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THE NEXUS BETWEEN MICROFINANCE AND FINANCIAL PERFORMANCE IN SMALL ENTERPRISES: CASE OF HARARE, ZIMBABWE

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ABSTRACT

The study derives from the notion that small enterprises (SEs) could be the drivers of the Zimbabwean economy, after many large companies have either closed down or downsized in the past two decades. This study also constitutes the third phase of the research aimed at examining how the financial performance of small firms can be influenced by microfinance services offered by MFIs. The purpose of the current study is to determine if there is any change to SEs' financial performance after acquiring microfinance from MFIs. The research employed both the quantitative and qualitative designs, whereby the population for the study comprised the many SEs in and around Harare Central Business District. The researchers purposively sampled twenty SEs from each sector from within the population of SEs operating in Harare on condition that: (1) the SE had obtained microfinance from an MFI and is currently indebted to at least one MFI, (2) The SE meets the operational definition of an SE; that is it has between six and forty employees, annual turn-over of $50 000 to $500 000 and assets valued at between $50 000 to $1 million. Questionnaires were used as a data collection tool. The key findings of the study were that microfinance has had a positive impact on SE financial performance. We however note that both SEs and MFIs in Harare generally have not yet adopted contemporary bankruptcy prediction models meant to ensure that SEs do not collapse abruptly due to indebtedness and lack of information on the direction of their businesses. Thus, whilst we conclude that microfinance could be a driver of SE sustainability and development, we recommend the use of modern day financial analysis techniques in monitoring SE financial soundness.

Keywords: Financial performance; Small enterprise, Financial analysis

INTRODUCTION

The study is firmly grounded on the notion that microfinance institutions (MFIs) could be drivers of financial performance in small enterprises (SEs). Like in any other country in the world, SEs in Zimbabwe have the propensity to serve as sources of livelihood to the poor, create employment opportunities, generate income and contribute to economic growth. The term 'Small Enterprise' according to the Zimbabwe Revenue Authority (ZIMRA)'s definition of a small company, means an enterprise with six to forty employees, annual turn-over of $50 000 to $500 000 and assets valued at between $50 000 to $1 million. Major industries in Zimbabwe have since either shut down or downsized their operations, throwing thousands of skilled labour

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and professionals into the streets.

Despite the increasing roles of SEs in Zimbabwe, access to financial services by SEs has been touted as one major constraint. Over the years, the Zimbabwean government has however instituted institutional and policy reforms favouring SEs, particularly with regards to the flow of financial resources to the enterprises. Empirical studies from Zimbabwe and abroad reveal that microfinance institutions have been among the different financiers of SEs. As at 31 December 2017, there were 189 MFIs duly licensed by the Reserve Bank of Zimbabwe. In the view of Ozioko (2010), the licensing of MFIs by the central banks is meant to ensure financial inclusion; that is, enabling those entrepreneurs not serviced by mainstream financial institutions to access financial services for the betterment of their operations. Nonetheless, there has not been enough evidence as to whether the crucial objective of improving SE financial performance is being achieved by those SE benefiting from the services of MFIs, particularly microcredit.

The term 'performance', as widely referred to in both academic and scientific literature refers to the extent to which companies accomplish their objectives. In the views of authors such as Kotane (2015), business performance indicators take two forms; financial and non-financial indicators. That is, a well performing business not only improves on its financial position and profitability, but also improves on customer satisfaction, internal business processes and employee innovation and learning, among other dimensions of organisational performance. A critical evaluation of business performance measurement practices among large and small firms worldwide reveals a contemporary trend of blending both financial and non-financial business performance measurement techniques in monitoring performance.

The present study is however premised on the notion that although both financial and non-financial performance measures are crucial for small enterprises, for the SEs under study (all of which are indebted to MFIs), it would be worthwhile to focus primarily on financial performance. Financial performance is considered crucial as it relates to the SEs' financial dimensions such as profitability, liquidity and financial position. The researchers consider the aforementioned financial dimensions very crucial in assessing the worth of microfinance in the SEs. In light of the foregoing, the study sought to examine the impact of microfinance on SE financial performance as measured using different financial analysis techniques.

REVIEW OF LITERATURE

Developments in the Theory on SEs

Over the past 50 years, the world has witnessed unprecedented growths in the conceptualisation of the key issues, which relate to the SE sector as well as the consequent theoretical work. Chief of the theories is the labour surplus theory dating back to the seminal work by Ranis (2004). The author argues that the driving factors behind the development of SMEs is excess labour supply, which could not be absorbed by large private enterprises or the public sector; therefore would be compelled to be engaged by the SEs regardless of low productivity and poor pay (Kessy and Urio, 2006). Consequently, development in the SE sector is as a result of escalation in unemployment levels.

