

Financial Management Practices and Performance of SMEs in Ghana: The Moderating Role of Firm age

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ABSTRACT

This study examines the moderating effect of firm's age on the relationship between financial management practices of SMEs and their performance in Ghana. This paper relied on a sample of 200 SMEs in the Sekondi-Takoradi Metropolis using random sampling without replacement technique (random numbers). The study employed descriptive cross-sectional survey design. Ordinary least square regression analysis model was used to test the relationship between financial management practices and SMEs performance. The results show that receivable management, cash management, inventory management and asset management practices influence SMEs performance. Also, firm's age has a moderating effect on the relationship between financial management practice and SMEs performance. This implies that time (age) enables firms to develop organizational routines to be able to perform their activities with more efficiency and which may better their performance. It is recommended that SMEs should incorporate good financial management practices such as credit management, cash management, inventory management and asset management in their operations.

Keywords: Financial management practices, asset management, Ordinary least square, Firm's age, SMEs, Ghana.

INTRODUCTION

The success or failure of small and medium enterprises (SMEs) is contingent on their financial viability and one of the most common problems facing such firms is their ability to secure sufficient cash flow and working capital to remain profitable (Siaw, 2014). Financial management was noted as one of the top problems facing SMEs as long ago as the Bolton Report in the early 1970s (Bolton, 1971). This has been a recurring theme in the small business literature since that time (Abor & Quartey, 2010; Amoako, 2012). Whilst all firms can encounter problems of financial management the challenges facing SMEs are more significant due to their small size and vulnerability to fluctuations in cash flow (Siaw, 2014).

Research has shown a positive relationship between the efficient management of cash flow and working capital, and the firm's profitability (Yazdanfar & Ohman, 2014). The more efficiently a firm manages its finance the more it can boost its profitability. This emphasizes speeding up the recovery of accounts receivable while carefully managing inventory turnover (Enqvist, Graham & Nikkinen, 2014). The owner-manager needs to ensure that they

monitor their accounts payable and accounts receivable closely. However, the amount of liquidity an SME requires may depend on its age, size, industry, availability of owner-manager's collateral, and whether it has access to bank overdraft facilities (Taurigana & Afrifa, 2013).

Although, the problem of finance and for that matter financial management has been identified as one of the major constraints to growth of small businesses (Mensah, 2004; MFPED 2008; Lashitew, 2011; Mina, Lahr & Hughes, 2012; Agyei, 2014), most of the research works concentrate on capital structure of SMEs (Marfo-Yiadom, 2002; Abor & Biekpe, 2006; Marfo-Yiadom & Agyei, 2011; Agyei-Mensah, 2012; Pieterse, 2012). In Addition, most of the researches do not establish the association between financial management practices and performance.

Therefore, the problem to be addressed in this research is to examine financial management practices and their association with the performance of SMEs in Sekondi-Takoradi. Sekondi-Takoradi is currently named the oil city of Ghana due to the discovery of oil in commercial quantity in the region and has attracted unprecedented migration of people all

over the world. Selection was based on the fact that it has a number of industrial units in the Western Region (GSS, June 2013). Hence, the economic activity as a result of variation in business activities will help make meaningful statistical inferences.

The objectives for this study therefore include,

- To determine the effect of financial management practices on performance; and
- To establish the moderating effect of firm's age on the association between financial management practices and performance in the SMEs sector in Sekondi-Takoradi

Hypotheses of the Study

In order to achieve objectives 1 and 2 the following hypotheses were tested:

HO_{1-a} There is no association between Account receivable management practices and SMEs performance

HO_{1-b} There is no association between Inventory management practices and SMEs performance

HO_{1-c} There is no association between Cash management practices and SMEs performance

HO_{1-d} There is no association between Asset management practices and SMEs performance

HO_{2-e} Firm's age does not have a moderating effect on the association between Account receivable management practices and SMEs performance

HO_{2-f} Firm's age does not have a moderating effect on the association between Cash management practices and SMEs performance

HO_{2-g} Firm's age does not have a moderating effect on the association between Inventory management practices and SMEs performance

HO_{2-h} Firm's age does not have a moderating effect on the relationship between Asset management practices and SMEs performance

The rest of the paper is organised as follows. We review relevant literature in the next section; followed by our methods of data collection and analysis.

We then proceed to present our data results, and follow this up with discussion of the results. Key findings emerging from our discussion of the results occupy the section that follows; and we end the paper with conclusion and recommendations.

REVIEW OF RELATED LITERATURE

Financial management is concerned with raising the needed funds to finance the firm's assets and activities, effective allocation of funds between competing uses, and ensuring that the funds are used effectively and efficiently in order to accomplish the desired goal of the business (McMahon, Holmes, Hutchinson, & Forsaith (2008).

