CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF BUSINESS ESTABLISHMENTS IN TUGUEGARAO CITY

Dan Mark Lazo, Veatrice Ann Cristobal, Maricon Gay Eugenio,
*Maria Leonor Rosales, Jerome Marquez**

ABSTRACT

Capital structure is the lifeblood of every business to cope with the fast-changing economic environment. The main objective of this study was to determine the capital structure in terms of debt-equity ratio of the business establishments and its relationship to their financial performances mainly their Return on Asset (ROA) and Return on Equity (ROE). Primary data were gathered through their annual financial reports for the span of three years (2016, 2017, and 2018). In the determination of capital structure, frequency and percentage were used to count the numbers of firms employing more debt than equity, lesser debt than equity, and zero debt. The findings revealed that some businesses tend to be more equity-extensive but became debt-extensive in later years while some remained to employ more equity in later years. In addition, few remained to be zero indebted. The profitability ratios Return on Asset (ROA) and Return on Equity (ROE) of the businesses were averaged and it revealed that it continued to thrive in their 3 years of operation. Moreover, the Pearson Correlation Analysis to test the relationship of capital structure and financial performance rejected the hypothesis and became evident that no relationship exists between the two.

Keywords: Capital Structure, Financial Performance, Return on Asset, Return on Equity

INTRODUCTION

Every entrepreneur establishes their business with their eyes pointed on a big market share to maximize its profit and minimize its cost. The fulfillment therefore of these objectives lead the company to search for available resources to finance its investments. The sources that could be used by firms to provide necessary finances are the external finances such as debt and internal finances such as equity (Nassar, 2016).

Basit & Irwan (2017) defined capital structure as a combination of debt and equity which are used for investment-financing purposes. This definition connotes that capital structure is a trend in finance particularly in the field of operation-financing through debt, equity or a combination of both, for the sustainability and continuance of the firm. The decision on this matter is important especially for those who aim to start and grow their market shares and to venture new business opportunities. Thus, the lack of funding may possibly impede the operation and

miss opportunities that may lead to possible shutdown (Markova & Mirčevska, 2010). Karuma, Ndambi & Oluoch (2013) explained that debt is always desired by firms whose profit-generating capacity is excellent, but if the company experiences a drop in its income, financing with more debt as capital would be harmful because of its corresponding increase in the cost of debt. Financing with internal funds on the other hand may restrict the company from obtaining larger financing.

This area of business has been the subject of many tests, discussions and debates. It is one of the most intriguing fields in financial management (Šarlija & Harc, 2016). These two important fields of finance are still an unsolved issue that has been investigated both theoretically and empirically (Al-Qudah, 2017). The pioneer works of Modigliani and Miller (M&M) regarding the role of debt to the entity are commonly used by researchers in comprehending that managers are indifferent about its capital structure. Accordingly, the change in leverage does not affect the firm value. In fact, it can balance its interest tax shields with the cost of financial distress using ddebt (Hillier et al., 2011). Another famous pioneering work is the agency theory of Jensen & Meckling (1976) as cited by Nassar (2016), where it explained that a potential conflict may arise between the managers and its shareholders on one side and between the managers and creditors on the other side.

Therefore the main objective of this study was to determine the capital structure in relation to ROA and ROE of businesses in Tuguegarao City.

Research Objectives and Questions

This study aimed to determine the capital structure of business establishments and its relationship to financial performance.

Specifically, it answered the following questions:

1. What capital structure is employed by the business?
2. What is the financial performance of the business establishment in terms of Return on Asset, and Return on Equity?
3. Is there a significant relationship between capital structure and financial performance of the business establishment?

Hypothesis

There is a significant relationship between capital structure in terms of debt-equity ratio and financial performance in terms of Return on Asset, and Return on Equity.

Significance of the Study

The examined relationship between capital structure and financial performance of business establishments will give aid to the managers of businesses in selecting the optimum capital structure for their firm that will give them adequate amount of funding needed for their operation, or enough amount to support their plans for expansion. These pieces of information are useful as an input in arriving with goal-oriented decisions, ways or methods in the utilization of funding resources that will help them asses and compare their current operating status form their previous operations, useful in forecasting and budgeting their future operational undertaking to improve their efficiency and effectiveness with minimized cost and maximized profit.

