados. Para tanto, foi realizada uma análise de séries temporais no período de 1990 a 2015. Modelos econométricos

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foram desenvolvidos e testados. A este respeito, foram desenvolvidos três modelos econométricos. As variáveis dependentes foram Retorno sobre Ativos, Retorno sobre o Patrimônio Líquido e Margem de Lucro Líquido, enquanto a variável Independente foi Dívida sobre Ativos e Dívida sobre o Patrimônio Líquido. A hipótese de dados de séries temporais estacionárias foi verificada através do teste Augmented Dickey Fuller. Para examinar o impacto da estrutura de capital no desempenho dos negócios, aplicaram-se regressão múltipla e análise de correlação. Os resultados mostraram que não há impacto significativo da dívida sobre ativos (DTA) sobre o desempenho dos negócios, enquanto a dívida sobre patrimônio líquido (DTE) tem impacto significativo no desempenho dos negócios da Emirates Airline.

**Palavras-chave:** Estrutura de Capital, Desempenho dos Negócios, Retorno sobre o Ativo, Retorno sobre o Patrimônio Líquido, Margem de Lucro Líquido, Dívida sobre Ativos, Dívida sobre o Patrimônio Líquido.

## Introduction

Emirates was established in 1985 just with two aircraft and now it has become the world's fourth-largest airline by scheduled revenue passenger-kilometers flown and number of international passengers carried. It's founded by the royal family of Dubai. It started its operation in October 1985 and first flight was from Dubai to Pakistan (Karachi). Its first aircraft stock came in the form of a pair of Boeing 727-200s provided by the Dubai Royal Air Wing. The Emirate airline grew rapidly through partnerships and investment to become one of the world's leading air carrier and today it fly the world biggest fleets of Airbus 380 and Boeing 777s.

## Emirates

(Arabic: *طَيَّران الإمارات*) is an airline based in Dubai, United Arab Emirates. The airline is a subsidiary of The Emirates Group, which is exclusively owned by the of Dubai's Investment Corporation of Dubai government. It is the biggest air company in the Middle East, functioning over 3,600 trips per week from its center at Dubai International Airport, to more than 150 cities in 80 nations through six continents. Shipment activities are carry out by Emirates SkyCargo. As of 2019, it is the 2nd biggest cargo air company globally in relations to the total shipment tonne-kilometres flown and the largest in terms of international freight tonne-kilometres flown.

Key Characteristics of Emirates Airline

S. No	Key Factors	
1	Established	March 25, 1985 (age 34 Years)
2	Commenced operations	25 October 1985
3	Hubs	Dubai International Airport
4	Frequent-flyer program	Skywards
5	Subsidiaries	Arabian Adventures •
		Congress Solutions International •
		Emirates Holidays •
6	Fleet size	Emirates Tours •
		254
7	Destinations	150 Cities of Six Continent
	Company slogan	Fly Emirates.
		From Dubai to destinations around the world.
		Keep Discovering
		Hello Tomorrow
8	Parent company	Fly Better (current)
		The Emirates Group
9	Headquarters	Garhoud, Dubai, United Arab Emirates
	Key people	Ahmed bin Saeed Al Maktoum •
		(Chairman & CEO)
10	No. of Employees	Tim Clark (President) •
		60,282 (March 2019)
11	Revenue	US\$ 13.3 billion (Nov. 2018)
12	Net income	US\$ 62 million (Nov. 2018)

Source: [https://en.wikipedia.org/wiki/Emirates\\_\(airline\)](https://en.wikipedia.org/wiki/Emirates_(airline))

The capital structure of the firm describes that how a firm can raise the funds which is needed to expand and required the business for different purposes. The capital structure is the combination of the long term of debt and the equities which is maintained by the firms. The business activities are financed from one or another way.

Capital structure decisions is dynamic and it's depend upon the market indicator, size, nature and need of the firm. Market indicators like interest rate, demand and supply of shares, good will, and competition play vital in the capital structure decision. So much intention of the finance manager is focused on the capital structure decision while shaping the capital structure decisions of the firms. A suitable combination of debt and equity can lead the success of firm in respect of return on asset, return on equity and net profit margin. The debate about the capital structure decision has long been as however the decision of the capital structure also impacted the profitability of the firm. It was the groundwork work on capital structure when Modigliani and Miller (MM) published their famous paper in 1958. Providing the assumptions of perfect market and zero tax world, MM suggested that the decision of debt-equity was not dependent on the firms' value, i.e. the capital structure decision is irrelevant.