A number of studies have examined the relationship between the financial management variables and performance. For instance, Nyamano, Lumumba, Odonde & Otieno (2012) conducted a study to investigate the effects of working capital management practices on the financial performance of small-scale enterprises (SSEs) in Kisii South District, Kenya. The study, which adopted a cross-sectional survey research design, found that working capital management practices were low amongst SSEs as majority of them had not adopted formal working capital management routines. Similarly, their financial performance was on a low average. The study concluded that working capital management practices influence the financial performance of small scale enterprise. The study relied on primary qualitative data to measure the working capital management practices, but the present study measures financial management using five constructs such as account receivable management, cash management, inventory management, account payable management and asset management based on primary quantitative data.

Likewise, Debasish, Joydeep and Prasenjit (2001) also investigate the association between the liquidity and profitability of Indian Private Sector enterprises as a case of Aluminum producing industry. They identified that there is a very high degree of positive correlation between liquidity and profitability of selected companies. They also observed that liquidity variables jointly influence profitability of the selected companies. According to Pedro and Pedro (2008), provision of trade credit has effect on the level of investment in assets and consequently impact on the profitability and liquidity of the firm. They argue that provision of trade credits has positive effect on sales as it improves the sales of the firm. However, over-investment in accounts receivables can adversely affect the operations of firm.

Additionally, in 2003, Deloof investigated the relationship between working capital management and corporate profitability for a

sample of 1,009 large Belgian non-financial firms for the period 1992-1996. He reports a negative relationship between profitability that was measured by gross operating income and cash conversion cycle as well number of day's accounts receivable and inventories. Furthermore, Delo of (2003) argues that shortening the inventory conversion period could lead to an increase in stock out costs of inventory which results in losing sales opportunities and consequently leads to poor performance. This study focuses on SMEs.

In another study, Dimitrios (2008) investigates the effect of inventory management on firm performance. He reports that too much inventory could demand more physical space, increase the possibility of inventories damage, deterioration and losses and consequently, could lead to financial problems. Additionally, Dimitrios (2008) argues that holding large amount of inventory frequently is an indication of inefficient and careless management practices and procedures. However, keeping too little inventories might also lead to the interruption of operation in manufacturing, increase the possibility sale loss and consequently lower the profitability of the firms. However, Panigrahi (2013) posits that there can be an unexpected relationship, where the correlation between inventory conversion period and sales can be positive. Panigrahi (2013) indicates that decrease in inventory conversion period can result into decrease in sales and vice versa. This unexpected relationship shows the ineffectiveness of managers to increase sales level because of decrease in inventory conversion period.

Similarly, Lazaridis and Dimitrios (2005) investigate the relation between working capital management and corporate profitability of listed company in the Athens Stock Exchange. Using a sample of 131 listed companies for period of 2001-2004, the result from regression analysis indicated that there was a statistical significant positive relationship between profitability, measured through gross operating profit, and the cash conversion cycle. From those results, they argue that managers could create value for shareholders or profit can be created by handling correctly the cash conversion cycle and keeping each of the different components of working capital (accounts receivables, accounts payables, inventory) to an optimum level.

In another study to examine cash management and growth of small scale businesses in

Ntungamo market in Kampala, Arihoona (2011) used a sample size of 38 businesses. The regression analysis showed that there is a positive significant relationship between cash management and growth of small scale businesses. Arihoona observed that poor cash management practices constrains business operations and some customers who are not satisfied with the services run away signifying poor performance and hence retards the growth of the business. From the foregoing literature, it is observed that a single study examining the effect of FM practices on SMEs performance in Sekondi-Takoradi metropolis is missing. Hence, the need to fill such research gap.

Firm's Age and Performance

The amount of time that a business has been in operation affects its ability to grow (Hui *et al.* 2013; Mann & Sager, 2007). Age of a business is associated with the firm's risk of failure, which implies that younger firms are at a higher risk of failure than older ones. Age could actually help firms become more efficient (Martins, Ligthelm & Wijk, 2003). Hall (1995) argues that older firms would have more time to learn about their costs, and so will have more accurate estimates of their costs. Hui *et al.* (2013) examines the impact of firm age and size on the relationship among organizational innovation, learning, and performance among Asian Food Manufacturing Companies. Using a sample of 168 food manufacturing companies, the regression analysis revealed that firm age and size are two moderators which control the relationship among organizational innovation, learning, and performance. The findings apparently demonstrate that age enables firms to develop organizational routines to be able to perform their activities with more efficiency and better performance.

The literature review revealed that attempts have been made to address the issue of financial management among SMEs. However, most of the research works concentrate on capital structure (Marfo-Yiadom, 2002; Abor & Biekpe, 2006; Marfo-Yiadom & Agyei, 2011; Agyei-Mensah, 2012; Pieteron, 2012; Nketsiah, 2015) and most of the researches also do not establish the relationship between financial management practices and performance. Furthermore, none has investigated all the five financial management practices (account receivable management, cash management, inventory management, account payable

management and asset management) in one study.