Literature Review

Conceptual Framework

Financing operation can be done through employing debt, equity or a mixture of both. A vital combination of debt and equity is essential to good financial results (Mumtaz, Rauf, Ahmed & Noreen, 2013). Thus, businesses with an excellent management of its financing structure have an advantage over other firms (Badar & Saeed, 2013). Decisions on capital structure are therefore vitally important (Ahmad, Abdullah & Roslan, 2012). Incorrect selection of capital structure will either make the organization or kill it. A research by Casmir & Anthony (2012) pointed that a highly leverage (debt equity) organization has a negative impact on the company's performance. Employing debt, however, provides tax benefit by its interest expense (Ahmad, Abdullah & Roslan, 2012) and this tax deductibility advantage makes firms more aggressive than relying on their own equity to employ more debt (Solano & Teruel, 2007). Therefore, financial managers should critically address the choice as to which structure will be used to identify the pros and cons implied to it. On the other side, financial performance is a reflection of how the company used its resources to yield income (Karanja, 2013). This concept also manifests the overall economic health of an entity covering a certain duration and can be applied as a metric of comparison of firms within the same industry or sector (Karanja, 2013). Analysts would use different metrics such as ROA (return on assets), ROE (return on equity), EPS (earnings per share) and many more to calculate an entity's financial performance. In this analysis, we used the equations widely used in other studies: ROA, measured as net income divided by an entity's average capital, and ROE, calculated as net income divided by an entity's average equity.

Capital Structure

Capital Structure has been defined by authors in different ways. Weston and Brigham (1979) as cited by Basit & Irwan (2017), defined capital structure as the financing of a company of which it is represented by long term debt, net assets and preference shares while Suhaila & Mahmood (2008) as cited by Basit & Irwan (2017) defined the capital structure of a company as a mixture of debt and finance including equity securities like preference and common shares. To finance a company's operation, one must incur a proportionate debt and equity, where equity also constitutes share premiums, debentures, convertible shares and reservations. The financing strategy and structure of a business depicts its different approach of financing which states that most businesses prefer to finance a new investment first with retained earnings, then with debt and lastly with issuance of equity (Nirajini & Pirya, 2013). Furthermore, in the study of Habimana (2014), the aftermath of Modigliani and Miller theory has stimulated the researchers to conduct numerous studies and has concluded a non-identical rulings about the relationship between capital structure and businesses' financial performance. These papers were conducted in industries with similar status quo to the Philippines. We will examine the newest and latest published papers regarding this aspect to further ascertain what factors are affecting the capital structure of the businesses and consequently to analyze its association in its financial performance (Habimana, 2014).

Return on Asset and Return on Equity

Pouraghajan (2012) as cited by Habimana (2014) used Return on Assets and Return on Equity as it's determinants of financial performance and found evidences that performance can be improved by reducing the debt ratio. According to Weston & Copeland (2001) as cited by Zaragih (2018), policies and decisions have an impact in profitability ratio. Moreover, the total asset investment relative to the number of earnings earned determines the Return on Assets which ascertains that a company is more efficient in financing their assets because of the rate of return as consequent to the higher Return on Asset (Aileen & Lyn, 2008; Zaragih, 2018). In addition, when a firm chooses to increase its Return on Assets, it should maintain its assets and increase its earnings margin thus signifying the ability to receive a higher returns at a certain amount of sales.

Lestari & Sugiharto (2007) as cited by Zaragih (2018), stated that if ROE is greater than 10%, it means that a company is in a better performance. A measure of return earned by stockholders, both common and preferred is called Return on Equity and a higher rate is an indication of higher investment return. The Return on Equity effect on profit growth is due to the very precise investment pattern and

nature thereby assets are being exhausted effectively resulting to a maximized profit (Irawan, 2011; Zaragih, 2018).

Relationship of Capital Structure and Financial Performance

A study on six-year (1995-2011) Malaysian Companies has been conducted by Salim & Yadav (2012). According to them, a negative impact existed between its ROA, ROE and EPS with total debts employed. They categorized the Malaysian Construction Companies as large, medium, and small companies. The large companies manifested positive relationship by testing the relationship of debt-equity market value and EPS. In addition, an opposite result has been found as to EPS with debt-equity. Medium-sized companies from Malaysia, established a positive relationship between equity and long-term debt whereas negative association has been found with DC and EPS for small-sized companies.