The main propositions of MM theory are the following:

1: Modigliani & Miller stated that the capital structure and value of the firm are not related and relevant to each other, in fact the return (profitability) on assets is responsible for the fluctuations in firm's value and the value is independent of financing these assets. Whether the firm relies on debts or equity for financing, its market value will be free from this way of financing. Modigliani & Miller declaration believes that a firm's market value is not going to change because of the change in financing policy and this is because of arbitrage transactions which do this possible. Moreover, Modigliani & Miller asserted that such arbitrage transactions are possible due to viable capital markets.

The base for the MM proposition is the assumption of perfection in capital market where the costs of bankruptcy, transaction cost, information asymmetry and taxes are not present. Firms can use any level of debt in the capital structure as they cannot face the problem of bankruptcy and both the management and the investors of the firm possess equal information regarding the firms' future prospects. Similarly

neither the individuals nor the firms have to pay any taxes and the rate of interest for borrowing funds is the same for investors as it is for corporations. And management will always try to maximize shareholders wealth.

2: Secondly, Modigliani and Miller assumed perfect capital market. This supposition says that a firm which uses high debt to equity ratio will have to pay large amount of return to the stockholders. It is due to the fact that a firm has to face higher risk when it uses heavy amount of liabilities.

Modigliani and Miller were later on criticized because there various imperfections are there in capital markets. There may be multiple ways of capital structure and which are relevant to the investment decision. Modigliani and Miller negated one of these assumptions by themselves. However the agency and bankruptcy costs of debt was again side line by Modigliani and Miller (1963) in their initial paper. Furthermore they suggest in their seminal paper that the value of such firms that are using higher debt in their capital structure will be maximized because of the tax shield that debt provides. The above mentioned theory also elaborate the relationship between the capital structure and firms performance. Theory also described that the decision of the firms about its source of capital also impact the competitiveness of the firms. As a result the firms must utilize proper mix of debt and the equity because it affected the maximum profitability of the firm.

The same as above mentioned capital structure can be used to explain the relationship between the debt and the equities. As financing is one of the major decision in a firm. Therefore a finance manager should develop suitable combination of debt and equities for his/her enterprise. Capital structure can be defined as it the mixture of debt and equity which a company employ the finance its business operation (Damodaran, 2001). One of the significance of the capital structure is that it is heavily associated with the ability of the firms to accomplish the different types of needs of different shareholders. The capital structure also explicit the main claim to assets of the corporation which also involve the numbers of liabilities and equities (Riahi-Belkaonui, 1999). Proper analysis should be conducted to determine the capital structure of the firm, because capital structure effect the overall firm performance and survival. In the current market scenario the financial managers are facing hard problems in assessing the most desirable level of capital structure. As a result the firms must utilize

proper mix of debt and equity because it affected the maximum profitability of the firm.

### Study Objectives

- (1) To find the impact of debt to asset on business Performance of emirates airline
- (2) To find the impact of debt to equity on business Performance of emirates airline

### I. Literature Review

Nirajini and Priya (2013) examined the facts of trading businesses registered in Sri Lanka from year 2006 to 2010 and used correlation and multiple regression analysis and found that there is a significant association between capital structure and business performance. Raheman, Zulfiqar and Mustafa, (2007) analyzed 94 non-financial corporations listed on the Islamabad Stock Exchange (ISE) and used data from 1999 to 2004. Pearson's correlation and regression analysis was performed and results demonstrated that capital structure does influence the business success.

Salim & Yadev (2012) considered the affiliation between capital structure and firm performance in Malaysian companies. The end results disclosed a destructive relation between return on assets, return on equity, earning per share with short term obligation, long term liability, total liability.

Timothy et al. (2002) examined a non-linear connection between management share-ownership and leverage. By the small levels of management ownership, agency clashes require the use of more debt but as managers become rooted at high levels of managerial ownership they seek to diminish their threats and they use a smaller amount of debt.

Rajan and Zingales (1995) analyzed 31 nations and acknowledged an adverse relationship between profitability and leverage and quantified that the increases in size should foster such adverse relation.

Asgharian (2003) examined the association between debt and profitability in sick businesses, which is the industries with adverse average progress in sales, in Sweden. The outcomes presented that in a sick industry, companies with huge debt have a lower progress in sales but greater development in profitability. And also, an adverse relation between stock earnings and debt is recognized irrespective of the business type. Tong and Green (2005) taken the Chinese registered companies and originate, in line with pecking order theory, a significant destructive

relationship between profitability and debt. Margaritis and Psillaki (2007) examined the result of efficiency ratios on capital structure in New Zealand firms. In line with agency cost supposition, they found that debt and efficiency ratios are positively connected. Also, they described an optimistic relation between profitability and debt.