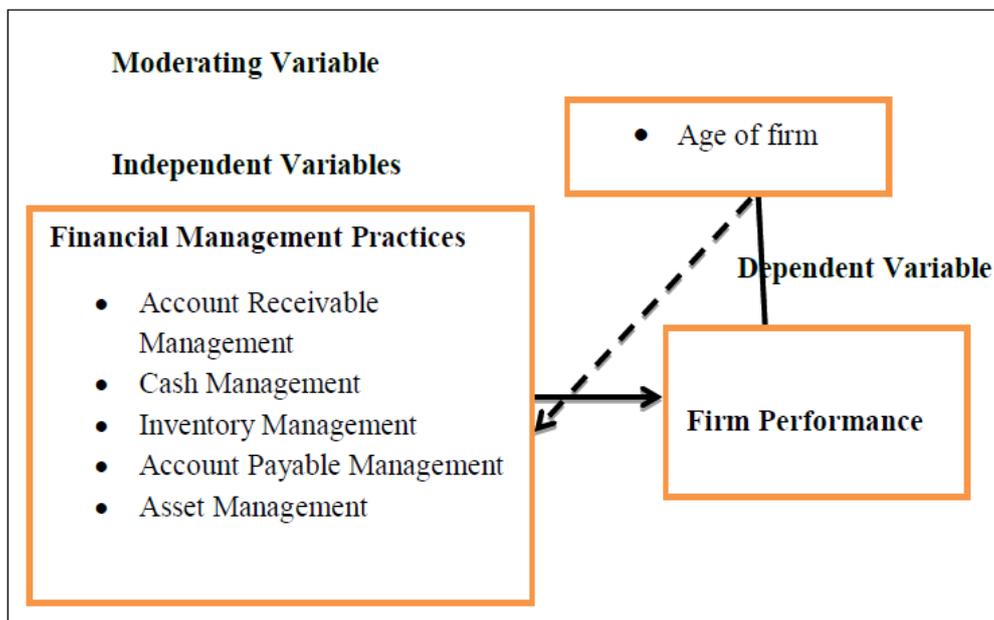
Measuring Performance

Performance measures could include traditional accounting measures such as sales growth, market share, and profitability. In addition, factors such as overall satisfaction and nonfinancial goals of the owners are also very important in evaluating performance, especially among SMEs. This is consistent with the view of Wanjoi (2008) that both financial and non-financial measures should be used to assess organisational performance. Panigrahi (2013) posits that one of the indicators used to determine the performance of an enterprise is its turnover/ sales volume. In this study, sales volume was used because the SMEs sampled do not keep records of assets and liabilities in order to use other performance measures such as Return on Asset and or Return on Equity. The survey revealed that weekly turnover ranged from about two hundred Ghana cedis (GHS 200)

to Eight Thousand Ghana cedis (GHS 8,000). Assuming a 52- week year cycle, it means sales volume / turnover ranged from ten thousand and four hundred Ghana cedis (GHS 10, 400) to four hundred and sixteen thousand Ghana cedis (GHS 416,000). This confirms the small and medium nature of the businesses surveyed according to Mensah (2004). However, it is worth noting that, the estimation of sales is usually a problem when no proper records are kept. Marfo-Yiadom and Agyei, (2011) and Nketsiah (2018) reported in a study of traders in Ghana that many traders gave figures from memory. The record keeping is generally poor and thus one can only rely on the recent memories of the traders to estimate the level of sales.

Conceptual Framework of The Study

Figure 1 is the conceptual framework illustrating the relationship between FM practices and firm’s age as moderating variable between FM practices and performance.



Researcher’s Construct, (2017)

METHODOLOGY

Empirical Model

In order to analyse the association between financial management practices and performance of SMEs; and to test the moderating effect of firm’s age on the association between financial management practices and SMEs performance, multiple linear regression model is adopted. It was preferred because it reveals statistical relationships between variables and can be used

to predict or estimate the behaviour of variables (McCartney *et. al.* 2006).

$$\text{Profitability} = \alpha + \beta_1 \text{INVENTORYMGT} + \epsilon$$

This regression analysis model is adopted from the works of Deloof (2003), Padachi (2006) and Shin and Soenen (1998). However, Wambugu (2013) included other working capital variables such as account payable, cash and account receivables as well as growth in sales and growth in total assets as intervening variables to the model. That is,

$$\text{Profitability}_i \text{ (Return on asset)} = \alpha + \beta_1.\text{CASHCONCYC}_i + \beta_2.\text{INVHOLDPER}_i + \beta_3.\text{ACCRCAPER}_i + \beta_4.\text{ACCPAYPER}_i + \beta_5.\text{APPROACHWC}_i + \beta_6.\text{GWTSALES}_i + \beta_7.\text{GWTASSET}_i + \epsilon_i$$

Following the works of Wambugu (2013), Padachi (2006), Deloof (2003) and Shin

$$\text{Profitability}_i = \alpha + \beta_1.\text{ASSETMGT}_i + \beta_2.\text{ACRECMGT}_i + \beta_3.\text{ACCPAYMGT}_i + \beta_4.\text{CASHMGT}_i + \beta_5.\text{INVMGT}_i + \beta_6.\text{FIRMAGE}_i + (\beta_7.\text{FINRECKEEP}_i \cdot \text{FIRMAGE}_i) + (\beta_8.\text{ASSETMGT}_i \cdot \text{FIRMAGE}_i) + (\beta_9.\text{ACRECMGT}_i \cdot \text{FIRMAGE}_i) + (\beta_{10}.\text{ACCPAYMGT}_i \cdot \text{FIRMAGE}_i) + (\beta_{11}.\text{CASHMGT}_i \cdot \text{FIRMAGE}_i) + (\beta_{12}.\text{INVMGT}_i \cdot \text{FIRMAGE}_i) + \epsilon_i$$

