

*Full Length Research Paper*

# An investigation into the impact of the usage of debt on the profitability of small and medium enterprises in the Buffalo city municipality, South Africa

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This study investigated the impact of the usage of debt on the profitability of small and medium enterprises (SMEs) in the manufacturing sector in the Buffalo City Municipality of the Eastern Cape Province of South Africa. To achieve this objective, the research hypothesized that the usage of debt has a negative impact on the profitability of SMEs. The research further hypothesized that SMEs have a difficulty in accessing debt finance from commercial banks. The study is important because SMEs, despite their contributions to the South African economy, have not been given due attention as research on corporate finance has been biased towards large firms. The results indicated that the usage of debt has a significantly negative impact on the profitability of SMEs. The results also indicated that SMEs have difficulties accessing debt from commercial banks. Lastly, the study recommended some measures that are expected to improve the accessibility to debt and reduce the cost of debt to SMEs. These measures among others include reduction in interest rates, awareness programmes by the banks, more bank competition (specifically commercial banks that are focused on lending to SMEs) and training of the owners of SMEs in the areas of writing business plans.

**Key words:** SMEs, debt, profitability, accessibility.

## INTRODUCTION

Empirical studies by Eriotis et al. (2002), Rajan and Zingales (1995) regarding the impact of debt on the profitability of firms have focused primarily on large firms in developed countries. These studies found a positive relationship between the use of debt and the profitability of firms. Few studies, such as Tze-Wei et al. (2002) however, have been conducted in developing countries or emerging markets such as South Africa. Modigliani and Miller's (1963) pioneering theory, on the capital structure of firms is the basis for the theoretical foundation for these studies. Modigliani and Miller's theory states that interest payments on debt are tax-deductible, creating tax savings for the borrower. The tax-deductibility of interest payments on debt effectively reduces the cost of debt. Therefore, firms can use debt to

lower their costs of capital and maximize their profitability and shareholders' wealth.

Rajan and Zingales (1995) however, argue that studies done in developed countries alone cannot be completely used to substantiate theories on corporate finance. Studies carried out in developing countries are also very important and may reach different conclusions from those carried out in developed countries. This is because the financial systems of developed countries are relatively more efficient than those of developing countries. One of the reasons for this is that most developed countries, unlike developing countries, have capital markets, which have been in existence for a long time and are, therefore, well developed. Therefore, without testing for the robustness of these findings outside the environment in which they were uncovered, it is hard to determine whether these empirical regularities are merely spurious correlations or whether they support one theory or the other.

Furthermore, only a limited number of studies such as

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Hall et al. (2004) and Voulgaris et al. (2004) have concentrated on the capital structure of small and medium enterprises (SMEs) despite their increasing contributions to the economies of most countries. In South Africa, SMEs are very important as the country suffers from high unemployment with an official estimate of approximately 25.5% of the economically active population unemployed (Statistics South Africa Labour Force Survey, 2006). SMEs are, therefore, expected to be an important vehicle to address the challenges of job creation, sustainable economic growth, equitable distribution of income and the overall stimulation of economic development. SMEs are also an important source of innovation in the development of new products, services and technologies. The contribution of SMEs to private sector employment (66.4%) and to gross domestic product (34.8%) implies a very high labour absorption capacity and highlights the job creating potentials of this sector and its importance to the reduction of unemployment in South Africa (Ntsika, 2002).

Current empirical studies on the impact of leverage on the profitability of firms in South Africa such as Negash (2001) and Negash (2002) have concentrated on large firms, especially those listed on the Johannesburg Stock Exchange. Negash (2001) found that the potential gain from leverage by large firms in South Africa was significant and comparable with the gains by firms in North America as proposed by Modigliani and Miller (1963). However, no extensive study has been conducted on how leverage impacts on the profitability of SMEs, considering their differences from large firms and their growing importance to the South African economy. Based on such gaps in the existing literature, this paper attempts study the impact of debt on the profitability of South Africa's SMEs. To achieve this objective, the study will also examine whether SMEs in South Africa have difficulties accessing debt capital. The reason for this is that without access to debt capital, the advantage of using debt to lower the cost of capital cannot be obtained.