Onaolapo (2010) evaluated statistics from Nigeria and noticed a meaningfully adverse association between firm's debt ratio and a firm's return on equity or return on assets. Majumdar and Chhibber (1999), Fama and French (2002), Booth (2001) also described adverse connection between debt and business performance.

Agency complications are more severe for rising businesses, as they are more elastic in their choice of upcoming investments. Consequently, the predictable progress rate should be destructively related to long-term debt (Titman and Wessels 1988). Furthermore, Myers (1977) claims that companies with greater growth rates tend to use fewer long-term obligation and more short-term leverage in their capital structure in order to decrease such agency costs.

Aivazian, Booth, and Cleary (2003) claimed that the more the tangible assets, the less the readiness of short-term assets for banks to loan against. Because most of the businesses use short term liabilities. Consequently, the less the tangible assets, the more protected is short-term financing and the lesser the agency clashes.

Bhaduri (2002) decided that businesses with a high business threat are more expected to face monetary problems and therefore are more to be projected to be bankrupted. Meanwhile liability comprises an assurance of periodic outflows to the creditor, extremely leveraged businesses are liable to monetary distress costs. Therefore, businesses with instable earnings are likely to use fewer obligation in their capital structure than those with constant earnings.

Big businesses have a tendency of expansion that is why they have less disposed to insolvency. Hence, a progressive connection is likely between firm size and leverage. In addition to, big businesses are expected to be mature and consequently have relaxed entree to capital markets, and such businesses are more capable to pay dividends (Holder, Langrehr, and Hexter 1998; Gul 1999; Koch and Shenoy 1999; Chang and Ho 2003).

After studying 400 businesses from 12 segments and registered on the Tehran Stock Exchange (TSE), Pouraghajan et al (2012) concluded that there is a substantial connection between capital structure and business performance. Several investigators have concluded a constructive relation and some investigated adverse while others have determined that capital structure and business performance are associated by both direction, positively and negatively.

Tang and Jang (2007) conducted a research study about the relationship of debt and firm performance and very low relation between debt and firm performance. Ebaid (2009) studied the relationship between capital structure and firm performance. Data of 64 Egyptian firms between 1997 and 2005 and gross profit margin, assets return and equity return were taken as measures of performance and determined that capital structure has poor and no influence on firm performance. Saeedi and Mahmoodi (2011) used data over 2002-2009 of 320 companies listed on the Tehran Stock Exchange, established that there is no substantial relation between capital structure and firm performance. Grossman and Hart (1982) claimed that liability can boost administration to rise their performance as possible insolvency will have costs to supervision like losing situation. Ari, Herrera and Adullah (2011) used eastern Asian corporations as a model and establish a constructive relation between firm's performance and the debt. Capon et al. (1990) conducted a meta-analysis of results from 320 published readings connected to financial performance, and find a positive relationship between usage of debt and the financial performance.

According to Jong, Kabir and Nguyen (2007) found that creditors' rights protection has a significant effect on capital structure. But firm performance may also affect the choice of capital structure.

Berger and Patti (2006) specified that more efficient firms are more likely to earn a higher return for a given capital structure, and that higher returns can act as a buffer against portfolio risk so that more efficient firms are in an improved situation to substitute equity for liability in their capital structure. Brailsford et al. (2002) examined a non-linear relationship between managerial share-ownership and leverage. At low levels of managerial ownership, agency conflicts necessitate the use of more debt but as managers become rooted at high levels of

managerial ownership they seek to reduce their risks and they use less liability.

Anderson and Reeb (2003b) found that insider ownership by managers or families has no effect on leverage while King and Santor (2008) reported that both family firms and firms controlled by financial institutions carry more debt in their capital structure. Abor (2005) reported an optimistic relation between capital structure, which measured by short term debt and total debt and performance over the period 1998-2002 in the Ghanaian firms. Arbiyan and Safari (2009) examined the effects of capital structure on profitability using 100 Iranian listed firms from 2001 to 2007. The found short-term and total debts are absolutely related to profitability (ROE) which designate a negative relation between long-term debts and ROE Razak and Aliahmed (2008) inspected the impact of an alternative ownership control structure of corporate governance on firm performance among government linked companied (GLCs) and Non GLC in Malaysia, The study was based on a sample of 210 firms over period from 1995 to 2005. Findings appear that there is a significant impact of government ownership on company performance after controlling for company specific characteristics such as company size, non- duality, leverage and growth. The finding is off significant for investors and policy managers which will serve as a monitor for better investment choice.