& Soenen (1998), this study builds up on their models to include other financial management practice such as asset management (ASSET MGT). In addition, a moderating variable such as firm’s age is also included in the model. The model thus becomes:

Table 1. Definition of Variables and Expected Signs

Variable	Definition	Expected Sign
Profitability (Sales volume)	The amount realised from the sale of goods or rendering of services by owner managers of SMEs in the normal operations of business in a specific period.	
FIRMAGE	Number of years the firm has been in existence.	Positive
FINRECKEEP	The practice of maintaining and monitoring the history of financial activities by owner managers of SMEs.	Positive
ACRECMGT	Management of credit owner/ manager of SMEs grant its customers when goods are sold or services are rendered	Positive
CASHMGT	Managing cash on hand in order to ensure a firm’s financial stability and solvency	Positive
INVMGT	Activities employed by owner/ manager of SMEs in maintaining the stock of any item or resource used in an organisation in order to provide uninterrupted production, sales, and/or customer-service	Indeterminate
ACCPAYMGT	Involves how owner managers of SMEs manage monies owed to suppliers for products and services purchased on credit.	Positive
ASSETMGT	Involves how owner managers of SMEs invest their short-term funds in order to help the businesses stay afloat financially.	Positive

Target Population, Sampling technique and Sample size

Only registered SMEs in the database of NBSSI in the Sekondi-Takoradi metropolis were used in the study. The list of registered SMEs data obtained from the NBSS I numbered Seven Hundred and Sixty-two (762).

The names, phone numbers and exact locational addresses of registered enterprises in the Sekondi-Takoradi metropolis were given to the researcher by the NBSSI. A random sampling without replacement (table of random numbers- See Appendix A) was used to select 200 enterprises. Based on a table provided by Bartlett, Kotrlik and Higgins (2001) on determining minimum returned sample size for a given population size for continuous and categorical data, the minimum sample size of a population of about 800 registered SMEs requires a sample of about 166 registered SMEs(See Appendix B-The table includes sample sizes for both continuous and categorical data assuming alpha levels of .10, .05, or .01. The margins of error used in the table were .03 for continuous data and .05 for

categorical data). However, since the list of registered SMEs data obtained from the NBSSI, as at July, 2017, totalled Seven hundred and sixty-two (762), the researcher randomly selected 200 registered SMEs to cater for non-response rate. The 200 registered SMEs selected is sufficient sample size accounting for about 26.2% of the total population of SMEs that have registered with NBSSI in the metropolis. This is consistent with Cresswell, (2003) and Sekaran, (2003).

Data Collection Procedure

The main data for this study was primary data which was collected through a self-administered questionnaire. The data collection process began with a meeting with the management of the Sekondi-Takoradi office of NBSSI to brief the regional manager about the issues relating to the data collection and to seek approval to approach the SMEs registered with his outfit. After the approval, a meeting was held between the researcher and research assistants who are staff of NBSSI who were engaged to undertake the data collection. Thereafter, a training session on the objectives of the study, the content of the

instruments, ethical matters, sampling and the data collection procedures to enable the research assistants in the data collection was held. Once the exact location of the owner managers shop/business premises is located, permission was sought. Thereafter, the objectives of the study were explained to the sampled respondents to assure them of their confidentiality before the instrument was administered.

Data Analysis

Inferential statistics such as Factor analysis employing the principal component analysis (PCA) technique was used to identify the most

significant Financial Management (FM) practices. Multiple linear regression model was developed and tested to explain the association between SMEs performance and the various financial management practices variables as indicated in the conceptual framework. McCartney *et. al.*, (2006) posits that multiple regression analysis is useful in determining whether or not a particular effect is present, in measuring the magnitude of a particular effect and in forecasting what would be of a particular effect.

Table 2 summarizes the data analysis techniques that were used in the study.

Table 2. Data Analysis Techniques

Research Objectives	Data Requirements and Statistical Approach
<p>Objective 1 Determine the effect of FM practices on performance.</p>	<p>Hypothesis 1: There is no significant association between FM practices and performance (sales volume) of SMEs in Sekondi-Takoradi Metropolis.</p> <ul style="list-style-type: none"> • Inferential Statistics • multiple linear regression model <p>$H_{01}: \beta_i = 0$ $H_{01}: \beta_i \neq 0$ Reject H_{01} if $p < 0.05$, otherwise fail to reject the H_{01}</p>
<p>Objective 2 Establish the moderating effect of firm age on the relationship between financial management practices and performance of SMEs in Sekondi-Takoradi.</p>	<p>Hypothesis 2: Firm age does not have a moderating effect on the association between FM practices and performance in the SMEs sector in Ghana.</p> <ul style="list-style-type: none"> • Inferential Statistics • Hierarchical multiple linear regression model <p>$H_{02}: \beta_i = 0$ $H_{02}: \beta_i \neq 0$ Reject H_{02} if $p < 0.05$, otherwise fail to reject the H_{02}</p>

Ethical Considerations

The purpose of the study was explained to each participant and they were made aware that they are free to refuse to respond to any item that they are not comfortable with. Consent was obtained from each participant in the study. In this respect, owner managers of SMEs were asked to append their signatures or thumbprints on a consent form or give verbal consent to participate. Participants were assured of the confidentiality of information that they will provide.