This study makes important contribution to the literature. First, most of the capital structure theories and empirical studies have been tested in the developed countries especially in large firms. To what extent these theories are portable across different countries and different sizes of business organizations has become increasingly relevant. Furthermore, considering the role played by SMEs in the South African economy, in terms of employment creation, sustainable output growth, the equitable distribution of income and the overall stimulation of the economy it is in the interest of the country to identify factors which can contribute to their likely success or failure. In addition, the research is significant in that its results could be useful to financial analysts, consultants and accountants who analyse the performance of SMEs. Also, the results may be useful to government officials, lawmakers and other small

business policy makers in understanding the problems of capital adequacy of SMEs and its causes. Finally, the results will provide an empirical framework on which future research on the capital structure and profitability of small manufacturing firms in South Africa can be based.

Finally, the paper focuses only on SMEs in the manufacturing sector (refer to Table 1). According to Gumede (2002) the manufacturing sector is the most important sector of the South African economy in terms of output and employment. Most of the manufacturing activities are performed by SMEs. Another reason for considering only the manufacturing sector in this study is that it is highly probable that cross-industry differences in the definition of SMEs could confound findings. According to the National Small Business Act of South Africa, the definition of a SME in the manufacturing sector is different from that of a SME in the retail sector in terms of turnover, number of employees and total gross asset value. These influences are to a reasonable extent controlled by examining a single, albeit broadly defined industry. In addition, debt is defined as loans and advances from commercial banks. According to Gumede (2002) commercial banks provide more than 50% of credit extension to SMEs.

The remaining sections of this paper are organized as follows: Section two presents a review of the relevant literature on capital structure and develops testable hypotheses. Section three explains the methodology employed. The empirical results are presented and discussed in the fourth section and section five concludes and makes recommendations.

## LITERATURE REVIEW AND HYPOTHESES

The amount of debt and equity a firm uses to finance its operations is referred to as the capital structure. The seminal paper by Modigliani and Miller (1958) generally known as the M and M theory set up the basis for the development of a theoretical body of literature around the firm capital structure. M and M were the first to raise the issue of the relevance of capital structure to the value of the firm. M and M (1958) state that in a perfect, frictionless world without taxes, capital structure would be irrelevant to the value of the firm. However, the perfect world without taxes is unrealistic and this led to the revision of the 1958 theory in 1963 with the introduction of taxes. M and M (1963) argue that in a world with corporate taxes and deductibility of interest payments on debt, firm value will be maximized by using debt as possible. This implies capital structure is relevant to firm value.

The M and M 1958 and 1963 theories stimulated a great deal of debate about the capital structure of the firm and led to the development of some other theories of capital structure. The agency cost theory by Jensen and Meckling (1977) argue that agency costs play an

**Table 1.** Definition of SMEs in the manufacturing sector in South Africa (Adapted from Government Gazette of the Republic of South Africa, 2003).

Sector	Size or class	Total full time paid employees less than	Total annual turnover less than	Total gross asset value less than
Manufacturing	Medium	200	R51.00 million	R19.00 million
	Small	50	R13.00 million	R5.00 million
	Very small	20	R5.00 million	R 2.00 million
	Micro	5	R0.20 million	R0.10 million

important role in financing decisions due to conflict that may exist between shareholders and debt holders. Ross (1977) points out those firms' managers or insiders are assumed to possess private information about the characteristics of the firm's return stream or investment opportunities (information asymmetry). Therefore the choice of the firm's capital structure signals to the outside investors the information of insiders. Miller (1977) introduces personal taxes and argues that in a world in which interest payments are fully deductible when computing corporate income taxes, the value of the firm, in equilibrium, will still be independent of the capital structure. Another very relevant contribution to capital structure is the pecking order theory by Myers and Majluf (1984). The theory states that firms prefer to use internal financing (retained earnings) first to finance investment opportunities but when external financing are required firms prefer to use debt before equity because debt is cheaper than equity.

### Impact of debt and on the profitability of SMEs

Modigliani and Miller (1963) affirmed that since interests on debt are tax-deductible, thereby creating tax savings for the borrower, it becomes possible for firms to minimize their costs of capital and maximize shareholders' wealth by using debt. This implies that the value of a levered firm becomes higher than that of an unlevered firm. The use of debt is expected to enhance a firm's return on equity which is the ultimate measure of profitability. Correia et al. (2003) point out that the impact of the use of debt on a firm's profitability can be positive or negative. Leverage (debt) is positive when it is used to generate a return on assets that is higher than the before-tax cost of debt, thereby enhancing the return on equity. This results in profitability and wealth maximization. Positive leverage usually occurs when a firm operates under favourable conditions, when sales and profit margins are high and when the company is able to generate a good return on assets. The final impact of positive leverage is on the return on equity, which increases at a rate faster than if the firm had no debt.