Thus SEs come in handy with answers to those who fail to be engaged by the formal sector. It has generally been observed that the growth in SEs is widespread in periods of crisis, where contraction of the formal sector is witnessed or where the formal sector's growth is too

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sluggish that it cannot absorb the labour force (Muiruri, 2014). Arguably, development in the formal sector results in contraction in the SE sector and consequently, an anti-cyclical relationship continues with the formal economy.

2.2 Approaches to Microfinance Institutions (MFIs)

Although the primary objective of MFIs has traditionally been the provision of basic financial services to the financially excluded, a thorough search of literature reveals that microfinance can be viewed from different dimensions and perspectives. Robinson (2001) asserts that the most known approaches in microfinance development can be categorized as (1) business vs. developmental approach and (2) poverty lending vs. financial system approach. Both approaches share the goal of making financial services available to poor people throughout the world.

According to Ayelech (2010), the business approach primarily focused on organisational achievements such as repayment, cost recovery and profitability. Hence, the MFIs' concern is how to develop the industry rather than how to develop the community. On the other hand, the development approach emphasises more on how the client is doing rather than profitability. Supporters of this approach argue that the client should participate in awareness and capacity building programs before applying for loans. Therefore, the development approach places emphasis not only on the building of institutions; but also empowering the poor people to get the most out of the services delivered.

Ayelech (2010) above also describes the poverty lending approach as one that focuses on poverty reduction through credit and other services provided by institutions that are funded by donor and government subsidies. A primary goal of this approach is to reach the poor especially the poorest of the poor with credit. Saving is not a significant part of this approach. The poverty lending approach was first realized in Grameen bank in Bangladesh. It has wide outreach to poor borrowers. But the approach has required large amounts of continuing subsidies and does not meet poor people's demand for saving services, and hence it has not proved to be a globally affordable model (Robinson, 2001). With the failure of credit institutions to address the grassroots (households') financial needs, the situation demanded an innovative approach to address the lower segment of the population. The new approach should correct the drawbacks of the old approach (Ayelech, 2010). The financial system approach focuses on commercial financial intermediation among poor borrowers and savers; and also emphasis is given to institutional self-sufficiency. The approach targets lending to the economically active poor people, i.e. people with the ability to use small loans for income activities and the willingness to repay and to voluntarily make required savings. The current research is linked to both the financial system and the business approaches in the context of SMEs.

Microfinance and SEs: Summary of Empirical Studies

Table 1 below summarises some of the recent studies, which investigated the contributions of microfinance to small enterprises.

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Table 1: Empirical evidence

Author(s)	Purpose	Method	Country	Key Findings
Pei-Wen et al (2016)	The study sought to explore the effect of microfinance facilities on SMEs in Malaysia.	The study gathered using questionnaires distributed to the owners of SMEs, which fell into a microenterprise category in the Klang Valley.	Malaysia	Regression results reveal that microfinancing has a significant effect on SMEs' incomes.
Christopher (1864)	The purpose of the study was assessing the impact of Microfinance on Small and Medium Enterprises (SMEs) in Nigeria.	Simple random sampling technique was employed in selecting the 100 SMEs that constituted the sample size of the research. Structured questionnaire was designed to facilitate the acquisition of relevant data, which was used for analysis.	Nigeria	The study established that a significant number significant number of the SMEs benefitted from the MFIs loans even though only few of them were capable enough to secure the required amount needed. Interestingly, majority of the SMEs acknowledge positive contributions of MFIs loans towards promoting their market share, product innovation achieving market excellence and the overall economic company competitive advantage.
Chimaleni et al (2015)	The researchers sought to determine the effect of sources of business financing on the financial performance of Small and Medium enterprises in Lurambi Sub-County. Specifically, the study sought to determine the effect of commercial loan financing on the financial performance of Small and medium enterprises.	Descriptive survey was used. The population of interest comprised of 450 small and medium enterprises in Lurambi Sub-County. Stratified random sampling was used to select 88 small and medium enterprises. The survey instrument used was the questionnaire, which was administered to owners and managers. Analysis of data was done using descriptive and inferential statistics.	Kenya	The study established that, sources of business financing affected financial performance of small and medium enterprises significantly; commercial loan financing affected financial performance significantly.
Haider et al (2017)	The study was aimed at finding the difference in certain performance indicators of MSEs whose owners had been given	Survey research was conducted and a sample of 384 MSEs was selected on simple random basis.	Pakistan	The findings revealed that all the performance indicators including sales increase, income increase, assets increase, employment