According to Zertun and Tian (2007) examined the effect which capital structure has had on corporate performance using a panel data sample representing of 167 Jordanian companies during 1989- 2003. The study showed that a firm s capital structure had significantly negative impact on the firm s performance measures, in both the accounting and market's measures.

Gleason et al (2000) also established a negative and substantial relation of debt level with firm performance measured by the return on assets and return margin in the European countries. Upneja and Dalbor (2001) studied the capital structure of restaurant industry and found that firms employ both short term and long term liabilities to sponsor its operations but considerable rely on the short term liabilities.

Huang and Song (2006) studied the Chinese companies and found adverse relation between debt measured by long term debt and total debt and profitability measured by the return on assets. Further, big companies employ more



liabilities and increase in firm size lead to rise in debt.

Ghosh (2007) considered that debt is inversely correlated with profitability. Rao et al (2007) examined Oman firms and found that capital structure is negatively and significantly related to firm performance. Chen et al (2007) found that there is drawback for companies those use more debt from the industry practices. According to King and Santor (2008) the capital structure is negatively correlated with firm performance. Firm profitability, share price performance and growth opportunities decline with an increase in leverage in market-based economies (UK and USA) and bank-based economies (France, Germany and Japan), reported by Antoniou, Guney and Paudyal (2008). Companies listed on the New York Stock Exchange (NYSE), excluding banking sector, were chosen to study the relationship of capital structure and firm performance and the results confirmed that debt ratio and profitability are adversely related and debt is also negatively related with progress and age but the asset structure has a positive relation to firm size, Talberg et al (2008).

Arcas and Bachiller (2008) studied 133 privatized companies in European Union (EU) and found that they more profitable and less leveraged in French and Scandinavian zones while outcomes are contradictory in British zone, but the outcomes are positively associated in Eastern part of the EU. Tsangao et al (2009) concluded that impact of capital structure on firm performance is positive as well as negative too. Arbabiyan and Safari (2009) conducted a study over hundred (100) Iranian companies and found that short term liability and total liabilities are positively related to productivity while long term liabilities are in adverse relation with return on equity.

## II. Research Methodology

### Specification of variables

This study used business performance as a dependent variable and measured through ROA, ROE, and NPM, while Capital structure is independent variable and its determinants are debt to asset and debt to equity.

### Dependent Variables:

Every profitable business wants maximum profit. Maximum profit satisfied the stockholders and stakeholders of the firm. In this regard this research study used three construct as an indicator of firm performance as return of asset, return of equity and net profit margin.

### a. Return on Assets:

The return on assets considered as it how much the firm is earning on its utilization of its assets or the how much the assets of the firm are contributing to its profit. Return on Assets = Net Income / Total Assets [Muhammad, Shah, & Islam (2014)]

### b Return on Equity:

The return on equity measured the construct of the amount of net income returned as a percentage of shareholders equity. The Return on equity asses a firm's profitability by showing how much profit a company generates with the money shareholders have invested. Return on Equity = Net Income / Shareholder's Equity [Muhammad, Shah & Islam (2014),

### c. Net Profit Margin:

The net profit margin indicates the whole construct of the ability of the company to turn each dollar into the net profit. It creates a relation between the net profit and the sales of the firm. In addition to, it reveal the overall efficiency of the management.

### ii .Independent Variable:

The independent variable which is used in the study is capital structure and the two important measures have been used as an indicator for the capital structure i.e. debt to assets and debt to equity ratios.

### a Debt to Assets:

The debt to assets refer that how much the asset are financed through the debt (Fraser & Ormiston, 1998). Debt to Assets = Total Liabilities / Total Assets

### b. Debt to Equity:

The debt to equity ratio assess the financial leverage of the company. It indicates the relative proportion of shareholders' equity and debt used to finance a company's assets. (Peterson & Fabozzi, 1999). Debt to Equity = Total Liabilities / Total Equity

### Hypothesis of the Study

**H1:** There is a significant and negative relationship between DTA and ROA.

**H2:** There is a negative and significant relationship between DTA and ROE.

**H3:** There is a negative and significant relationship between DTA and NPM.

**H5:** There is a significant and negative relationship between DTE and ROA.

**H6:** There is a significant and negative relationship between DTE and ROE.

**H5:** There is a significant and negative relationship between DTE and NPM.

#### Sources of Data

The study was based upon the secondary data and data was from the annual reports of emirates airline over the period of 1990 to 2015.