Sensitivity analysis of performance of selected food and beverage companies in Nigeria was conducted by Akintoye (2008) as cited by Ajanthan & Arulvel (2013). The proxies they used namely Earnings Before interest and Taxes, Earnings per Share and Dividends per Share were significantly sensitive with Degree of Operating Leverage, and Degree of Financial Leverage. Among the many performance measures, Berger & Bonaccorsi (2008) as cited by Ajanthan & Arulvel (2013) used profit efficiency as a means of measuring performance. It assesses how managers are effective in raising revenue and managing the costs which are an integral concepts in value maximization. The assessment emerged a result that losses of shareholders due to agency costs and losses of potential accounting profit are closely relative. Also, the results explain that no connection exists with the level of leverage and higher profit efficiency (Ajanthan & Arulvel, 2013).

The study of Goyal (2013) as cited by Basit & Irwan (2017), was responded by the public sector banks located in India in assessing the influence of capital structure to the profitability of these firms. Regression analysis was applied to test the relation of profitability measures (ROE, ROA and EPS) and capital structure. The study was completed revealing a significant positive relationship.

Ahmad, Abdullah & Roslan (2012) have two different findings on their study. In terms of each debt level, there is no significant relationship in its ROE. However, an opposite relationship exists in its ROA. Capital structure is not the main element in measuring its financial performance as it resulted to an insignificant relationship on the Nigerian Stock Exchange's Manufacturing Companies in the years 2005 to 2009 (Nassar, 2012). Furthermore, an insignificant impact was found using debt ratio as a capital structure determinant and ROA, ROE for financial performance (Onaolapo & Kajola, 2010).

Research Paradigm

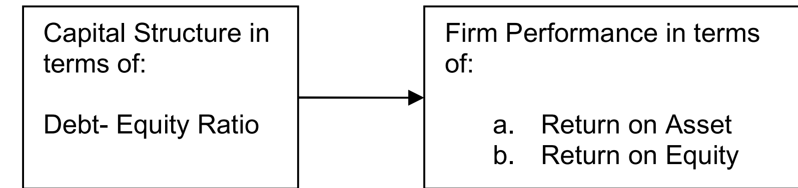

Figure 1. Paradigm of the study

Figure 1 shows how capital structure in terms of debt-equity ratio may relate to firm performance of business establishments in Tuguegarao City.

METHODS

The researchers used correlational research design. The researchers considered the existing business establishments located in Tuguegarao City. Data were extracted from the annual financial reports, mainly on the Statement of Financial Position and Income Statement covering the periods of 2016, 2017, and 2018 of business establishments. A request for authorization to conduct the study was sent to the academic dean for approval. After securing the approved authorization, the proponents sent a letter to Department of Trade and Industryand obtained the list of businesses established in Tuguegarao City. Request letters were sent to business establishements. After being approved, the researchers requested fortheir financial statements covering 2016, 2017, and 2018. The data obtained from the financial statements were processed using appropriate statistical tools. The researchers used ratio analysis and Pearson- Correlation to analyze the data gathered.

RESULTS

Table 1: Capital Structure employed by the Business

Type of Capital Structure	2016		2017		2018	
	Frequency	%	Frequency	%	Frequency	%
Debt > Equity	7	35	9	45	9	45
Debt = 0	2	10	2	10	2	10
Debt < Equity	11	55	9	45	9	45

Table 1 shows the capital structure employed by the establishments. Year 1 revealed that 35% of the businesses employed more debt than equity in financing

its assets and funding its operations. Whereas 10% is zero debt and the remaining 55% employed more equity than debt. Year 2 and 3 obtained a similar result showing that 45% of the businesses are employing more debt than equity, more equity than debt, and the remaining 10% are consistently relying on equity.

Table 2: Financial Performance of the Business

Areas	Mean		
	2016	2017	2018
Return on Assets	20.94%	29.33%	35.43%
Return on Equity	31.69%	40%	51.57%

Table 2 shows the financial performance of business establishments. Generally, a ROA of 5% or higher and ROE of 10% or higher are considered good. The Return on Asset and Return on Equity are increasing as the businesses continue their operation from 2016 to 2018. The establishments obtained a 20.94% ROA and 31.69% ROE in 2016, whereas these ratios increased to 29.33% and 40% in 2017, respectively. The highest ROA and ROE were obtained in 2018 with 35.43% and 51.57% respectively.