However, leverage is negative when it is used to generate a return on assets that is lower than the

before-tax cost of debt. This can have a negative impact on the return on equity. Negative leverage usually occurs when a firm faces difficult times, when sales and profit margins are low and the return on assets generated from operations, is lower than the before-tax interest on debt. This can put the firm into serious financial difficulties, possibly culminating in bankruptcy. In this situation, return on equity declines at a faster rate and, in the worst scenario, becomes negative.

Michaelas et al (1999) reveal that the minimization of the cost of capital and maximization of profitability through the use of debt finance might not hold for SMEs. The researchers conclude that SMEs find it difficult to borrow from commercial banks for a variety of reasons. When they are able to borrow from banks, the costs of debt financing for SMEs are usually higher than those of large firms due to their higher credit risk. The reliance on debt to finance investment purposes therefore negatively impacts on the profitability of SMEs. In South Africa, interest rates on lending are very high (12.5%) compared to the rates in developed countries (average 4%). Therefore, it is more difficult for firms, in South Africa, to earn returns higher than the cost of debt compared to firms in developed countries. Falkena et al. (2002) agree that the cost of funds is a major problem for SMEs in South Africa, as more than half of them have been adversely affected by the high cost of debt. Many SMEs, in South Africa also have a limited turnover, implying their need to keep margins very low to compete with large firms. SMEs furthermore need to be efficient and keep administrative costs low to maintain sufficient profitability. It is in this context that high bank fees can represent a significant burden for SMEs.

Furthermore, SMEs in South Africa are faced with many difficulties regarding their return on investment. Amongst these is the dual nature of the economy, where SMEs, often, have to compete with established multinational firms in the same sector. In South Africa, most sectors are concentrated around a few large firms. Consequently, SMEs face the constraints of entering a highly competitive market and this affects their ability to make profits from their investment (Balkenhol and Evan-Klock, 2005). Kesper (2001) also stipulates that most SMEs in the manufacturing sector in South Africa have not been able to grow since 1994. Many SMEs do not

report a profit or an increase in turnover. Their constraints include: Poor micro economic conditions and more price competitive imports coming into the domestic market, which result in smaller and less frequent orders. An increase in wages erodes the price competitiveness of SMEs; Sales of SMEs are primarily concentrated on the local markets and high input costs, especially transport costs.

Brink et al. (2003) agree that turnovers of SMEs in South Africa are low and are decreasing because of factors such as small market size, low demand and a lack of sufficient knowledge on competitors. SMEs rarely conduct marketing research on their competitors and the needs of their customers. They also suffer from marketing factors such as poor location, insufficient marketing, poor products or service and the misreading of customers' trends and needs. The high cost of funds and the unfavourable economic conditions for SMEs in South Africa, suggest that the use of debt finance will have a negative impact on their profitability. Consequently, it is hypothesized that:

**H<sub>1</sub>:** The use of debt has a negative impact on the profitability of SMEs.

### **Accessibility to debt by SMEs**

The concept of optimal capital structure as explained by Myers and Majluf (1984) is based on the notion of asymmetric information. The conclusions drawn from asymmetric information theory is that there is a hierarchy of firm preferences with respect to the financing of investments. Firms will initially rely on internal funds that are retained profits when there is no existence of information asymmetry then will use debt if additional funds are needed and finally will issue equity to cover any remaining capital requirements. This hierarchy is broadly defined as the pecking order theory. Vidal and Ugedo (2005) however argue that a limitation of this model is that it is generally intended to describe listed companies leaving the rest mainly the SMEs out of the explanation.