#### Data analysis

As the data which is used in this research study was time Series over the period of 1990 to 2015. The time series data is the series of data points in a time order. Normally time series is a procedure which is taken at consecutive equally spaced points in time. For the purpose of data analysis the descriptive, correlation and Regression analysis have been employed to find the impact of capital structure on the performance of the Emirates Airline.

#### Model Specification

Descriptive, Correlation and Regression analysis has been employed to analyze the impact of capital structure on firm's performance. Particularly, it helped to assess that for what extent the value of dependent variable changes while by the variation of independent variable. This study uses the following regression models:

$$Y_t = \alpha + \beta_1 DA + \beta_2 DE + \varepsilon$$

(1)

Where,

$Y_t$  = Return on Asset

$\alpha$  = Coefficient of Intercept

DA = Debt to Asset

DE = Debt to Equity

$$Y_t = \alpha + \beta_1 DA + \beta_2 DE + \varepsilon$$

(2)

Where,

$Y_t$  = Return on Equity

$\alpha$  = Coefficient of Intercept

DA = Debt to Asset

DE = Debt to Equity

$$Y_t = \alpha + \beta_1 DA + \beta_2 DE + \varepsilon$$

(3)

Where,

$Y_t$  = Net Profit Margin

$\alpha$  = Coefficient of Intercept

DA = Debt to Asset

DE = Debt to Equity

Table 1. Estimated Correlation Matrix of Variables

	ROA	ROE	NPM	DTA	DTE
ROA	1.0000				
ROE	.73725	1.0000			
NPM	.47820	.75856	1.0000		
DTA	-.042635	-.044431	.062647	1.0000	
DTE	-.40016	-.39563	-.42825	-.0036939	1.0000

#### Correlation analysis

There is a great importance of the correlation analysis in the research so in this research study the correlation analysis was also implemented to analyze the impact of the capital structure on the performance of the firms. The correlation reveals that what is the strength in the relationship between two or more variable in the research. The coefficients of the correlation analysis are nominated by r which also tells the intensity of the relationship between the two or more variable. Its range lies from -1.0 to +1.0 in value +1 indicates strong positive relationship, while -1.0 indicates perfect negative relationship and similarly 0

indicates no relationship between two variables.

**On the basis of the above rules** the above table of the correlation matrix is revealing the relationship, direction and strength of variables.

#### Regression analysis

The time series data has been used over the period from the period 1990 to 2015 that is why the ADF Augmented Dickey Fuller test has been employed in this research study to assess the order of integration and the test of ADF also brings the data in a stationary form. In this study unit root test was also applied and the results are as follows:

Table .1 Unit Root Test

Variables	Level	With Trend	Conclusion
ROA	Level	-4.54 I(0)	
ROE	Level	-3.94 I(0)	
NPM	Level	-5.98 I(0)	
DTA	Level	-4.04 I(0)	
DTE	Level	-4.69 I(0)	

Table.2 Ordinary Least Squares Estimation  
Dependent variable is ROA.

25 observations used for estimation from 1990 to 2015

Regressor	Coefficient	Standard Error	T-Ratio[Prob.]
A	34.5294	12.2629	2.8158[.010]
DTA	-.024890	.10769	-.23112[.819]
DTE	-.10553	.050317	-2.0973[.047]

R-Squared .16207 S.E. of Regression 20.7450  
Mean of Dependent Variable 16.9285 DW-statistic 1.5828

**Regression Results**

The above table showed the results of dependent variable return on asset and independent variable debt to asset and debt to equity. The p value of debt to asset is .819 > 0.05 which shows that there is no significant relationship between debt to asset and return on asset. The p value of debt to Equity is .047 < 0.05 which shows that there is a significant relationship between debt to equity and return on asset. The value of coefficient of debt to asset is -.024890 Value of coefficient shows rate of

variation .so this study indicates that debt to asset has negative weak impact on return on asset. If one unit increases in DTA there will be .024890 times decrease in ROA. The value of coefficient debt to equity is -.10553 Value of coefficient shows rate of variation. This study indicates that debt to equity has negative weak impact on return on asset. If one unit increases in DTE there will be .10553 decreases in ROA.

Table.3 Ordinary Least Squares Estimation  
Dependent variable is ROE.