RESULTS AND DISCUSSION

Firm Characteristics

One firm characteristic that has been found to influence performance of SMEs is the age of the firm. Experience can be measured through the number of years a person had managed a

business. Table 3 shows that the age of SMEs in the study ranged from one year to 15 years and above. It can be observed that most of the firms in the study 80 (54.40%) fell within the 11-15-year group. The second largest group of firms in terms of age was those which were established 6 to 10 years ago (37.40%). This implies that entrepreneurs in the study had experience in terms of the number of years they had managed a firm as majority (91.80%) of them had managed their businesses for 6 years or more.

The size of the firm was measured according to the total number of employees of the firm. Table3 shows that majority of the firms in the study according to Ghana Statistical Service classification of SMEs were small scale enterprises which employ up to 9 people (90.50%). This is followed by medium and large-sized enterprise which constituted 9.50 percent of the respondents.

Table 3 Other Socio-demographic Characteristics of Respondents

Socio-demographic Characteristic	Frequency	Percent
Age of firm	1 – 5 years	3
		2.0

	6-10 years	55	37.4
	11-15 years	80	54.4
	Above 15 years	9	6.1
	Total	147	100
Number of Employees	0 – 5 employees	97	66.0
	6 – 9 employees	36	24.5
	10 – 14 employees	14	9.50
	Total	147	100

Source: Fieldwork (2017)

Effects of Financial Management Practices On Performance.

In order to test the effect of financial management practices on SMEs performance and the moderating effect of firm’s age on SMEs performance, multiple linear regression analysis was utilised. Table 4 presents the results of two multiple linear regression models. In the first model, the FM practices together with the moderating variable (firm’s age) were entered. In the second model, the interaction effect of the moderating variable (firm’s age) was assessed. The output comprises of *beta*, *t* value, the R Square, Adjusted R Square change, *F* statistics and the significance value (*P*-value).

Table 4 (Model 1 column-results for objective 1) shows that cash management ($p=0.001$, $\beta=0.280$) has a statistically significant association with SMEs performance (sales volume). The positive significant relationship between cash management practices and the performance of SMEs of Sekondi-Takoradi metropolis implies that good cash management practice that ensures that customers are given rebates in the form of cash discounts will induce them to purchase more, hence, increasing the firm’s sales volume. This positive relationship is consistent with the findings of Lazaridis and

Table 4. Regression Results

Variables	Standardized Coefficients			
	Model 1		Interaction Model	
<i>Dependent Variable: Sales volume</i>	Beta	Sig.	Beta	Sig.
1 Constant		.000		.000
Account Receivable Management Practices	.175	.105	.316	.001
Cash Management Practices	.280	.001	.118	.114
Inventory Management. Practices	.042	.742	.220	.057
Account Payable Management Practices	.171	.148	.113	.276
Asset Management Practices	.251	.020	.024	.810
Firm’s Age	.501	.000	.550	.000
Account Receivable Management Practices x Firm’s age			.268	.000
Cash Management Practices x Firm’s age			.042	.620
Inventory Management Practices x Firm’s age			.387	.000
Account Payable Management Practices x Firm’s age			-.095	.324
Asset Management Practices x Firm’s age			.333	.000
Adjusted R ² =.220	R Square Change = 0.252			
F Statistics (6,132) = 7.492	F Statistics (7,131) = 18.857			
P < 0.005	P < 0.005			

Tryfonidis (2006) who report statistically significant positive relationship between profitability, measured through gross operating profit and the cash conversion cycle. Arihoona (2011) who examines cash management and growth of small scale businesses in Ntungamo market in Kampala also reports a positive significant relationship between cash management and growth of small scale businesses.

Furthermore, Table 4 (Model 1 column-results for objective 1) shows that asset management ($p=0.020$, $\beta=0.251$) has a statistically significant association with SMEs performance (sales volume). The positive significant relationship means that the appraisal of new and existing capital investment projects enables firms embarks on investments that have potential to increase sales volume. Again, effective asset management decisions can positively affect SMEs performance. This is due to the fact that, effective asset allocation will ensure that asset are allocated to areas possible to yield positive returns in terms of sales. This confirms the findings of Peel and Wilson (1996) and Olawale *et al.* (2010) who report that the use of investment appraisal techniques has a positive impact on profitability.