Empirical evidence, on the relationship between the size of a firm and leverage is quite varying with respect to conclusions (Abor and Biekpe 2005). Studies by Rajan and Zingales (1995) found a positive relationship between the size of a firm and leverage (that is the size of a firm affects its ability to access debt). Michealas et al. (1999), however, found a negative relationship between the size of a firm and leverage, whilst other studies found no relationship between the size of a firm and leverage. Roden and Lewellen (1995) conclude that there is no relationship between size and leverage and that size does not determine a firm's leverage. Nguyen and Ramachandran (2006) argue that the pecking order theory may not apply to SMEs because they suffer from information asymmetry. Small size is likely to lead to severe information asymmetries between the SME

owners and potential lenders because SMEs are unlikely to have adequate and reliable financial statements. This is consistent with the view of Bose and Cotheren (1997) that information asymmetry can negatively affect SMEs access to debt capital. Information asymmetry arises when one party to a transaction has better information than the other. SMEs may have more information about their future prospects than the banks. Since banks do not have the necessary information, even SMEs with profitable investment opportunities are turned down when requesting credit facilities. This situation implies that SMEs face difficulties in accessing loans from financial institutions. Consequently it is hypothesized that:

**H<sub>2</sub>:** SMEs have difficulties accessing debt capital commercial banks

## **RESEARCH METHODOLOGY**

### **Data collection**

The study covered SMEs in the manufacturing sector adhering to the definition given by the National Small Business Act of South Africa (1996) as amended in 2003. Manufacturing activity is, broadly, defined to include the manufacturing of the following products, namely; food products, beverages, wearing apparels, dressing and dyeing of fur, leather products, footwear, wood and wood products, paper and paper products, plastic products, non-metallic mineral products, basic metals, fabricated metal products, machinery and equipment, electrical machinery and apparatus, radio, television and communication equipment and furniture (Statistics South Africa, 2004).

The study was done in the Buffalo City Municipality of the Eastern Cape Province of South Africa. The Buffalo City Municipality consists of East London (including Mdantsane), King William's Town and Bhisho. The survey population, for this study, was obtained from the Bureau of Market Research of the University of South Africa. The Bureau, conducts market and social-economic research on a regular basis. It also maintains an updated address register on establishments in South Africa. This information is classified according to economic activity, size of the business and geographical area and is stored on a computer. The register revealed that there are one hundred and sixty six SMEs in the manufacturing sector in the Buffalo City Municipality.

Probability sampling method was used for the study. Probability sampling involves selection methods in which all the members of a sample are chosen through a random process. With probability sampling each of the population has a known, non-zero chance of being included in the sample. Simple random sampling was used to draw a sample of one hundred and thirty firms which represented approximately 78% of the population. A requirement to be included in the survey was that the responding SME must keep accounting records or prepare annual financial statements. This requirement is needed for the quantitative analysis of the impact of debt on the profitability of the respondents. Studies such as Temtime and Pansiri (2004) reveal that not all SMEs keep books of accounts or prepare annual financial statements. This necessitated the choice of a big sample.

Data for the study was gathered through self-administered questionnaires, which involved a direct and face-to-face meeting between the researcher and the respondent. Cooper and Schindler, (2003) explain that this method has higher response rate than mail surveys or telephone interviews. Furthermore, the researcher needed to obtain information on the financial data of the

respondents. Self-administered questionnaire has shown to increase the reporting of sensitive information and also ensure anonymity and privacy of the respondents, thereby encouraging more candid and honest responses.

The questionnaire consisted of twenty five (25) questions, covering five primary areas. The questions included social-demographic questions, questions on whether the respondents adhere to the requirements of the National Small Business Act, questions on accessibility to debt by the respondents, questions on the impact of debt on the profitability of the respondents and questions relating to the financial data of the respondents. The questions that were used in the questionnaire were dichotomous questions, multiple-choice questions and five-point Likert scale type questions. The combination of the three types of question ensures the collection of complete information from the respondents (Loubser, 1999). 21 out of the 25 questions were closed ended. Closed ended questions are easy to code and analyse, since the responses are predetermined (Cooper and Schindler, 2002).

To test for the reliability of the data collected through the self-administered questionnaire, Cronbach's Alpha was employed. The results showed a Cronbach's Alpha of 0.744

### Method of analysis

The study utilized an estimated multiple regression equation to test the hypothesis that the usage of debt has a negative impact on the profitability of SMEs. To test the hypothesis that SMEs have difficulties accessing debt finance from commercial banks, dichotomous question (Yes or No) was utilized. Financial data over a two-year period 2005-2006 were collected and mean values were calculated for the dependent and independent variables except for firm size. The estimated regression equation is analyzed below:

$$P = \alpha + \beta_1 \text{ Debt ratio} + \beta_2 \text{ Size} + \varepsilon_1$$

Profitability represents the dependent variable in the equation. It will be measured by return on equity. The return on equity is defined as profit after tax divided by ordinary share holders' funds. This is consistent with similar studies such as Mesquita and Lara (2003).

