

LEVERAGE AND PROFITABILITY OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES) IN TUGUEGARAO CITY

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ABSTRACT

According to Philippine Statistics Authority (2019), one of the contributors in the progress of the economy in Cagayan Valley in terms of Gross Domestic Product (GDP) was the MSMEs. The financial performance of a MSME can be measured through profitability and leverage. Several researches regarding the relationship of profitability and leverage were conducted. However, the researches presented different results. Using the financial statements from 2016 to 2018 of MSMEs in Tuguegarao City, this study focused on figuring out the relationship of profitability and leverage by applying the return on sales and debt ratio respectively. Quantitative research design was utilized in the study in assessing the MSME's financial statements wherein data were collected from fifty (50) different MSMEs in Tuguegarao City. Pearson correlation coefficient was adapted to test the relationship between profitability and leverage of the MSMEs. Results presented that nearly all of the MSMEs have high level of profitability and low level of leverage. Thus, the study showed that there is a significant relationship between profitability and leverage and an inverse relationship among these variables existed.

Keywords: *Profitability, Leverage, Micro Small and Medium Enterprises (MSMEs), Financial Performance*

INTRODUCTION

Micro, Small and Medium Enterprises in the Philippines, as defined by Senate Economic Planning Office is known to be any business activity engaged in industry, agricultural related business or services that has an asset size (exclusive of land) of up to Php100 million and an employment size below 200 employees. In Cagayan Valley, economy bloomed at 7.2 percent in 2017 compared to 3.8 percent in 2016, hitting a record higher than the country's Gross Domestic Product (GDP) of 6.7 percent (PSA, 2018). The Department of Trade and Industry has reported that 96 percent of all enterprises is Micro Small and Medium Enterprises which contribute to Gross Domestic Product ranging up to 30 percent to 53 percent. Small businesses are one of the vital structures that provide a main share in the economic improvement of any country (Elimam, 2017).

Although it has been evident that MSMEs are vanguard to both national and regional development in many countries, several researches are still conducted to

Accountancy, Business and Hospitality Research Bulletin identify the points and constraints affecting its growth. A study conducted by Wang (2016), investigated the biggest hindrances SMEs are facing, and results revealed that SMEs perceive access to finance as the most significant obstacle which hinders their growth particularly on its leveraging concerns. MSMEs experienced difficulty in accessing its funds because of the insufficient collateral, minimal performance as well as the inadequacy of financial statements and business ideas (Aldaba, 2012). Understanding the leverage level of MSMEs can be useful in making decisions to improve profitability and growth, but studies present contradicting results regarding their relationship.

Akhtar, Javed, Maryam, & Sadia (2012) determined that financial leverage and financial performance has a direct correlation in which as one variable increases, the other one also increases and vice versa. In other words, as debt increases, profit as well increases. Saini (2014), highlighted certain factors like marketing, finance, government regulations, managerial incompetence, information, competition, technical upgrade, research and development as variables affecting growth of MSMEs. On the contrary, the research of Mendoza (2015) regarding this matter claimed that the profitability and leverage do not have significant relationship, as debt increases, profit decreases and vice versa. It could be inferred from this that MSMEs who tend to borrow greater amount of money has low profitability as their supposed profit earned were used to settle their interest or finance related to their debt. This study probed the relationship between profitability and leverage and evaluated the financial performance of chosen MSMEs which are measures to contribute to its sustainability and growth.

Research Objective and Questions

This study aimed to determine the profitability and financial leverage of MSMEs. Specifically, it was conducted to answer the following questions:

1. What is the level of leverage of the MSMEs in Tuguegarao City in terms of Debt Ratio?
2. What is the level of profitability of the MSMEs in Tuguegarao City in terms of Return on Sales?
3. Is there a significant relationship between the profitability and leverage of MSMEs in Tuguegarao City?

Hypothesis

There is no significant relationship between the profitability and leverage of MSMEs in Tuguegarao City.