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	training against those whose owners had never been given any kind of training.			increase, and meeting household expenses have shown a significant difference between the two groups.
Mokua and Ndede (2017)	The research study objective was an evaluation of micro-credit finance and financial performance of Small and Medium Enterprises (SMEs) Nakuru County, Kenya.	The research adopted a descriptive research design. The study used a sample of 106 respondents out of whom 65 responded.	Kenya	The study established that increase in interest rates affected the financial performance of SME's to a great extent. The study also established that strict credit policies affected access to credit thus affecting the financial performance of SME's. Also, income level of entrepreneurs affected the financial performance due to inability to finance the accessed credit.
Nahamya et al (2013)	The study sought to establish the impact of microfinance service delivery on the growth of SMEs in eastern Uganda.	The study employed both quantitative and qualitative data analytical methods, and a multiple regression was run to estimate the effect of socio-economic characteristics on the SMEs' growth, while a logit model was used to assess the constraints to access to microfinance products in Uganda.	Uganda	The findings indicate that although the MFIs have performed below a set standard on average due to some industry wide challenges, they have had a significant impact in linking SMEs and the poor to sources of credit and contributed to their growth in terms of growth of business capital and stock accumulation.

Source: Own analysis

METHODOLOGY

The study stratified the SEs by sector. Then the researchers purposively sampled twenty SEs from each of the eight identified sectors, on condition that the SE owner or manager reveals that the enterprise had acquired microfinance and was at the time of the research indebted to at least one MFI; taking into consideration the cost and time benefit analysis. The questionnaire was used as a data collection tool. In particular, a structured questionnaire was designed containing

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an appropriate number of closed ended and open-ended questions to allow the respondent to give as much information as possible in a short space of time. Due to the largely scattered population and also to avoid risk of meager responses, the questionnaires were sent to the respondents in different workstations where the respondents were based. However, after distributing the questionnaires, only 128 were returned, representing an 80% response rate.

RESULTS AND DISCUSSION

4.1 Respondents' Demography

The research sought to gain an understanding of the respondents' demographic profiles by posing questions that solicited responses on their gender, highest level of education, age and experience in their current positions. The respondents were the chief accounting officers (CAOs) in their respective SEs. Table 2 below tabulates the demographic information of the targeted research group.

Table 2: Demographic Information

Demographic Characteristic	Type	Frequency	%
Gender	Male	79	61.7
	Female	49	38.3
	Total	**128**	**100**
Age Group	18-28 years	39	30.5
	29-38 years	57	44.5
	39-48 years	18	14.1
	49-58 years	12	9.4
	Above 58 years	2	1.5
	Total	**128**	**100**
Experience	Less than 1 year	31	24.2
	1-5 years	37	28.9
	6-10 years	41	32
	11-15 years	13	10.2
	Above 15 years	6	4.7
	Total	**128**	**100**
Education	Primary	5	3.9
	Secondary	18	14.1
	Certificate/Diploma	59	46.1
	Degree	17	13.3
	Postgraduate	29	22.6
	Total	**128**	**100**

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4.1 Access to microfinance services and improvement in FPMs

Financial performance measurement is too diverse due to the use of different financial performance measures by different entities across the globe. The current study found that SEs in Harare mainly utilised the following nine financial ratios for monitoring their performance.

Table 3: Financial Performance Measures

Ratio	Model	Explanation
Earnings after tax to Total Assets	$\frac{Earnings\ after\ tax}{Total\ Assets}$	This represents the profit that is available to all the finance providers of the company; including equity holders, preferred stock holders, debt holders and providers of short-term credit (trade suppliers, employees for wages and salaries).
Net working capital to Total Assets	$\frac{Working\ Capital}{Total\ Assets}$	This measures the liquidity of the business as measured by its ability to meet the requirements of all the finance providers.
Current Ratio	$\frac{Current\ Assets}{Current\ Liabilities}$	The current ratio of a company gives a quick way to look at its current assets and current liabilities. They should be nearly equal to one another.
Interest Cover (Earnings before interest and taxes to interest expense)	$\frac{Earnings\ before\ interest}{Interest\ Charge}$	Another ratio that looks at the ability of a company to pay its interest when due is its interest coverage ratio, or times interest earned.
Cash flow to total debt	$\frac{Change\ in\ cash\ and\ cash\ equivale}{Total\ noncurremt\ liabilities}$	This measures the efficiency at which the interest bearing borrowings are able to generate cash flows. The ratio can be broken down into two parts; the cash flow from financing activities (*NCFFFA*) to debt $\left(\frac{NCFFFA}{Debt}\right)$ and the cash flow from other activities (*NCFFOA*) to debt ratios $\left(\frac{NCFFOA}{Debt}\right)$