### Intercept (alpha)

Intercept represents the value of the dependent variable (profitability) when the values of the independent variables are zero. It shows the value of the dependent variable before the independent variables are introduced (Gujarati, 1995).

### Coefficient values or parameter estimates $\beta_1$ and $\beta_2$

The terms  $\beta_1$  and  $\beta_2$  represent the slope coefficients or the coefficient values. The coefficient value measures the rate of change in the value of the dependent variable per unit change of the independent variables.

### Debt ratio

Debt is measured by the debt to assets ratio. This is consistent with similar empirical studies such as Mesquita and Lara (2003) and Tze-Wei et al. (2002).

Size, in this study, will be measured by the natural logarithm of the total number of employees. This is consistent with similar studies such Tze-Wei et al. (2002).

### Error term

The influences of all other variables affecting profitability, except the ones noted in the regression equation, can be captured by one single variable called the error term (Gujarati, 1995).

## RESULTS AND DISCUSSIONS

One hundred and nineteen SMEs participated in the survey leading to a non-response error of about 10%. The non-response error was low due to repeated calls and visits by the researcher to the firms in the sample and through the use of self-administered questionnaires. A major requirement set prior to the completion of the questionnaire is that a respondent must keep either books of account or prepare annual financial statements. Out of the one hundred and nineteen firms that participated in the survey, eighty one, kept books of account or prepared annual financial statements while 38 firms did not and were eliminated from the sample. Demographic questions focused on the gender, educational qualifications, age of operations and products manufactured and yielded the following answers. 86% of the respondents are male, while 14% are female. This result indicates that men are more involved in entrepreneurial ventures than women. 44% of the respondents have high school certificates, 28% have diplomas, 18% bachelor degrees, 7% primary school certificates and 3% masters and above. This result indicates that small firm owners in the study area are well educated. 33% of the respondents have been in operation for between 1 and 5 years, 26% have been in operation for 6-10 years, 30% have been in operation for 11-15 years, 7% in operation for between 16-20 years and 4% in operation for more than twenty years.

This result indicates that small manufacturing firms are young with approximately 59% of them operating not above ten years. 31% of the respondents are operating in food processing. 18% in metal fabrication, 13% are in clothing manufacturing. Other products manufactured include wood, 11%, plastic, 9%, furniture, 7%, leather, 7% and paper products, 4% This result indicates that small manufacturing firms are mainly in food processing, metal fabrication and clothing.

With regards to the hypothesis that SMEs have difficulties accessing debt finance from commercial banks, 76 respondents out of the 81 firms applied for bank loans, while 5 did not apply. The major reason for not applying for bank loans was found to be the high interest rates (3 respondents), did not need loans (1 respondent) and lack of collateral (1 respondent). This result indicates that SME owners do not want to apply for loans, because they may be unable to meet due obligations (principal and interest payments) towards such an expensive facility. With regards to what the loan applications were requested for 39 of the applications were to meet fixed asset purchases, whilst 35 were for

working capital needs and 2 for business acquisitions. None of the respondents required funds for market development, restructuring or reorganisation. This result indicates that fixed asset purchases are the most important financial needs of SMEs. The result further indicates that SMEs need funds for working capital and that they do not primarily engage in business acquisition (only 2%), market development and restructuring or reorganisation.

Out of seventy six applications for bank loans, 31 were successful and 45 applications were rejected and unsuccessful. This implies that a majority of the respondents that applied for credit were denied by the commercial banks. This result supports the hypothesis that SMEs have difficulties in accessing debt capital from commercial banks. Accessibility to debt can be linked to demographic factors such as the age and size of the firm. Linking the accessibility of debt to the age of the firm reveals that out of the thirty one (31) firms that had access to debt, twenty seven (27) have been in operation for more than five years and 4 for less. This suggests that the age of a firm is a major factor that influences accessibility to debt by SMEs. Also, out of the 31 firms whose applications for loan were successful, 29 can be categorized as medium sized, whilst 2 are small. This result indicates that larger SMEs have better access to credit than smaller SMEs.

