

Capital Structure and Profitability of Selected Universal Banks in the Philippines

Edralin Lim

De La Salle University

edralin.lim@dlsu.edu.ph

Abstract: The banking industry has a significant part in the economy of either a developing or a fully developed country. Banking systems promote a country's growth. In turn, this growth can be attained by turning savings into sound investment. This is why the researcher wants to examine the relationship between capital structure and profitability of the banking industry, specifically the universal banks.

The researcher based his sample on eleven universal banks in the Philippines from 2006 to 2013. The study used correlation analysis to determine the relationship between capital structure and profitability. To assess the bank's profitability, return on equity was used. On the other hand, debt to equity ratio and debt to asset ratio were used to measure capital structure.

The study showed that debt to equity ratio and debt to asset ratio have a significant positive relationship with return on equity. Evidently, higher leverage profoundly leads to higher profitability – which is encompassed by the concept of moderate view. Moreover, as tax savings are taken advantage by banks, the concept of static trade-off was actually validated. Hence, increasing the net income. Furthermore, it connoted that profitable banks depend severely on debt rather than equity to finance their assets. Overall, the study confirmed that the decisions on how banks manage their resources and capital structure will always be significantly related to profitability.

Key Words: capital structure; profitability; universal banks

1. INTRODUCTION

1.1 Background of the Study

According to Asenova (2006), the banking industry has a significant part in the economy of either a developing or a fully developed country. Banking systems promote a country's growth. In turn, this growth can be attained by turning savings into sound investment. The banking industry is able to grab economic opportunities if it has a healthy and stable financial system, which later on drives growth of the economy. This is why it is relevant to completely analyze the dynamics that could affect the profitability of the banking industry, most especially the universal banks.

Abor (2005) stated that capital structure is one of the significant factors that affect the bank's profitability. Firms continuously effort to pursue a right combination, as it would take full advantage of their overall market value, which as a result could aid them diminish their risk exposures.

The study conducted examines the relationship between capital structure and profitability of the selected universal banks in the Philippines for the period 2006 to 2013.

1.2 Review of Related Literature

1.2.1 Capital Structure

Brigham and Houston (2013) defined capital structure as “the mix of debt, preferred stock and common equity that is used to finance the firm's assets”.

Debt financing is defined as the act of raising capital by borrowing money. As an exchange for lending money, it is anticipated that creditors obtain interest and principal payments in agreement with the terms of the loan contract. On the contrary, equity financing is denoted by the use of the retained earnings of the firm for re-investment or by raising capital through selling preferred and/or common stocks.

More than a few factors should be considered in selecting a paramount source of financing to use. Two ways of defining capital structure is provided by Myers (2001). The first way is by making use of the static trade-off framework, whereas the firm is perceived as setting a target debt-to-value ratio and gradually stirring towards it. The firm's optimal debt ratio is usually determined by a trade-off between the costs and benefits of borrowing, protecting the firm's assets and its investment plans. Second one is through the pecking order framework, whereas the firm prefers to acquire funds from internal sources rather than externally financing their investments and other business activities.

The capital structure decision is indeed a sole essential decision for any business organization. It is mandatory to have a widespread understanding of how to finance a firm to attain the major goal of a company, which is to capitalize on the shareholders' wealth. The ability of a firm to deal with the pressure of the competition would as well be impacted based on this decision. Furthermore, examining the advantages and disadvantages of the financing sources and selecting the

most ideal mix of debt and equity would enable firms to take full advantage of their overall market value. (Abor, 2005).

The study published by Modigliani and Miller (1958) manifested the irrelevance of financial leverage to the value of the firm under the assumption of a perfect capital market. Since this was published, the interest of researchers and professionals has been roused by the study of capital structure. To probe on the bearing of capital structure on a firm's profitability and to shed some light on the diverse theories and factors that may affect the debt-to-equity choice of a firm, several researches have been conducted.