Number of observations (N) = 147	
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Source: Fieldwork (2017)

Age Effect

Hierarchical multiple linear regression analysis was used to determine interaction. Frazier and Barron. (2004) and MacKinnon (2000) advocate the use of regression analysis in testing interaction effects. Frazier *et al.* (2004) define a moderator as a mechanism through which a predictor influences an outcome variable. In the context of this study, firm's age is moderating by virtue of their intervening effect on the relationship between financial management practices and performance of SMEs. Consequently, the study used hierarchical multiple linear regression analysis using the SPSS test for moderation.

The results in Table 4 (Interaction model-results for objective 2) indicate that firm's age significantly interact the association between financial management practices and performance (sales volume) of SMEs in Sekondi-Takoradi metropolis. The interaction model as a whole is significant {F (7,131) =18.857, $p < 0.005$ }.

Furthermore, it was hypothesized that firm's age does not moderate the effect of the FM practices and SMEs performance. From Table 4, results of the interaction model established significant contribution of firm's age ($\beta = 0.550$; $p = 0.000$) to the model as the products of the FM practices and SMEs performance. This means the effects of the FM practices on SMEs performance depend on the age of the firm. Thus, FM practices as well as firm's age play important role in SMEs performance. Therefore, firm's age can indeed interfere with the interaction between FM practice and SMEs performance. This is because over time, firms discover what they are good at and learn how to do things better by specializing, develop organizational routines and find ways to standardize, coordinate, and speed up their production processes, as well as to reduce costs and improve quality (Hui *et al.* 2013). Again, over time, older firms would have more time to learn about their costs, and so will have more accurate estimates of their costs. As a result, unpleasant surprises in their costs will be minimised. Hence, evidence of firm's age as an interaction factor on the relationship between FM practices and SMEs performance has been established.

The coefficients in Table 4 (interaction model) shows that inventory management practices ($\beta =$

0.387, $p = 0.000$), asset management practices ($\beta = 0.333$, $p = 0.000$) and account receivable management practices ($\beta = 0.268$, $p = 0.000$) make statistically significant contribution in explaining the relationship between FM practices and performance when firm's age is taken as moderating variable. This positive association between receivables management and SMEs performance when firm's age is taken as moderating variable implies that when businesses institute stringent credit policy which only offers credit to credit worthy customers, overtime it may reduce the level of creditors, thus ensuring that the business has available cash to run its activities which may lead to increased sales. This positive association between account receivable management practice and sales volume is consistent with the findings of Pedro and Pedro (2008).

Additionally, the positive relationship between inventory management and performance of SMEs of Sekondi-Takoradi metropolis means that with time firms that employ efficient inventory management practices can reduce inventory to an optimal level which has positive effect on production and sales. Similarly, increasing the inventory conversion period could lead to a decrease in stock out costs of inventory which results in enhancing sales opportunities and consequently leads to good performance (Deloof, 2003). Additionally, frequently keeping too little inventories as a result of inefficient and careless management practices and procedures might also lead to the interruption of operation in manufacturing, increasing the possibility of sale loss and consequently lower the profitability of the firms (Panigrahi, 2013) Studies such as Panigrahi (2013), Dimitrios (2008), Singh (2008) and Deloof, 2003 confirms these results.

CONCLUSIONS

The conclusions drawn from the study are discussed below.

To begin with, financial management practices such as receivables management; inventory management, cash management and asset management are very important and indeed influence performance of SMEs.

Also, the positive association between financial management practices and SMEs performance when firm's age is controlled for indicates that,

the effects of the financial management practices on SMEs performance depend on the longevity of the firm. This implies that age enables firms to develop organizational routines to be able to perform their activities with more efficiency and that may better their performance.

RECOMMENDATIONS

This study put forward some essential recommendations:

- Although receivable management practices, cash management practices, inventory management practices and asset management practices are associated with the performance of SMEs, entrepreneurs must not interpret it as the only practices for achieving performance in terms of sales volume. Entrepreneurs can be trained to make more realistic evaluations of their business capabilities and incorporate good financial management practices in their operations.
- Again, owner managers of SMEs must be educated on the need to use formal procedures in receivable management (trade credit) so as to enhance the receivable collection process by ensuring consistency and uniformity of collection techniques.
- Owners of SMEs should be trained on management of inventory by carrying out stock checking and stock records. They should also improve on advertisement, marketing strategies and attitude towards customers in order to make higher sales and increase profits.