Table 3: Test of Significant Relationship between Capital Structure as represented by Debt-Equity Ratio and Financial Performance

Areas	r-value	p-value	Decision
Return on Assets	-.302	.196	Reject Ha
Return on Equity	-.015	.951	Reject Ha

It can be gleaned form the table that the Pearson Correlation result signified a non-relationship result between debt-equity ratio and financial performance measures Return on Asset and Return on Equity covering the 3-year operation of the business.

DISCUSSION

Twenty business establishments within the locale have been subjected to this study. Using Statement of Financial Position and Income Statement covering the years 2016, 2017, and 2018, the findings revealed that these businesses are not consistently using debt, equity or a mixture of both in financing their 3-year operation. Some of these businesses shifted from being debt extensive to equity extensive or vice versa and other businesses remained to be zero debt within their 3-year operating cycle. Debt are often favored by etreprenuers due to its tax deductibility. However, high exposure to debt levarages the cost of debt and may lead to bankcruptcy (O'Brien & David, 2010). Businesses relying extensively on their equity or internal funds are often encountering issues of having limited access

to abundant provisions of capital. Investing therefore in one's business is an important component for raising larger funds, necessary for business expansion. The managers must arrive with decisions by selecting the most appropriate mix of debt and equity (Ukaegbu & Oino, 2014). Thus financial decision may affect the value of the firm if an incorrect decision was made (Gomez, 2012; by Anuar & Chin, 2016).

The investigation unveiled that the twenty establishments achieved an increasing trend in their Return on Asset and Return on Equity within their 3-years of operation. According to Ibendahl (2018), generally, Return on Asset ratios around 5% or higher are good whereas Return on Equity ratios around 10% or higher are also considered good. The results manifested that the ROA and ROE of these businesses are beyond the threshold. These profitability ratios and investor ratios measure the overall firm efficiency in utilizing the funds lend to them (Kabajeh, Nu'aimat, & Dahmash, 2012). The improvement in their profitability ratios year-after-year indicates that the firms were able to optimize the use of their available resources provided by their capital structure. ROA and ROE are often highlighted in the financial statement analysis because a higher ratio indicates that there is operational efficiency in their performance in creating profits given their resources (Rosikah, Praningrum et al., 2018). These pieces of financial information could be used as a description of company success indicators and a consideration in decision-making (Harapan, 2004; Rosikah, Praningrum, Muthalib, Azis, & Rohansyah, 2018).

Lastly, it has been found that there is no relationship between the capital structure as represented by debt-equity ratio and in the financial performance, as represented by ROA and ROE of these businesses. As manifested in the results, despite the change from being debt-extensive to equity-extensive or vice versa, or resorting to equity alone, the financial performance of the firms continued to prosper and they attained a ROA and ROE beyond 5% and 10% respectively. Similar results were found by Basit & Irwan (2017) and Leonard & Mwasa (2014) in their studies, stating that the insignificance of the relationship means that any changes in the total debt, or total equity, results no impact to the firm's ROA and ROE. Moreover, the study of Habimana (2014) about capital structure matters for the financial performance of China firms found that applying more leverage is negatively correlated with ROA and ROE. Thus, regardless of what kind of capital structure is used, the consistency in the operations of the firms will carry on.

CONCLUSION

It has been identified that among the twenty business establishments, some firms decided to be more equity-extensive but transitioned to more be debt-extensive, and some remained employing more equity than debt. Whereas, other firms decided to not employ debt. The changing decisions as to the capital structure did not affect the profitability of these businesses and their financial performance continued to prosper, thus indicating that capital structure is not related to financial performance.

RECOMMENDATION

There are specific limitations and detailed comparisons from other researches due to differences from scientific tests and other factors influencing the study. The correlation result of this paper concluded that no significant relationship existed between capital structure and financial performance. The focus of this research is only the businesses within the vicinity of Tuguegarao City. Further researches may use different places with a greater number of population and business establishment. This research used only 3 variables: debt-equity ratio, ROA, and ROE. Future researchers may use other variables like Return on Sales, Earnings per Share and Asset Turnover. Furthermore, this research is lacking in the number of respondents because of unaccepted requests due to the confidentiality of the needed documents such as financial statements. Therefore, the vast majority of business establishments must be taken into account because 20 out of 100 only responded. Future researchers may use a larger sample size to depict the population and to obtain a more accurate results.

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