25 observations used for estimation from 1990 to 2015

Regressor	Coefficient	Standard Error	T-Ratio[Prob.]
A	52.0634	13.4828	3.8615[.001]
DTA	-.028411	.11841	-.23994[.812]
DTE	-.11449	.055323	-2.0694[.034]

R-Squared .15863 S.E. of Regression 22.8088  
Mean of Dependent Variable 32.8531 DW-statistic 1.3649

**Regression Results**

The above table showed the results of dependent variable return on Equity and independent variable debt to asset and debt to equity. The p value of debt to asset is .812 > 0.05 which shows that there is no significant relationship between debt to asset and return on equity. The p value of debt to Equity is .0340 < 0.05 which shows that there is a significant relationship between debt to equity and return on equity. The value of coefficient of debt to asset is -

.028411 Value of coefficient shows rate of variation .so this study indicates that debt to asset has negative weak impact on return on equity. If one unit increases in DTA there will be .028411 times decrease in ROE. The value of coefficient debt to equity is -.11449 Value of coefficient shows rate of variation. This study indicates that debt to equity has negative weak impact on return on equity. If one unit increase in DTE there will be .11449 times decrease in ROE.



Table.4 Ordinary Least Squares Estimation  
Dependent variable is NPM.  
25 observations used for estimation from 1990 to 2015

	Regressor	Coefficient	Standard Error	T-Ratio[Prob.]
A		44.5727	16.0557	2.7761[.011]
	DTA	.045800	14100	32482[.748]
	DTE	-.14999	065880	-2.2768[.032]
	R-Squared	.18713	S.E. of Regression	27.1613
	Mean of Dependent Variable	26.2275	DW-statistic	2.0337

### Regression Results

The above table showed the results of dependent variable Net profit margin and independent variable debt to asset and debt to equity. The p value of debt to asset is  $.748 > 0.05$  which shows that there is no significant relationship between debt to asset and Net profit margin. The p value of debt to Equity is  $.032 < 0.05$  which shows that there is a significant relationship between debt to equity and Net profit margin. The value of coefficient of debt to asset is  $.045800$  Value of coefficient shows rate of variation .so this study indicates that debt to asset has positive weak impact on Net profit margin. If one unit increases in DTA there will be  $.045800$  times increases in NPM. The value of coefficient debt to equity is  $-.14999$  Value of coefficient shows rate of variation. This study indicates that debt to equity has negative weak impact on return on equity. If one unit increase in DTE there will be  $.14999$  times decrease in NPM.

### Conclusions

This study was conducted to know about the impact of capital structure on business performance of airline industry. For the said purpose Emirates airline was taken a case and secondary data collected over the period 1990 to 2015. Previous literature were studied thoroughly and developed four econometric models in the first model dependent variable was ROA and independent variable were same for the all four models as DTA and DTE. In the second model ROE was dependent variable, NPM was taken as dependent variable while in third model. Study concluded mixed results. Study found that there is no any significant relationship between DTA and RoA, no statistical evidence showed between DTA and RoE, it is also concluded that DTA has impact on NPM in case of Emirates Airlines. However, DTE has significant relationship with the performance of Emirates Airline. However the results of Emirates Airlines indicate that debt to equity has also negative

relationship with ROA, ROE, and NPM. In general, a company with a high D/E ratio is viewed as a higher risk to lenders and investors because it suggests that the company has financed a larger amount of its growth through borrowing. Negative relation showed that if DTE high it reduces the business performance.

### References

- Abor, J., (2005), The effect of capital structure on profitability : an empirical analysis of listed firms in Ghana, *Journal of Risk Finance*, 6: 438-447
- Acras, M, J & Bachiller, P., (2008) Performance and Capital Structure of Privatized Firms in Europe, *Journal of Global Economics Review*, Volume 37, 2008 - Issue 1
- Aivazian, V., L. Booth, and S. Cleary., (2003), "Do emerging market firms follow different dividend policies from US firms?" *Journal of Financial Research* 26, no. 3: 371–87
- Antonios, A, Guney\_Y, and Paudyal, K., (2008). "The Determinants of Capital Structure: Capital Market-Oriented versus Bank-Oriented Institutions,". *Journal of financial and quantitative analysis* Vol. 43, No. 1., 59–92.
- Arbabiyan, A. A. S. (2009). Investigating impact of capital structure on beneficiary of firms listed at Tehran stock exchange, *Journal of Manager Perspective* ., No.33, pp.159-175.
- Arbabiyan, Ali-Akbar & Safari, M., (2009), The effects of capital structure and profitability in the listed firms in Tehran Stock Exchange, *Journal of Management Perspective*, 33: 159-175.
- Arbabiyan, Ali-Akbar & Safari, Mehdi, (2009), "The effects of capital structure and profitability in the listed firms in Tehran Stock Exchange", *Journal of Management Perspective*, 33: 159-175.
- Ari,W, Herrera, J, J, D, Abdullah, H, H., (2011), "East Asian Corporate Governance: A test of the relationship between capital structure and firm performance" *International Journal of Economics and Finance Studies*