The respondents whose applications were unsuccessful were asked for the reasons why their requests were rejected. 25 responded that banks discriminated against them because they are small, 5 responded that their own contributions were too small, 13 responded that they lacked adequate and acceptable collateral and 2 said they lacked a good business plan. Question on the other financing options available to the respondents revealed that all the respondents use owners' capital and retained earnings. 40 respondents use contributions from family and friends and only 3 respondents make use of venture capital. This result indicates that owners' capital and retained earnings are the most significant sources of finance for SMEs.

All the 81 respondents were asked whether they have enjoyed any facility or assistance from Khula Enterprise Finance Agency (Khula). Khula is government institutions established to assist SMEs obtain credit from commercial banks. 76 respondents responded that they have never enjoyed any assistance from Khula while 5 respondents have benefited from Khula. This result indicates that Khula services are benefiting relatively, few SMEs.

With regards to the hypothesis that the use of debt has a negative impact on the profitability of SMEs: A five-point Likert scale ranging from strongly agree to strongly disagree was used to obtain information from the respondents on their perception on the interest rates on lending in South Africa. This part of the questionnaire was answered only by the 31 respondents who had access to debt. 17 respondents strongly agreed with the

perception that interest rates on borrowing by SMEs in South Africa are too high. 9 agreed and 3 were neutral. 2 respondents disagreed with the perception that interest rates are too high. The agreement percentage is eighty three percent (83%). This result suggests that interest rates on SMEs are too high in South Africa. Question on whether the respondents can borrow at the prevailing interest rate and still generate returns on funds that are greater than the before-tax interest rate on debt elicited the following responses. 24 respondents strongly disagreed, 3 disagreed, 2 respondents were neutral, one agreed and 1 strongly agreed. These results indicate that the use of debt has a negative impact on the profitability of SMEs.

Leverage is only positive if it generates return on assets greater than the before tax interest rate on debt. Further statistical tests to support this argument were provided by the analysis of quantitative data collected and the extract of the regression results in Tables 2 and 3, respectively.

Tables 2 presents summary statistics for financial variables of the respondents within the sampled period. The average return on equity of leveraged respondents is 3.99% compared to unleveraged respondents at 6.11%. Leverage is positive when the return on assets is greater than the before tax interest rate on debt. The average return on assets for leveraged respondents is 11.38% whereas the before interest tax interest rate for the majority of the respondents at 13.5%. This implies that the return on assets for most of the respondents is lower than the before tax interest rate on debt indicating negative leverage. Also the average debt to assets ratio of the leveraged firms was 51.68% and the debt to equity ratio was 1.31 times. This indicates that SMEs that are able to access debt finance use more debt than equity in their capital structures.

Tables 3 presents extract of regression results for the relationship between debt finance and profitability. The parameter estimate for debt when regressed against profitability is negative at 0.28740. The parameter estimate measures the impact of the predictor variable on the response variable. The significance level of is .0001 which is lower than the 5% significance level usually applied in business economics (Gujarati, 1995). These results indicate that the usage of debt has a significantly negative impact on the profitability of the respondents. These findings are consistent with previous literature on the impact of debt on the profitability of SMEs such as Hughes (1997) and Tze-Wei et al. (2002).

## CONCLUSION AND RECOMMENDATIONS

The primary objective of this research study was to investigate the impact of the use of debt on the profitability of SMEs in the Buffalo City Municipality in the Eastern Cape Province of South Africa over the period

**Table 2.** Summary statistics of financial variables for SMEs between 2005 and 2006.

Performance measure	Ratios calculated from data collected from respondents using debt	Ratios calculated for respondents not using debt
<b>Profitability ratios</b>		
Return on assets (%)	11.38	12.9
Return on equity (%)	3.99	6.11
<b>Liquidity ratios</b>		
Current ratio	1.56:1	1.73:1
Quick ratio	0.68:1	0.85:1
<b>Solvency ratio</b>		
Times interest earned ratio	1.83	-
<b>Debt ratios</b>		
Debt to assets ratio (%)	51.68	-
Debt to equity ratio	1.31 times	-