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Ratio	Model	Explanation
Operating profits to assets	$\frac{Operating\ Profits}{Total\ Assets}$	This measures the profit attributable to all the finance providers, i.e. profit before interest and tax to equity + preferred capital + debt. It measures the capability of the business to meet the requirements of all the financiers.
Cash operating cycle	*Cash operating cycle = Trade receivables collection period + Inventory holding period - Trade Payables payment period*	This measures the days it takes from buying merchandise on credit, through selling the goods and finally receiving cash. A shorter operating cycle is deemed favourable.
Total Assets Turnover	$\frac{Annual\ Sales}{Total\ Assets}$	This ratio looks at the aggregate assets of a company and measures the way the company utilizes them.
Return on equity (ROE)	$\frac{Earnings\ after\ ax}{Equity}$	This is a ratio that represents the profit that is attributable to the equity holders of an organisation.

SE financial performance was thus mainly based on these ratios. We note that SEs in Harare are mainly relying on traditional financial analysis techniques and hardly applying modern day financial analysis models. That is, although we find the financial ratios informative, the issues of abrupt business failure seem to be far from being highlighted. This is because when asked on their application of any contemporary bankruptcy prediction model in their analysis, almost all the CAOs professed ignorance on any such model.

Table 4: Summarised Responses-how access to microfinance improved FPMs

The following measure of financial performance improved due to access to microfinance services	**Response**		
	Not sure	*Generally Disagreed*	*Generally Agreed*
Increase in profit per employee	20%	38%	49%
Gross profit margin ratio (gross profit to net sales)	9%	45%	46%
Cash flow to total debt	13%	44%	44%
Increase in profit before tax	20%	41%	44%
Inventory turnover (inventory to sales)	22%	35%	43%
Earnings after tax (PAT) to total assets	29%	28%	43%
Net profit ratio	17%	41%	41%

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Increase in working capital	19%	41%	41%
Net working capital (NWC)	21%	38%	41%
Operating profit to operating assets	26%	33%	41%
Increase in total assets	19%	14%	40%
Growth in annual revenue	18%	33%	39%
Total assets turnover (sales to total assets)	17%	45%	38%
Cash operating cycle	25%	38%	37%
Times interest earned (income before interest and taxes [EBIT] to interest expense)	25%	38%	37%
Return on equity (ROE)	23%	42%	34%
Net working capital to total assets	22%	45%	33%
Debt ratio (total debt to total assets)	24%	43%	33%
Current ratio (current assets to current liabilities)	26%	43%	31%

Table 4 shows that he financial performance measure (FPM) with the highest improvement after access to the microfinance services is the increase in profits per employee (49% of the respondents generally agreed so). This was followed by the gross profit margin (46% general agreement); Cash flow to total debt and Increase in profit before tax (both 44% general agreement); Net profit ratio, Increase in working capital, Net working capital (NWC) and Operating profit to operating assets (all 41% general agreement); and increase in total assets (40% general agreement).

It can therefore be deduced that access to microfinance generally could not improve all the FPMs. The most improved FPMs, though, are profitability measures (increase in profit per employee, gross profit margin, net profit ratio, increase in profit before tax and operating profit to total assets). This implies that access to microfinance improved profitability for an average SE. The results indicated that the majority of the respondents agreed on the increase of their fund, ability to cope with new technology and to compete, access to market as well as increased number of experienced employees as the result of an MFI loan. And this leads to the increased number of branches, increased number of customers as well as creation of employment opportunities. The research participants also revealed that after accessing microfinance, the standard of living for both SE owners and employees have improved and on the other hand, SEs were able to enjoy economies of scale. Similar sentiments were expressed by Kobla (2009) who examined the impact of microfinance banks on small-scale enterprises in the South Tongu district of Ghana through the use of descriptive statistics. The study revealed that beneficiaries who benefitted considerably from the products of microfinance enjoyed increase in income, increase in equipment, creation of employment, and improvement in the standard of living.

Also, Brune (2009) examined empirically the impact of micro-finance institutions on the development of SMEs and concluded that there is empirical evidence for significant positive impact of micro-finance institutions on the development of SMEs. Additionally, in their research to find the relationship between microcredit and business growth, Waliaula (2013) found that

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there was a very strong positive relationship between the variables business growth and microcredit. The study also revealed that the majority of growth in the SMEs could be explained by the access to microcredit. From their study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied upon to explain growth in the SMEs sector in Kenya. Waliaula (2013) further states that:

> "Access of credit significantly led to increase in sales level. Businesses improved in terms of sales volume as a result of using microcredit. There is increased profitability of SMEs by using microcredit which is attributable to increased working capital. There is a notable increase in the total asset base attributable to increased purchasing power. Microcredit increases employment levels attributable to increased recruitment power. Businesses which have more working capital can recruit more employees to execute assignments. Use of microcredit influences the creation of more SMEs because the credit facilities can be used as initial capital. These conclusions are supported by both descriptive and inferential statistics as indicated."