Significance of the Study

The study will enhance the understanding of financial performance in terms of profitability and leverage of MSMEs in Tuguegarao City. A better grasp of evaluation of these performance measures will help to determine important financial decisions as to when MSMEs should rely on debt financing to aid in their sustainability and growth. The results of this study are beneficial to MSMEs of Tuguegarao City to determine the factors that may contribute to profitability and growth of a business. Lastly, the results will be also valuable for future researches related to MSMEs.

Literature Review

Conceptual Framework

MSMEs have penetrated the market with its undeniable growth. Recent reports of Department of Trade and Industry show that MSMEs total to 96% of the enterprises in the country. MSMEs proved to be major contributors to local and even national economy with its noticeable influence on Gross Domestic Product. Although MSMEs have been increasing in number, studies conducted show certain factors that hinder its growth. Saini (2014), provided in his study that among the factors affecting MSMEs in the manufacturing and servicing industry, labor skills, marketing and finance ranked the highest.

The financial performance of an MSME can attest its growth. According to Mendoza (2015), financial performance is a measurement of the utilization of assets from its business operation and the generation of revenues. Fatihudin, Jusni & Mochklas (2018), mentioned that financial performance is the attainment of the entities' financial goals for a certain period which can be measured by leverage and profitability and such measure will be used in the study. It is vital for MSMEs to understand financial information and measure financial performance that would improve financial decisions. In this research, the financial performance in terms of leverage and profitability was examined to provide useful information to MSMEs in analyzing the relationship of these measures.

In assessing financial performance leverage is a determining factor. Leverage is the financing of funds for its operation. Proper utilization of the fund can lead to an increase of profits and returns. Firms employing high leverage finance their operations mainly on debt. While it is a general concept that firms employing high leverage result to having high performance, the over reliance to debt can also escalate the risk of non- payment and may further result to the failure of business operations. For better comprehension of leverage, it is computed as the proportion

Accountancy, Business and Hospitality Research Bulletin of total debt to total assets. The greater the cost of debt, the greater the financial leverage (Investopedia, 2019).

Profitability is a basic measure to evaluate whether an entity is achieving its financial goal through its profit. As stated by Ahmad (2015), return on sales can be used to measure profitability. Return on Sales shows how the entity operate efficiently, it is determined by getting the quotient of the operating profit and net sales. The greater the return on sales, the greater the entity grow efficiently. Generally, the most frequent way to ascertain the financial performance of an entity is through its profits.

Status of MSME's in the Philippines and Other Developing Countries

MSME's proved to have paved its way on the Philippine market over the years. Micro, small and medium enterprises, report for 99.56% (920677) of the total businesses, of which 89.59% (828,436) were microenterprises, 9.56% (88412) were small enterprises, and 0.41% (3829) were medium enterprises (Philippine Statistics Authority, 2017). Large enterprises made up the remaining 0.44% (4044). Among European Union economies, MSME comprises 99.8 percent of enterprises contributing 66.8 percent of total employment in the formal, non-financial sector (European Commission, 2016).

Nation's GDP is greatly influenced by MSMEs as these entities share participation in employing great percentage of workers. In the East Asia, most MSMEs are inclined as potential suppliers of outsourced parts and services. These emerging entities strengthened economic integration and served as the catalyst of country's industrialization as seen in increasing growth of automotive, technology, trade, and retail sectors. MSMEs made its fair share and contribution on the development of most countries, be it regional or national. This was confirmed by many researches on the relevance of MSMEs in the country's economy. According to Rodriguez-Gutierrez, Moreno & Tejada (2015), it was discovered that MSMEs account for 99.9 percent of all firms and employ 96.2 percent of the manpower. This was further supported by Ayandibu & Houghton (2017), MSMEs being more labor intensive than large entities play major role in raising employment. MSMEs being dominant in the economy, engine job creation as it was found to provide livelihood opportunities most especially to the poor thus alleviating poverty. Fisesha & Oyelana (2017), second the significance of MSMEs in the boost of employment, particularly for women, low skill workers and the youth. Although a number of researches confirm the help and contributions of MSMEs to GDP, a study conducted by Ali (2013), revealed that MSMEs in Pakistan are ineffective as correlated to other advanced and developing society because of monetary restraint and adamant protocol of the Government. Moreover, he contested that many other constraints pose challenges affecting the growth of MSMEs thus misleading its function and role in poverty reduction.