- Asgharian, H., (2003) "Are highly leveraged firms more sensitive to an economic downturn?", *The European Journal of Finance*, 9(3), pp. 219-241
- Berger, A & Bonaccorsi di Patti, E (2006), Capital structure and firm performance: a new approach to testing agency theory and an application to the banking industry, *Journal of Banking and Finance*, 32: 1065-1102
- Bhaduri, S., (2002), "Determinants of corporate borrowing: Some evidence from the Indian corporate structure", *Journal of Economics and Finance* 26: 200–15
- Brailsforda, T, J, Olivera, B, R, and Pua, S, L, H., (2002) "On the relation between ownership structure and capital structure", *Accounting and Finance* 42, 1–26
- Capon, N.; Farly, J.U.; and Hoenig, S.M., (1990), "A meta-analysis of financial performance." *Management Science* 16, pp. 1143-1159.
- Chen S-S, Chung T-Y, Ho KW, Lee, C, F., (2007), Intra-industry effects of delayed new product introductions. *Rev Pac Basin Financ Mark Policies* 10:415–443
- Damodaran, (2001). "Corporate Finance." Theory and Practice (2nd edition). New York: Wiley
- Ebaid., E. I. (2009). The impact of capital structure choice on firm performance: empirical evidence from Egypt, . *Journal of risk Finance*, Vol. 7, pag. 477-487.
- Fama , E, F, & French, K, R., (2002), "The Equity Premium," *Journal of Finance, American Finance Association*, vol. 57(2), pp. 637-659,04.
- Ghosh\_S. (2007). Leverage, Managerial Monitoring and Firm Valuation: A Simultaneous Equation Approach, . *Research in Economics* ,61: , 84–98.
- Gleason, K. C., Mathur, L. K., & Mathur, I. (2000), "The Interrelationship between Culture, Capital Structure, and Performance: Evidence from European Retailers", *Journal of Business Research*, Vol. 50 No. 2, pp. 185 191.
- Grossman, S, J and Hart, O, D., (1982) "Corporate financial structure and managerial incentives", *The Economics of Information and Uncertainty*, McCall, J.J. (ed.), NBER, pp.107-140.
- Gul, F,A., (1999), "Government share ownership, investment opportunity set and corporate policy choices in China", *Pacific-Basin Finance Journal* 7, no. 2: 157–72.
- [https://en.wikipedia.org/wiki/History\\_of\\_Emirates\\_\(airline\)](https://en.wikipedia.org/wiki/History_of_Emirates_(airline)) retrieved on 11-6-2019
- Ho, H. (2003), "Dividend policies in Australia and Japan", *International Advances in Economic Research* 9, no. 2: 91–100
- Holder, M.E., F.W. Langrehr, and J.L. Hexter. (1998), "Dividend policy determinants: An investigation of the influences of stakeholder theory", *Financial Management* 27, no. 3: 73–82
- Hovakimian, A., Hovakimian, G., & Tehranian, H. (2004), Determinants of target capital structure: The case of dual debt and equity issues, *Journal of financial economics*, 71(3),517-540.
- Huang, S. and Song, F. (2006). The determinants of capital structure: evidence from China., *China Economic Review*, Vol. 17 No. 1, , (14-36.).
- Jong de A, Kahir, R, and Nguyen, T., (2007) "Capital Structure Around the World: The Roles of Firm- and Country-Specific Determinants", *Journal of Banking & Finance* 32(9):1954-1969
- King\_M. and Santor\_E. (2008) .Family Values: Ownership Structure, Performance and Capital Structure of Canadian Firms., *Journal of Banking and Finance*,32:, 2423-2432.
- Koch, P.D., and C. Shenoy (1999), "The information content of dividend and capital structure policies", *Financial Management* 28: 16–36
- Majumdar, S.K and Chhibber, P (1999): "Capital structure and performance: evidence from a transition economy on an aspect of corporate governance." *Public Choice*, 98, pp 287- 305.
- Margaritis, D and Psillaki, M., (2007), "Capital structure and firm efficiency", *Journal of Business Finance & Accounting*, 34(9-10), pp.1447–1469.
- Modigliani, F., & Miller, M. (1958). The cost of capital, corporation finance and the theory of investment. *American Economic Review*, 48, 261-97.
- Muhammad, H., Shah, B. & Islam, Z. (2014). The Impact of Capital Structure on Firm Profitability: Evidence from Pakistan. *Journal of Industrial Distribution and Business*, 5 – 2 (2014) 13 – 20, ISSN: 2233-4165/ Online ISSN: 2233-5383.
- Myers, S. 1977. Determinants of corporate borrowing. *Journal of Financial Economic* 5: 147–75
- Nirajini, A, Priya\_K, B. (2013). Impact of Capital Structure on Financial Performance of the Listed Trading Companies in Sri Lanka., *International Journal of Scientific and Research Publications*, Volume 3.
- Onaolapo, Adekunle A, Kajola, Sunday O. (2010), "Capital Structure and Firm Performance: Evidence from Nigeria" *European Journal of Economics, Finance and Administrative Sciences*, Issue 25
- Peterson, P, P., & Fabozzi, F, J., (1999). Analysis of Financial Statements. New York: Wiley. p. 92. ISBN 1-883249-59-7.
- Pouraghajan, A., Malekian, E., Emamgholipour, M., Lotfollahpour, V., and Bagheri, M, M. (2012). The Relationship between Capital