Therefore, growing bodies of knowledge have proven that microfinance has the propensity to positively influence at household, individuals and business enterprises, particularly SEs.

Microfinance impact on FPMs: Further Analysis

To prove that access to microfinance would improve the FPMs, paired sample t-tests were done on the four frequently used ratios, namely net profit margin, inventory to sales ratio, gross profit margin and debt ratio. The ratios for each participant firm were studied before and after the access to microfinance services to see if the access to the microfinance service would have had made any impact. The tests may be likened to intervention tests – to see if the introduction of microfinance would intervene to improve the financial performance of the SEs.

The hypotheses set regarding this analysis were as follows:

H_0: There is no difference in the mean gross profit margin before and mean gross profit margin after access to microfinance services.

$H_{0\alpha}$: There is a difference in the mean gross profit margin before and mean gross profit margin after access to microfinance services.

H_1: There is no difference in the mean net profit margin before and mean net profit margin after access to microfinance services.

$H_{1\alpha}$: There is a difference in the mean net profit margin before and mean net profit margin after access to microfinance services.

H_2: There is no difference in the mean inventory to sales ratio before and mean inventory to sales ratio after access to microfinance services.

$H_{2\alpha}$: There is a difference in the mean inventory to sales ratio before and mean inventory to sales ratio after access to microfinance services.

H_3: There is no difference in the mean debt ratio before and mean debt ratio after access to microfinance services.

$H_{3\alpha}$: There is a difference in the mean debt ratio before and mean debt ratio after access to microfinance services

Although the sample size was large (128>30), the distribution of the data was tested for normality before the final analysis. A difference (diff) was calculated for every financial

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performance measure by subtracting the ratios before from the ratios after the access to microfinance services. This difference distribution was then tested for normality, this distribution being taken to represent the distribution of the ratios. After the data had passed the normal distribution assumption test, paired sample t-tests were then analysed. The following sections attempt to go through these analyses.

Access to Microfinance and Gross Profit Margin

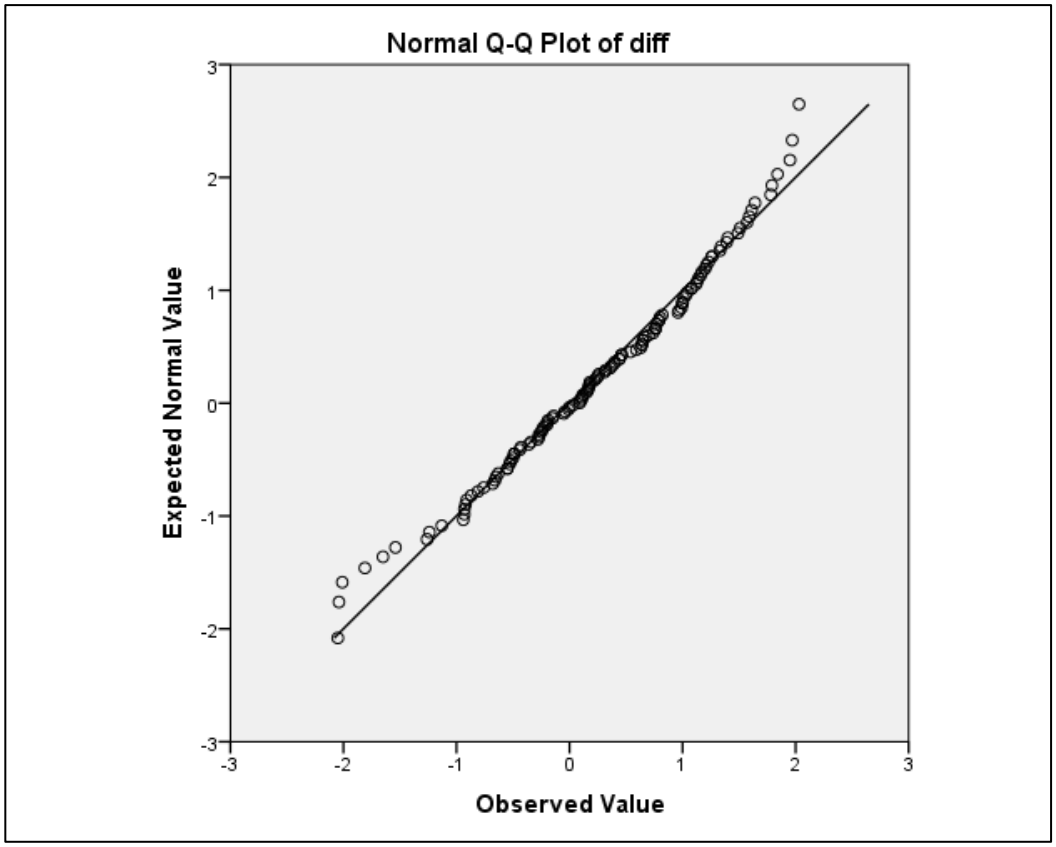

Figure 1: Q-Q Plot of the Difference in Gross Profit before and after Microfinance