Factors Affecting MSME's Financial Performance

Most studies highlighted numerous constraints which MSMEs face to further growth and productivity, including credit constraints, management accounting practices and ownership structure and board composition. Number of studies point that MSMEs are confronted with certain challenges and constraints relating to their expansion and growth. Ahiawodzi, (2012), concluded in his study that the main factor affecting MSMEs financial performance would be its access to credit. In his study, self-administered questionnaires were distributed to 78 SMEs and it was later revealed in both survey and econometric results that access to credit exerts a significant positive effect on growth of SMEs in Ghana. Also, Opafunso & Adepoju (2014), noted that Nigeria's government made effort to extend its help on MSMEs through enunciating financial policies with national development plans and budgets. This government schemes were made to ensure adequate financing MSMEs through loans and equity participation. The study concluded that access to capital funding by reduction in the interest rate on loan offered by banks can boost the performance of MSMEs in Ekiti State and Nigeria at large.

On a study conducted by Saini (2014), he discussed several problems common among the MSMEs. The study highlighted certain factors like marketing, finance, government regulations, managerial incompetence, information, competition, technical upgrade, research and development as variables affecting growth of MSMEs. He concluded that for entities in the manufacturing sector, finance, marketing and skilled labour rank as the highest. While for the services sector, it was noted that marketing, competition and skilled labour pose the greatest challenge. Various researches were also conducted to seek to show the relationship of several financial management strategies with the entity's profitability. Tsagem, Aripin & Ishak (2015) suggested that MSMEs owners/managers need to give more emphasis to efficient management of their limited resources by managing their account receivables, accounts payable, inventories and cash effectively for improve profitability. Firms with high managerial ownership levels exhibit higher profitability ratios but have lower growth rates (Lappalainen & Niskanen, 2012).

Relationship between Leverage and Profitability

It is evident that every business is committed to devising strategies that would improve their profitability like outsourcing, streamlining, integration of new technology, and formulating proper financial policies. One of the financial schemes to attain their objectives is optimizing the capital structure. It is of general concept that financial leverage and financial performance has positive relationship. On a study conducted by Rehman (2013), results yielded a positive relation on debt equity ratio with return on asset and sales growth, and a negative relation of debt equity ratio with earning per share, net profit margin and return on equity. Akhtar,

Javed, Maryam & Sadia (2012) suggests that if firms maintain high levels of financial leverage by employing debt financing, this scheme could improve their financial performance. This was supported by Javid (2014) on his study in which he asserted that financial leverage highly and positively impacts performance of MSME. Moreover, he explained that the proper administration of working capital can flourish the entity's performance. He concluded that firm size, financial leverage, liquidity ratio and sales growth all affect performance of SME.

While numerous studies support this claim, a number of researches argue otherwise. On a study conducted by Javed, Raob, Akram & Nazird (2015), results present a negative relation on the firm's return on asset and return on equity under the textile industry. Similarly, Mendoza (2015) confirmed that firms scoring high on leverage and liquidity measures result to have low profitability. Anderson & Minnema (2017) concluded their findings as consistent with pecking order theory. According to the results, he affirmed that the consulting firms in Sweden which prefers internal financing are generally more profitable. Furthermore, Wahba (2013) revealed that it is not the level of leverage that determines financial performance, but rather the debt maturity structure. The findings demonstrate that the entity's debt have an opposite effect on financial performance and therefore tend to cancel out.

Research Paradigm



Figure 1 Paradigm of the Study

The diagram shows the relationship between profitability and leverage. The variables used in this study are the level of leverage in terms of debt ratio and the level of profitability in terms of return on sales.