REFERENCES

- [1] Abor, J., & Biekpe, N. (2006). How are SMEs financed? Evidence from the Ghanaian nontraditional export sector. *Environment and Planning C: Government and Policy*, 24, 71-81
- [2] Abor, J., & Quartey, P. (2010). Issues in SMEs in Ghana and South Africa International Research. *Journal of Finance and Economics* Issue, 39, 218-228.
- [3] Agyei, K. N. (2014). Small Scale Businesses Practice of Basic Financial Management with Regards to Liquidity. *International Journal of Research in Social Sciences*, 4(5), 77-85.
- [4] Agyei-Mensah, B. K. (2012). Working Capital Management Practices of small firms in the Ashanti Region of Ghana. *International Journal of Academic Research in Business and Social Sciences*, 2, 1
- [5] Amoako, I. O. (2012). *Trust in exporting relationships: the case of SMEs in Ghana*. DProf thesis, Middlesex University.
- [6] Arihoona, F. (2011). *Cash Management in Small Scale Business in Ntungamo Market*. Research Report, Makerere University, Kampala.
- [7] Bartlett J. E., Kotrlik J. W., & Higgins, C. C. (2001). Organizational research: Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, 19, 43-50
- [8] Bolton Report (The) (1971). *Small Firms, Report of the Committee of Inquiry on Small Firms*, HMSO, Cmnd. 4811, London
- [9] Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd Ed.). Thousand Oaks, CA: Sage Publications, Inc.
- [10] Debasish, S., Joydeep, B., & Prasenjit, G. (2001). Liquidity management in Indian private sector enterprises: a case study of Indian aluminum producing industry. *Indian Journal of Accounting*, Vol. XXXII, June.
- [11] Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance & Accounting*, 30, 573-587
- [12] Dimitrios, P. K. (2008). The effect of inventory management on firm performance. *International Journal of Productivity and Performance Management*, 355-369
- [13] Enqvist, J., Graham, M. & Nikkinen, J. (2014). The impact of working capital management on firm profitability in different business cycles: Evidence from Finland. *Research in International Business and Finance*, 32, 36-49
- [14] Frazier, P., Tix, A., & Barron, K. (2004). Testing moderator and moderator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115-134.
- [15] Ghana Statistical Service (2013). *2010 Population and Housing Census. Regional Analytical Report for Western Region*, Accra: Ghana Statistical Service.
- [16] Hall, G. (1995). *Surviving and prospering in the small firm sector*. Routledge. London
- [17] Hui, H., Wan, C., Radzi, J.W.M., Jenatabadi, H., Kasim, F.A., & Radu, S. (2013). The impact of firm age and size on the relationship among organizational innovation, learning, and performance: A moderation analysis in Asian food manufacturing companies. *Interdisciplinary Journal of Contemporary Research in Business*, 5, 166-174.
- [18] Lashitew, A. A. (2011). Does Access to Finance Lower Firms' Cost of Capital? Empirical Evidence from International

- Manufacturing Data. *Research Memorandum*, University of Groningen. Retrieved on September 11, 2014, from <http://www.ggdc.net/publications/memorandum/gd120.pdf>.
- [19] Lazaridis, I., & Dimitrios, T. (2005). *The relationship between working capital management and profitability of listed companies in the Athens Stock Exchange*. Retrieved from <http://ssrn.com/> on January 22, 2016.
- [20] Mann, R.J., & Sager, T.W. (2007). Patents, venture capital, and software start-ups. *Research Policy*, 193-208.
- [21] Marfo-Yiadom, E. (2002). A survey of cash management practices of selected firms in Accra. Tema Metropolitan Area. *The Oguaa Journal of Social Science*, 165-182.
- [22] Marfo-Yiadom, E., & Agyei, K. (2011). Working capital management practices of small scale enterprises in the central region of Ghana. *Asian Journal of Business and Management Sciences*, 29-47
- [23] Martins, J.H., Ligthelm, A.A., & Wijk, B.T. (2003). Level of Entrepreneurship in the Informal Retail Sector of South Africa. Retrieved on September 15, 2016 from www.unisa.ac.za/dept/bmr
- [24] McCartney, K., & Burchinal, M.R. (2006). Best practices in quantitative methods for developmentalists. Monographs of the Society for Research in Child Development. *Financial practice and education*, 37-45.
- [25] McMahon, R. G. P., Holmes, S., Hutchinson, P. J. & Forsaith, D. M. (2008). *Small Enterprise Financial Management: Theory and Practice*, Harcourt Brace, Sydney.
- [26] Mensah, S. (2004). A review of SME Financing schemes in Ghana. Presented at the UNIDO Regional Workshop of Financing Small and Medium Scale Enterprises. Ghana.
- [27] MFPED (2008). *National Budget Framework paper FY 2008/09-FY 2012/2013*. Ministry of Finance, Planning and Economic Development, Kampala.
- [28] Mina, A., Lahr, H., & Hughes, A. (2012). *The Demand and Supply of External Finance for Innovative Firms*. Paper prepared for the 2012 International Schumpeter Society Conference, University of Queensland, Brisbane, 2-5 July
- [29] Nketsiah, I. (2015) Financial Management Practices and Performance of SMES in Sekondi-Takoradi Metropolis. Available at <https://erl.ucc.edu.gh/jspui/handle/123456789/3137>
- [30] Nketsiah, I (2018). Financial Records Keeping Practices of Small Business Operators in the Sekondi-Takoradi Metropolitan Area of Ghana. *Asian Journal of Economics, Business and Accounting* 6(3): 1-9. Retrieved from <http://www.sciencedomain.org/abstract/24174DOI:10.9734/AJEBA/2018/39291>.
- [31] Nyamao, N. R., Lumumba, M., Odondo, A.J. & Otieno, S. (2012). Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya. *African Journal of Business Management*, 18, 5807-5817
- [32] Olawale, F., Oumuyiwa, O., & George, H. (2010). An investigation into the impact of investment appraisal techniques on the profitability of small manufacturing firms in the Nelson Mandela Bay Metropolitan Area, South Africa. *African Journal of Business Management*, 4, 1274-1280.
- [33] Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: An analysis of Mauritian small manufacturing firms. *International Review of Business Research Papers*, 2, 45- 58
- [34] Panigrahi, A.K. (2013). Relationship between inventory management and Profitability: an empirical analysis of Indian Cement Companies. *Asia Pacific Journal of Marketing & Management Review*, 2319-2836
- [35] Pedro, J., & Pedro, M. (2008). A dynamic approach to accounts receivable: A study of Spanish SMEs. *Journal of European financial management*, 1-19.
- [36] Peel, M. J. & N. Wilson, (1996). Working Capital and Financial Management Practices in the Small Firm Sector. *International Small Business Journal* 14, 52-68.
- [37] Pieterse, A. (2012). *Working Capital Management Practices of Small and Medium Enterprises in the Western Region. A Survey of Selected SMES in the Sekondi-Takoradi Metropolis*. An unpublished undergraduate dissertation, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana
- [38] Sekaran, U. (2003). *Research methods for business* (4th ed.). Hoboken, New Jew: John Wiley & Sons.
- [39] Shin, H.H. & Soenen, L. (1998). Efficiency of working capital and corporate profitability. *Journal of Business Finance and Accounting*, 30 (3 & 4), 573 – 587.
- [40] Siaw, F. (2014). *Effect of demand side factors on access to external finance by micro, small and medium manufacturing enterprises in Kumasi metropolis, Ghana*. Unpublished Phd Thesis, School of Business, Kenyatta University, Kenya.
- [41] Tauringana, V. & Afrifa, A.G. (2013) "The relative importance of working capital management and its components to SMEs' profitability", *Journal of Small Business and*