1.2.2 Measures of Capital Structure

Debt to equity ratio is defined as “the ratio of total debt to total equity. The amount of a firm's debt financing is related to the amount of equity financing” (Kretlow, McGuigan, Moyer and Rao, 2013). A significant positive relationship between debt to equity ratio and return on equity is found by Nimalathasan and Brabete (2010). It means that the higher the debt to equity ratio, the higher is the return on equity. Usage of more debt leads to tax savings because interest is tax-deductible (Brigham and Houston, 2013).

Debt to asset ratio is defined as “the percentage of funds provided by the creditors. It is the ratio of total debt to total assets” (Brigham and Houston, 2013). A significant positive relationship between debt to asset ratio and return on equity is exhibited by Abor (2005), Gill, Biger and Mathur (2011), Gatsi (2012) and Saeed, Gull and Rashneed (2013). It means that the higher is the debt to asset ratio, the higher is the return on equity. Usage of more debt also results to tax savings because interest is tax-deductible (Brigham and Houston, 2013).

1.2.3 Measure of Profitability

Return on Equity (Net Income / Total Equity) is used by Al-Jarrah, Ziadat and El-Rimawi (2010), Athanasoglou, Brissimis and Delis (2005), Gatsi (2012), and Saeed, Gull and Rasheed (2013) to measure the profitability of banks. It displayed that return on equity is widely used in financial literature. Athanasoglou, Brissimis and Delis (2005) explained that shareholders are more anxious on value maximization or how much income the bank is generating with the money that they have invested in, which is measured through ROE.

1.3 Objectives of the Study

- To examine the relationship between capital structure and profitability of selected universal banks in the Philippines
- To determine whether debt to equity ratio is significantly related to return on equity
- To determine whether debt to asset ratio is significantly related to return on equity

1.4 Hypotheses

H1: Debt to Equity Ratio is significantly related to Return on Equity

H2: Debt to Asset Ratio is significantly related to Return on Equity

1.5 Scope of the Study

The study is limited to the analysis of the relationship between capital structure and profitability of universal banks in the Philippines. Return on equity was used as a measure of profitability. On the other hand, debt to equity ratio and debt to asset ratio were used as

measures of capital structure. The secondary information used in this study is retrieved from Osiris database for the period 2006-2013.

2. FRAMEWORK

2.1 Theoretical Framework

2.1.1 Moderate View (Trade-off Theory)

The optimal financing mix is aimed to attain by the moderate view of capital structure, as it would greatly benefit the company. The theory assesses the costs and benefits built by decisions on capital structure (Keown, Martin, Petty and Scott, 2005). In addition, Baker and Martin (2011) specified that the existence of debt in the capital mix of a firm can be expedient to investors and shareholders, as they can enjoy the paybacks from the tax advantage. Meanwhile, Beyer (2010) explicated that the issuance of debt, in lieu of equity, raises firm value as the total after-tax return on investors' help in maximizing the wealth of its shareholders. However, in order to accomplish an optimal financing mix, firms should bind their debt issuance up until how much their tax advantage can cover the costs from borrowing.

2.1.2 Static Trade-off Theory

The result of the market imperfections on the formation of capital structure is considered by the static trade-off theory. Taxes and bankruptcy costs may be included in the market imperfections, although the latter is not limited to these (Berk, DeMarzo and Harford, 2013). Consistent with Baker and Martin (2011), in place of equity, the issuance of debt causes a trade-off between the costs and benefits of borrowing. The advantages and disadvantages of debt financing are parallel with the optimum level of leverage, which in turn is able to make the best use of the value of the company. (Clayman, Fridson and Troughton, 2011)

2.2 Conceptual Framework

The research to examine the relationship between capital structure and profitability of universal banks in the Philippines adapts the frameworks by Abor (2005) and Nimalathasan and Brabete (2010). Debt to asset ratio (total liabilities / total assets) is used by Abor (2005) as a measure of capital structure and return on equity (net income / equity) is used as a measure of profitability. In contrast, debt to equity ratio (total liabilities / equity) is used by Nimalathasan and Brabete (2010) as a measure of capital structure and return on equity is used as a measure of profitability.