Figure 1 shows the results of the normality test for the gross profit margins. The observed data is clustered around the expected = observed line. This proves that the gross profit margins followed normal distribution. This would allow further analyses using paired sample t-statistics. The results of the analyses are depicted in Tables 5 and 6 below:

Table 5: Gross Profit Margin - Paired Sample Tests

	Paired Differences		t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference				
	Lower	Upper			

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Pair 1	Before – After	-.44	-.12	-3.51	127	0.001

Table 6: Gross Profit Margin - Paired Sample Statistics

		Mean	N
Pair 1	Before	.1466	128
	After	.4303	128

Table 5 shows that the t-statistic for H_0 is -3.51 at 95% confidence level with 127 degrees of freedom (df) and p-value (Sig. 2-tailed) is 0.001; i.e. there is a very small probability of the results occurring by chance. At 95% confidence interval, the mean gross profit margin would range from -0.44 to -0.12. The H_0 is then rejected (since p-value=0.001 is less than the significance level α=0.05), thus accepting $H_{0\alpha}$ that there is a difference in the mean gross profit margin before and after the firm has accessed microfinance. Using Table 6, the mean gross profit margin of the 128 firms (N) before access to microfinance was 0.15 and after access to the microfinance it was 0.43. It can be deduced that access to microfinance increased the gross profit margin of an average firm. According to Alhassan, Hoedoafia & Braimah (2016), there was a significant increase in the average monthly gross profit over time after microfinance was given to some women-owned SMEs in Ghana. These results concur with what this study established. However, Alhassan, et al (2016) go on to qualify their findings by stating that the increment that they found was too small to be of practical generalisation.

Access to Microfinance and Net Profit Margin

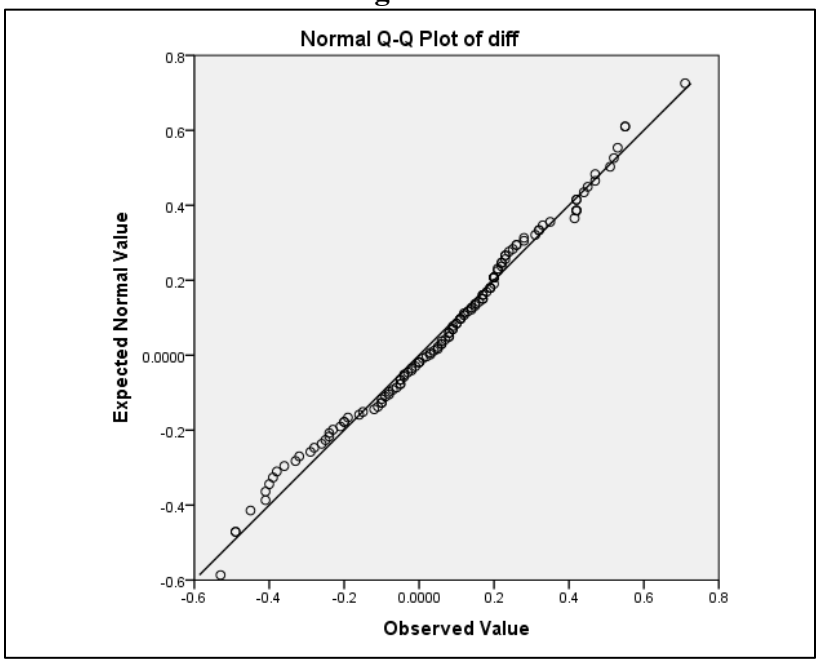

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Figure 2: Q-Q Plots of differences in Net Profit Margin before and after Access to Microfinance

Figure 2 shows the results of a distribution normality test using the Q-Q plot of the differences in net profit margin before and net profit margin after access to microfinance. The observed values are clustered around the observed=expected line. This confirms the normality of the distribution of the net profit margins of the firms studied. Tables 7 and 8 show the results of the paired sample t-test for the net profit margins before and after access to microfinance services.