- Structure and Firm Performance Evaluation Measures: Evidence from the Tehran Stock Exchange. *International Journal of Business and Comm* vol no 1 .9, 166\_181.
- Raheman, A., Zulfiqar, B., and Mustafa. (2007). "Capital structure and profitability: Case of Islamabad Stock Exchange". *International Review of Business Research Papers* Vol. 3 No.5, 347-361".
- Rajan, R. G., & Zingales, L. (1995), "What do we know about capital structure? Some evidence from international data", *Journal of finance*, 50(5): 1421-1460
- Rao, N, V, Al-Yahyee, K and Syed, L.(2007). Capital Structure and Financial Performance: Evidence from Oman, *Indian Journal of Economics and Business*,:1-23.
- Razak, N.H.A., Ahmad, R. & Aliahmed, H.J. (2008), Government ownership and performance: An analysis of listed companies in Malaysia, *Corporate Ownership and Control*, 6(2): 434-442.
- Riahi, B, A., (1999), *Capital Structure: Determination, Evaluation and Accounting*: Westport, Quorum Books Publisher.
- Saeedi, A. and Mahmoodi, I. (2011), "Capital structure and firm performance: evidence from Iranian Companies", *International Research Journal and Economics*, Vol. 70, 20-26.
- Salim, M, Yadav, R., (2012), "Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies", *Procedia - Social and Behavioral Sciences*, 65 pp. 156 – 166
- Talberg, M., Winge, C., Frydenberg, S. and Westgaard, S. (2008), "Capital structure across industries", *International Journal of the Economics of Business*, Vol. 15 No. 2, pp. 181-200.
- Tang, C., Jang, S., (2007). Revisit to the determinants of capital structure: a comparison between lodging firms and software firms. *International Journal of Hospitality Management* 26 (1), 175–187
- Timothy J. Brailsford, Barry R., Olivera, Sandra L. H. Pua (2002) " On the relation between ownership structure and capital structure", *Accounting and Finance* 42, 1– 26
- Titman, S., and R. Wessels. (1988). The determinants of capital structure choice. *Journal of Finance* 43, no. 1: 1–19.
- Tong, G and Green, C, J., (2005) "Pecking order or trade-off hypothesis? Evidence on the capital structure of Chinese companies", *Applied Economics*, 37, pp. 2179–2189.
- Tsangao, C., Kuei-Chiu, L., Yao-Men, Y. and Chia-Ha. (2009). ' Does capital structure affect operating performances of credit cooperatives in Taiwan: application of panel threshold method,. *International Research Journal of Finance and Economics*, Vol. 32,18-21.
- Upneja, A. and Dalbor, M. C. (2001), "An Examination of Capital Structure in the Restaurant Industry", *International Journal of Contemporary Hospitality Management*, Vol. 13 No.2, pp. 54-59.
- Zeitun, R. and Tian, G. (2007), "Capital structure and corporate performance: evidence from Jordan", *Australasian Accounting Business and Finance Journal*, Vol. 1, pp. 40-53