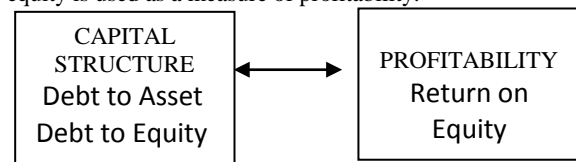


Figure 1. Research Framework

The Variables and Expected Relationships

1. Return on Equity = f(Debt/Equity)

A positive relationship is expected. It is expected of return on equity to follow the same direction as the changes in debt to equity ratio. The higher is the bank debt, the higher is the income on its equity. This is based on the findings of Nimalathasan and Brabete (2010). The use of more debt results to tax savings

because interest is tax-deductible (Brigham and Houston, 2013). Tax savings are taken advantage by banks.

2. Return on Equity = $f(\text{Debt}/\text{Assets})$

A positive relationship is expected. It is expected of return on equity to follow the same direction as the changes in debt to asset ratio. The higher is the bank debt, the higher is the income on its equity. This is based on the findings of Abor (2005). This is consistent, as well, with the findings of Gill, Biger and Mathur (2011), Gatsi (2012) and Saeed, Gull and Rashneed (2013). The use of more debt results to tax savings because interest is tax-deductible (Brigham and Houston, 2013).

3. METHODOLOGY

The study utilizes correlation analysis. It intends to analyze the relationship between the capital structure and profitability.

The researcher focuses on the banks categorized by the Bangko Sentral ng Pilipinas (BSP) as universal banks. BSP (2010) defines universal banks as:

The largest single group, resource-wise, of financial institutions in the country. They offer the widest variety of banking services among the financial institutions. In addition to the function of an ordinary commercial bank, universal banks are also authorized to engage in underwriting and other functions of investment houses and to invest in equities of non-allied undertakings.

As of now, there are 21 universal banks (BSP, 2014). However, the researcher was only able to complete 11 the data from 2006 to 2013 of the 11 banks specifically, Asia United Bank Corporation (Asia United Bank), Banco de Oro Unibank, Inc. (BDO), Bank of the Philippine Islands (BPI), China Banking Corporation (China Bank), Development Bank of the Philippines (DBP), Metropolitan Bank & Trust Company (Metro Bank), Philippine National Bank (PNB), Phil Trust Company (Philtrust), Rizal Commercial Banking Corporation (RCBC), Security Bank Corporation (Security Bank) and Union Bank of the Philippines (Union Bank). As shown in Table 1, total market share based on total assets of all universal banks is 78% which is a good representative of the whole universal banks. All figures of the said banks are retrieved from OSIRIS database.

Table 1. Selected Universal Banks As of June 30, 2014

Total Assets		
Rank	Name of Bank	(In Million Pesos)
1	BDO	1,640,833.60
2	Metro Bank	1,184,418.66
3	BPI	1,075,175.34
5	PNB	554,974.13
6	DBP	420,856.23
7	China Bank	389,412.61
8	Security Bank	377,215.20
9	RCBC	358,894.61
10	Union Bank	329,113.58
15	Phil Trust Company	123,120.35

17	Asia United Bank	110,686.03
	Total	6,564,700.34
	Total Assets of All Universal Banks	8,368,129.21
	Sample's Total Market Share	78%

4. RESULTS AND DISCUSSION

4.1 Return on Equity

The results showed that 7 out of 11 banks improved their return on equity over the period 2006-2013. They were Asia United Bank, BPI, DBP, Metro Bank, PNB, RCBC and Union Bank. Asia United Bank's return on equity of 0.86% in 2006 rose to 3.61% in 2013. BPI's return on equity of 17.79% in 2006 increased to 21.88% in 2013. DBP's return on equity of 11.31% in 2006 went up to 12.98% in 2013. Metro Bank's return on equity of 7.34% in 2006 rose to 21.66% in 2013. PNB's return on equity of 7.08% in 2006 increased to 7.62% in 2013. RCBC's return on equity of 10.76% in 2006 went up to 14.71% in 2013. Union Bank's return on equity of 14.29% in 2006 rose to 22.29% in 2013. On the other hand, BDO, China Bank, Philtrust and Security Bank decreased their return on equity over the period 2006-2013. BDO's return on equity of 17.19% in 2006 declined to 15.06% in 2013. China Bank's return on equity of 16.23% in 2006 reduced to 12.72% in 2013. Philtrust's return on equity of 12.35% in 2006 decreased to 18.95% in 2013. Security Bank's return on equity of 16.68% in 2006 declined to 13.19% in 2013. The data proved that majority of the 11 banks were successful in improving their income on equity and in competing with foreign banks.