Table 7: Net Profit Margin - Paired Sample Test

		95% Confidence Interval of the Difference				
		Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Before – After	-.11388	-.02510	-3.098	127	.002

Table 7 shows that at 95% confidence interval, the results would give a mean net profit margin ranging from -0.11 to -0.03. The t-statistic was -3.098 at 127 degrees of freedom (df). At a 2-tailed Sig. value of 0.002, it shows that there is a very low probability of the results occurring by chance. This would warranty the rejection of H_1 and then accepting $H_{1\alpha}$ that there is a difference in the mean net profit margin before and after the firm has accessed microfinance services.

Table 8: Net Profit Margin - Paired Sample Statistics

		Mean	N
Pair 1	Before	-0.0358	128
	After	-0.0337	128

Table 8 goes on to show that the mean net profit margin (N=128) before and after the firms had access to microfinance were -0.04 and -0.03 respectively. This may be used to conclude that access to microfinance would raise the net profit margin of an average firm.

Access to Microfinance and Inventory to Sales Ratio

Figure 3 shows the results of a normality test of the distribution of the inventory to sales ratios as shown by the Q-Q plot of the ratios before and after access to microfinance services. Since the observed values are not dispersed from the observed=expected line, this shows that the normality test was passed. Furthering the analysis, paired sample t-tests results are shown in tables 9 and 10.Table 9 shows that at 95% confidence interval, the t-statistic was -3.809 at 104 (N=105) degrees of freedom (df). The lower and upper bounds were -0.00471 and -0.00149 respectively. The p-value (2-tailed Sig.) was 0. This shows that there is enough statistical evidence to reject the null hypothesis H_2 and hence accept the alternative hypothesis $H_{2\alpha}$ that there is a difference in the mean inventory to sales ratio before and after the firms access microfinance.

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Table 9: Inventory to Sales Ratio: Paired Sample Tests

		Paired Differences				
		95% Confidence Interval of the Difference				
		Lower	Upper	T	Df	Sig. (2-tailed)
Pair 1	Before – After	-0.004710	-0.00148	-3.809	104	.000

Table 10: Inventory to Sales Ratio: Paired Sample Statistics

		Mean	N
Pair 1	Before	0.10257	105
	After	0.13354	105

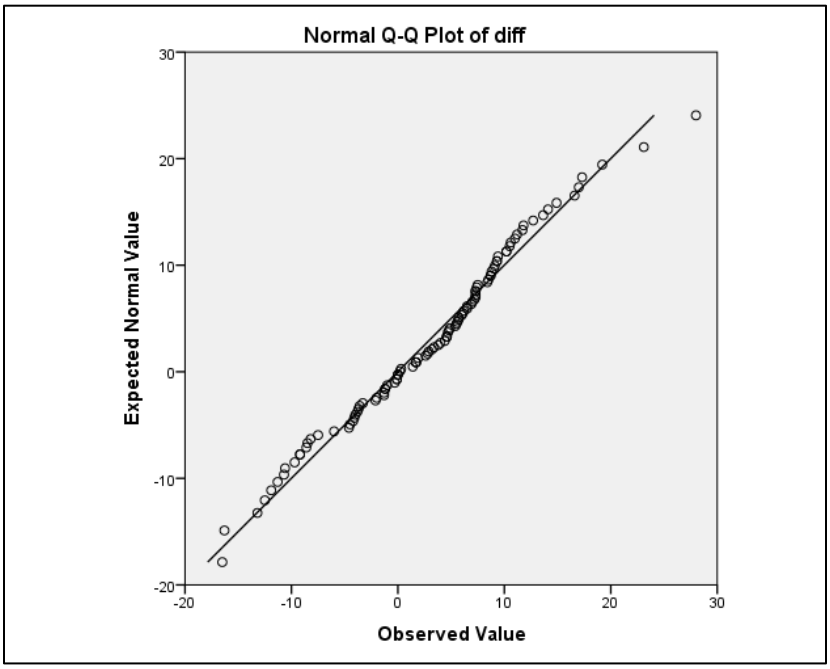

Figure 3: Q-Q Plot of the differences in inventory to sales ratio before and after access to microfinance

Table 9 shows that the mean inventory to sales ratio for the 105 trading SMEs before access to microfinance services was 0.1026 and after the access it was 0.13354. This shows that the inventory to sales ratio increased after accessing microfinance services.