METHODS

The study employed a quantitative correlational research design in assessing the MSME's leverage and profitability. The study was conducted among the fifty (50) MSMEs in Tuguegarao City, Cagayan Valley. The respondents for this research were fifty (50) business managers or owners through the assistance of their bookkeepers or accountants of different MSMEs in Tuguegarao City. These fifty businesses were composed of 23 servicing, 17 merchandising, 6 manufacturing and 4 hybrid. Quota sampling method was used in selecting the respondents for the study. Documentary analysis was utilized in the study by gathering the three (3) annual financial statements (2016-2018) of the MSMEs. The financial statements

were composed of the statement of financial position and the statement of comprehensive income. A written communication of permission was requested to conduct the study from the office of the Vice President for Academics. The letter was signed and endorsed to the Dean of the School of Accountancy, Business and Hospitality and the subject teacher. After the approval, the researchers requested for the list of Micro, Small and Medium Enterprises to the Department of Trade and Industry in Tuguegarao City. A number of MSMEs were provided by DTI but only fifty (50) respondents agreed to disclose their three-year financial statements (2016 to 2018) were considered in this study. These financial statements were obtained with the approval of the owner or manager and with the assistance of the bookkeeper and accountant. The researchers examined the financial statements of the respondents through computing the debt ratio and return on sales as presented in Appendix A.

Measures of Leverage and Profitability

According to Agamata (2014), the following are used to assess the financial performance in terms of leverage and profitability.

1. Measure of leverage

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

2. Measure of profitability

$$\text{Return on Sales} = \frac{\text{Operating Profit}}{\text{Net Sales}}$$

To interpret the data collected, a qualitative rating scale utilized by Mendoza (2015) was adapted in this study to measure the financial performance of MSMEs. The level of leverage and level of profitability was classified into different levels as shown in the table below.

Ratio	Low	Medium	High
Leverage (Debt Ratio)	Below 40%	40%-60%	Above 60%
Profitability (Return on Sales)	Below 5%	5%-10%	Over 10%

Frequency and Percentage were used in classifying the respondents as to the level of leverage and level of profitability. Pearson correlation coefficient was employed to determine the significant relationship between leverage and profitability of MSMEs in Tuguegarao City.

RESULTS**Table 1. Level of Leverage in terms of Debt Ratio of the MSMEs in Tuguegarao City**

Level	2016		2017		2018	
	Frequency	%	Frequency	%	Frequency	%
Low	37	74.00	35	70.00	34	68.00
Medium	5	10.00	8	16.00	7	14.00
High	8	16.00	7	14.00	9	18.00
Total	50	100.00	50	100.00	50	100.00

Majority of the respondents have low level of leverage from 2016 to 2018 as presented in Table 1. Of the total respondents in 2016, 74% has low level of leverage while in 2017, 70% of the respondents have low level of leverage. Moreover, 68% of the MSMEs have low level of leverage in 2018. This indicates that the fifty (50) MSMEs prefer internal financing than external financing.

Table 2. Level of Profitability in terms of Return on Sales of the MSMEs in Tuguegarao City

Level	2016		2017		2018	
	Frequency	%	Frequency	%	Frequency	%
Low	18	36.00	17	34.00	13	26.00
Medium	5	10.00	12	24.00	13	26.00
High	27	54.00	21	42.00	24	48.00
Total	50	100.00	50	100.00	50	100.00

The table shows that 54% of the MSMEs have high level of profitability in 2016. Majority of the respondents have high level of profitability in the years 2017 and 2018 with 42% and 48%, respectively. It shows that the fifty (50) MSMEs were performing well.

Table 3: Test of Significant Relationship between Leverage and Profitability of MSMEs in Tuguegarao City

Year	r-value	p-value	decision
1	-.340*	0.016	Reject Ho
2	-.450**	0.001	Reject Ho
3	-.377**	0.007	Reject Ho
Average	-.410**	0.003	Reject Ho

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

* . Correlation is significant at the 0.05 level (2-tailed).

The r-value represents the correlation between the two variables, the -.34 to -.45 values on the result can be interpreted that there is weak to moderate linear

relationship which means that if profitability increases, there is a .34 chance that the leverage will decrease and vice versa. The p-value represents the probability of the null hypothesis from happening. A p-value that is below the significance level of .05 indicates a strong evidence against the null hypothesis and based on results there is a .001-.016 or an average of .003 probability of the hypothesis to occur and as a result, the hypothesis is rejected.