4.2 Return on Equity and Debt to Equity Ratio

A positive relationship is expected. It is expected of return on equity to follow the same direction as the changes in debt to equity ratio. Table 2 showed that the Pearson Correlation is .273 and the correlation is significant at the 0.05 level (2-tailed). Based on the correlation run, the expected relationship was observed in all of the 11 banks. This result is consistent with the results of Nimalathan and Brabete (2010). The moderate view or trade-off theory is evident. This theory states that higher leverage profoundly leads to higher profitability. Moreover, as tax savings are taken advantage by banks, the static trade-off theory was actually validated. Tax savings from the use of debt contribute to income of banks.

Table 2. Correlation of ROE and D/E Ratio

ROE	Pearson Correlation	D/E Ratio
		.273*
	Sig. (2-tailed)	.010
	N	88
*. Correlation is significant at the 0.05 level (2-tailed)		

4.3 Return on Equity and Debt to Asset Ratio

A positive relationship is expected. It is expected of return on equity to follow the same direction

as the changes in debt to asset ratio. Table 3 showed that the Pearson Correlation is .344 and the correlation is significant at the 0.01 level (2-tailed). Based on the correlation run, the expected relationship was observed in all 11 banks. This result is consistent with findings of Gill, Biger and Mathur (2011), Gatsi (2012) and Saeed, Gull and Rashneed (2013). The moderate view or trade-off theory is evident. This theory states that higher leverage profoundly leads to higher profitability. Moreover, as tax savings are taken advantage by banks, the static trade-off theory was actually validated. The use of more debt results to tax savings because interest is tax-deductible (Brigham and Houston, 2013). Thus, contributes to income of the banks.

Table 3. Correlation of ROE and D/A Ratio

		D/AE Ratio
ROE	Pearson Correlation	.344**
	Sig. (2-tailed)	..001
	N	88

** . Correlation is significant at the 0.01 level (2-tailed)

5. CONCLUSIONS

The study covers net interest income (earning interest from loans and paying interest to deposits of the bank clients), other income (investment in bonds and other debt instruments) and other expenses (operating expenses) to arrive at net income. Return on equity is equal to net income over equity.

A gradual increase in profitability as measured by the return on equity is shown. This is proven by the continuous increase in the return on equity of the universal banks in the Philippines over the period 2006- 2013. The results indicate that domestic universal banks still manage to enhance their interest spread and to compete with the foreign banks that entered the country. Results also show that domestic banks are still efficient in earning the trust of their clients. These banks are able to survive the financial crisis that has happened.

Capital structure ratios such as debt to equity ratio and debt to asset ratio are found to improve the profitability of bank. A significant positive relationship between debt to equity and return on equity is found based on correlation results. The outcome supports the findings of Nimalathasan and Brabete (2010). Tax savings from the use of debt contribute to income of banks.

A significant positive relationship between debt to asset ratio and return on equity is found based on correlation results. The outcome is consistent with the findings of Gill, Biger and Mathur (2011), Gatsi (2012) and Saeed, Gull and Rashneed (2013). Tax savings from the use of debt improve the income of banks.

The findings validated that universal banks apply the moderate view and static trade-off theory, taking the advantages of debt financing to increase the firm value and improve their profitability.

Further study is still considered necessary. A research can be made using other measures of profitability such as return on assets and net interest margin to total assets. A study can plainly focus on the relationship of a bank's short-term debt and long-term

debt with profitability. Moreover, a comparison of capital structure between foreign banks and local banks can also be made.

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