Enterprise Development, Vol. 20 Iss: 3, pp.453 – 469

[42] Wambugu, P. M. (2013). *Effect of working capital management practices on profitability of small and medium enterprises in Nairobi country, Kenya*. Unpublished MBA Thesis, School of Business, Kenyatta University, Kenya.

[43] Wanjoi, M. (2008). Factors determining the success of SMEs in Nakuru, *The IUP Journal of Applied Finance*, 10(8), 11-28

[44] Yazdanfar, D, & Öhman, P. (2014) "The impact of cash conversion cycle on firm profitability: An empirical study based on Swedish data", *International Journal of Managerial Finance*, Vol. 10 Iss: 4, pp.442 – 452

APPENDIX A: Table of Random Numbers showing Sample of SMEs in Sekondi-Takoradi

200 Random Numbers																								
331	600	353	687	448	606	692	635	044	293	510	622	643	020	367	290	722	749	464	557	077	196	041	505	435
443	418	492	272	372	477	720	350	339	575	427	467	345	711	375	063	033	529	361	663	521	386	589	741	489
484	296	298	697	060	244	656	182	640	231	494	671	497	459	370	638	594	166	689	085	171	114	285	534	549
101	122	261	608	329	760	228	705	036	318	437	282	746	676	684	660	733	513	410	516	199	591	378	614	668
708	586	191	616	305	072	008	603	142	762	627	068	220	730	725	537	337	736	301	486	695	424	679	472	532
150	738	700	611	117	074	407	728	326	412	355	526	573	028	342	363	502	646	570	239	469	744	277	559	475
321	023	155	163	139	212	754	651	757	440	630	619	093	147	187	065	432	655	546	313	047	082	383	039	106
310	461	006	204	017	578	215	543	524	174	665	158	713	012	391	015	179	090	358	315	648	207	567	451	394

Specs: This table of 200 random numbers was produced according to the following specifications: Numbers were randomly selected from within the range of 1 to 762. Duplicate numbers were not allowed. This table was generated on 6/24/2017

APPENDIX B: Sample size determination table

Table 1: Table for Determining Minimum Returned Sample Size for a Given Population Size for Continuous and Categorical Data

Population size	Sample size					
	Continuous data (margin of error= .03)			Categorical data (margin of error= .05)		
	alpha= .10 t= 1.65	alpha= .05 t= 1.96	alpha= .01 t= 2.58	p= .50 t= 1.65	p= .50 t= 1.96	p= .50 t= 2.58
100	46	55	68	74	80	87
200	59	75	102	116	132	154
300	65	85	123	143	169	207
400	69	92	137	162	196	250
500	72	96	147	176	218	286
600	73	100	155	187	235	316
700	75	102	161	196	249	341
800	76	104	166	203	260	363
900	76	105	170	209	270	382
1,000	77	106	173	213	278	399
1,500	79	110	183	230	306	461
2,000	83	112	189	239	323	499
4,000	83	119	198	254	351	570
6,000	83	119	209	259	362	598
8,000	83	119	209	262	367	613
10,000	83	119	209	264	370	623

NOTE: The margins of error used in the table were .03 for continuous data and .05 for categorical data. Researchers may use this table if the margin of error shown is appropriate for their study; however, the appropriate sample size must be calculated if these error rates are not appropriate. Table developed by Bartlett, Kotrlík, & Higgins.

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