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Access to Microfinance and Debt Ratio

Table 11: Debt Ratio - Paired Sample Tests

		Paired Differences				
		95% Confidence Interval of the Difference				
		Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Before - After	-.1295928	-.0390165	-3.684	127	.000

Table 12: Debt Ratio - Paired Sample Statistics

		Mean	N
Pair 1	Before	.305070	128
	After	.3894	128

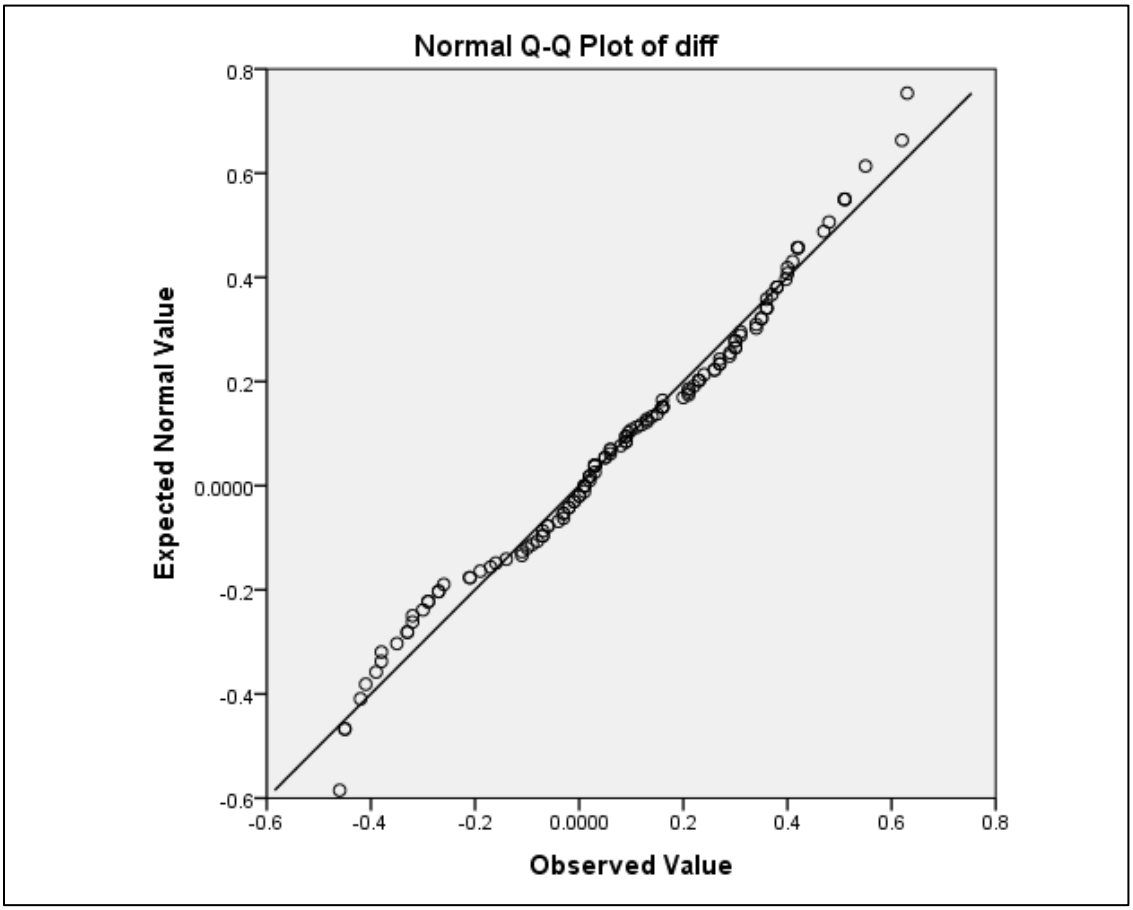

Figure 4: Q-Q Plot of the Differences in the Debt Ratio before and after Access to Microfinance services

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Figure 4 is a Q-Q plot of the differences in the debt ratios of the firms measured before and after access to microfinance services. It tests the normality of distribution of the debt ratios. Since the observed values are not dispersed from the observed=expected line, the test was passed and it can be safely assumed that the ratios were normally distributed. Therefore, further paired sample t-tests could be done. The results are shown in tables 11 and 12.
Table 11 depicts that at 95% confidence interval, the lower and upper bounds were -0.1295928 and -0.0390165 respectively. The t-static at 107 degrees of freedom (df) was -3.684. The 2-tailed probability value (Sig.) was 0. This shows that there is enough statistical evidence to reject the null hypothesis H_3 and hence accept the alternative hypothesis $H_{3\alpha}$ that there is a difference in the mean debt ratio before and after the SEs accessed microfinance. Table 12 illustrates that the mean debt ratios before and after accessing microfinance services were 0.305070 and 0.3894. This shows that access to microfinance services increased the debt ratios.

CONCLUSIONS

The current study concludes that access to microfinance has had a positive impact on an average SE's financial performance. We however note that SEs and MFIs in Harare generally have not yet adopted contemporary bankruptcy prediction models meant to ensure that SEs do not collapse abruptly due to indebtedness and lack of information on the direction of their businesses. Thus, whilst we conclude that microfinance could be a driver of SE sustainability and development, we recommend the use of modern day financial analysis techniques in monitoring SE financial soundness.

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