DISCUSSION

This study was designed to evaluate the relationship between profitability and leverage of selected MSMEs for the past three years (2016-2018). Specifically, it sought to determine the leverage and the profitability of selected MSMEs in Tuguegarao City.

Generally, as an industry norm, a ratio of 40 percent or lower is considered a good debt ratio and a ratio above 60 percent is considered to be poor ratio. This concept was adapted by Mendoza (2015) in his study wherein he presented a qualitative rating scale. Based on the presented rating scale, MSMEs were classified based on their utilization of debt. Thus, MSMEs having a debt ratio above 60 percent were classified as high level, 40 percent to 60 percent as medium level, and below 40 percent as low level. Hence, the researchers opted to use this rating scale. Findings revealed that most MSMEs had low level of leverage using debt ratio. This infers that the debt ratio of most MSMEs had the capacity to settle both short-term and long-term debt as they reach maturity. This corresponds with the study conducted by Mendoza (2015) wherein subject MSMEs are in good state in terms of leverage.

Meanwhile, MSMEs generating a positive return on sales usually indicates a good performance of a business. But ideally, a well performing business has an average of 5 percent to 10 percent return on sales. Still on the qualitative rating scale, MSMEs were identified as to their return on sales. MSMEs having below 5 percent were classified as low level, 5 percent to 10 percent as medium level and over 10 percent as high level. The results for the financial performance using return on sales of MSMEs showed that most MSMEs had high level. The variation on the findings for the return on sales imply that there are other factors to be considered. Saini (2014) discussed certain factors like marketing, finance, government regulations, managerial incompetence, information, competition, technical upgrade, research and development as variables affecting growth of MSMEs.

Lastly, using the Pearson Product Correlation Coefficient results yielded an inverse correlation between profitability and leverage of MSMEs in Tuguegarao City. This indicates that as leverage increases, the profitability decreases and vice versa. MSMEs who tend to borrow greater amount of money have low profitability.

It could be inferred from this that supposed profit earned was used to pay their debt. However, MSMEs who borrow less tend to have a greater return which can be expended internally as they have already paid their debts. Javed, Raob, Akram & Nazird (2015) concluded that total debts are negatively related to return on asset and return on equity. It is coherent with the pecking order theory which states that firms who opt to borrow less, earn more. It is in agreement to the study of Ahmad, Salman & Shamsi (2015) wherein it was found that the highly leveraged firms have lower profitability and lower leveraged firms have higher profitability. Contrary to this, Wahba (2013) explained that it is not the level of leverage that determines financial performance, but rather the debt maturity structure. Therefore, a significant negative relationship existed between leverage and profitability.

CONCLUSION

The study concluded that majority of MSMEs in Tuguegarao City do not rely on debt and they properly utilized their capital in procuring goods to produce profit. In terms of profitability using return on sales, most MSMEs were performing efficiently. However, based on the results, the hypothesis was rejected in the study. Hence, there is an indirect relationship between leverage and profitability. However, it was determined that the inverse relationship between leverage and profitability is weak due to the other factors affecting its growth.

RECOMMENDATION

The researchers recommend that a parallel study be conducted but with a larger number of respondents who can be able to represent the whole population of MSMEs in Tuguegarao City. Moreover, it can also be recommended to test the profitability of the business by using other methods other than return on sales to accurately measure the profitability and its connection to the company's leverage. Also, other factors affecting the entity's performance need to be considered for better assessment. Based on the results of this study, there is an indirect relationship between leverage and profitability. Thus, this can nudge the government on making schemes and policies to assist MSMEs on raising capital instead of resorting to debt. This study can be a basis for forthcoming researches related to the performance of MSMEs and understanding the determinants that contribute to the sustainability and growth of MSMEs. Furthermore, since an indirect relationship was found between the factors, related researches are advised to delve deeper on the proper utilization of an entity's debt.

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