**Table 3.** Extracts from the regression results.

Variable	Parameter estimate	Standard error	T value	Pr greater than t
Intercept	15.59480	2.29548	6.97	Less than 0001
Debt	-0.28740	0.06026	-4.77	Less than .0001
Size	0.35391	0.19157	1.85	0.0753

2005 - 2006. The other issue investigated was whether SMEs have access to debt. The results obtained from the respondents revealed that the usage of debt has a negative impact on their profitability. In addition, the data collected on the financial statements of the respondents were subjected to statistical tests using a regression analysis. The regression results indicated a significantly negative relationship between profitability and debt financing. Therefore, the hypothesis that the usage of debt has a negative impact on the profitability of small manufacturing firms is accepted. With regard to accessibility to debt, from a total of 76 respondents that applied for credit, 31 were successful and 45 respondents were unsuccessful. The hypothesis that SMEs have difficulties accessing debt capital from commercial banks is also accepted.

To improve SMEs' access to debt capital and improve their profitability from the usage of debt the following recommendations were suggested. Detailed financial records are not usually kept by SMEs. Therefore, SMEs are not always able to present full accounting records and other documentation called for by the banks, thereby making the appraisal of their applications difficult. It is recommended that SMEs keep detailed accounting records and audit their financial statements on an annual

basis. This will enable the banks to make a proper evaluation on SMEs, which should improve their accessibility to credit. Related to this is the issue of education and training. Most SMEs owners do not have basic business skills such as financial and marketing management skills and find it difficult to prepare documents which are required by the banks, such as a good business plan. It is therefore recommended that SME owners should improve their education especially business-related education, by attending short courses and seminars. The South African government should also intensify efforts to assist small firms with education and training through Small Enterprises Development Agency (SEDA).

Interest rate on lending should be reduced by the government. The high interest rates affect the costs of debt and the profitability of SMEs. Most SMEs can not generate a positive leverage because of the present high interest rate in South Africa. It is noted from the data analysis that SMEs that have access to debt have high debt ratios. This is due to the fact that they do not have access to other sources of equity apart from their owners' contributions, retained earnings and contributions from family and friends. Efforts to increase the supply of equity to SMEs should lead to a decrease in their demand for

debt. Against this background, it is recommended that small firms source equity from the Alt X Exchange. The Alt X Exchange is a partnership of the Johannesburg Stock Exchange and the Department of Trade and Industry. It is designed to give SMEs the opportunity to issue shares, raise capital to widen their investor base and have their shares traded in a regulated market.

It is also recommended that commercial banks should give breakdown of their lending to the SMEs and large firms as against their present practice of not subdividing their assets into sectors. This implies that it is statistically difficult to establish the percentage of loans and advances that are allocated, by commercial banks to SMEs in South Africa. It was noted that SMEs do not send annual financial records on their performance to any of the government authorities such as the Small Business Development Authority or Statistics South Africa. This makes it difficult to conduct academic exercises on SMEs because there is no general pool where detailed information can be obtained. In countries such as the United States, SMEs are mandated to send annual financial records of their performance to the United States Small Business Administration from where academics or even, the government can obtain detailed information on their financial performance and take the necessary action when required. This study recommends that SMEs in South Africa should be mandated by the government to send annual financial records on their performance to government agencies such as Statistics South Africa and the Small Business Development Agency.

The result of the data analysis revealed that a high percentage of the respondents did not enjoy the products of the Khula Finance Enterprises Agency (Khula). The reason given, by most of the respondents was that they are not aware of Khula. It is therefore recommended that Khula's products be marketed vigorously by the organization to SMEs that are the intended target market of the organization. Furthermore, there is the need for awareness programme by commercial banks on their requirements for SME lending requirements for loans. This will enable the SMEs to understand what is expected of them by the commercial banks when requesting for loans.

The banking market should also be deconcentrated through increased competition. Efforts to relax the entry requirements into the banking sector and increase the number of lenders suggest an increase in the availability of credit to SMEs. It is, furthermore, recommended that commercial banks undertake a substantial public awareness campaign on their requirements from SMEs who intend to request for credit. This will help eliminate the perception stated above, and also increase awareness of the criteria that commercial banks set for the financing of small firms. This research work suggests lines of enquiry for additional research. Further research could determine if the findings of this research are consistent across different industries.

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