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Trade Payable and Financial Performance of Small and Medium Size Enterprises: Evidence from Cameroon

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Abstract:

The paper attempts to bridge the gap in the financial literature by offering empirical evidence about trade credit and its effects on financial performance of Cameroon Small and Medium Size enterprises. The study employs panel data methodology (GLS and two step system GMM) on a sample of 58 Cameroon SMEs over the period of six years from 2012 to 2017. Findings indicate that trade payable has a positive relationship with all the measurements of financial performance (Return of assets, Return of equity and Operating profit margin). This outcome implies that, despite the fact that trade payable has both benefits and cost, the benefits surpass the costs in the case of SMEs in Cameroon. The results appear to be consistent with pecking order theory by SMEs in pattern of using trade payable instead of other external source of finance. We strongly recommend that buyer firms should establish a long-term credit relationship with their suppliers to boost their performance.

Keywords: Trade credit; financial performance, financial constraint, small and medium size enterprise

1. Introduction

Research has acknowledged that small and medium size enterprises (SMEs) play vital role in the private sectors of many countries around the world. Also, it has been acknowledged that these enterprises are usually confronted with lack of access to external finance (Beck and Demeriguc-Kunt, 2006). Due to frictions such as information asymmetries, agency problems, and differential tax rates that may exist among them and investors/lenders, they are particularly excluded from having access to finance from formal financial institution such as commercial banks. Consequently, in order to avoid the under-investment problem and to have financial flexibility, they used trade credit (TC) as an alternative source of financing.

Trade credit is an arrangement between a buyer and a seller by which the seller allows delayed payment for its products instead of cash payment. Ferris (1981) describes it as a loan tied in both timing and value to the exchange of goods. Under credit market imperfection, Lewllen et al. (1980) suggested that firms can use it as an important source of financing to influence on its value. In order to verify this relationship, empirical studies undertaken in various contexts yielded contradictory results. While some pointed out a positive relationship (Makori and Jagonga, 2013; Kapkiyai and Mugo, 2015; Martinez-Sola et al., 2017) or a negative relationship (Deloof 2003; Garci-Teruel and Martinez-Solano, 2007; Samiloglu and Demirgunes, 2008; Gill et al., 2010); other scholars put forward a non-linear relationship (e.g., Hoang et al., 2019). According to Ferrando and Mulier (2013), it is the combination of both aspects of trade credit (accounts payable and account receivable, i.e. net trade credit) that is important for a firm's performance. Li et al. (2016) cast doubt on the claim that trade credit causally boosts firm performance. The research question is of interest because of the tradeoffs associated with borrowing from suppliers

In the context of Cameroon, this study re-examines the above contradictory findings concerning the effects of trade credit on SMEs financial performance (FP) in the context of Cameroon. Unlike previous studies, the paper contributes to the literature by analyzing both the linearity and the non-linearity between account payable and financial performance. The research uses balanced panel data from 58 SMEs during the period 2012-2017. To estimate models and to avoid unobservable heterogeneity and possible endogeneity, two estimations methods were selected (the GLS and the GMM). Also, different measurements of financial performance (ROE, ROE, OPM) were employed to verify robustness of the results. The findings showing a positive and significant relationship between account payable and SMEs financial performance support a growing body of research suggesting that trade credit financing is not as expensive as is typically

assumed. We extend the trade credit literature by bridging the gap between purchasing firms' motives in using trade credit and the market's assessment of these motives.

We use a sample of Cameroon SMEs for two main reasons. Firstly, in Cameroon despite the fact that SMEs represent about 98 % of enterprises in the country, bank finance is a scarce resource hard to obtain (Omenguele, 2015). Also, the 2016 World Bank Enterprise Survey highlights that access to finance is a major growth constraint for 41.1% of SMEs in Cameroon, which compares to an average of 38.3% for other sub-Saharan African economies. As such, given their significant contribution to the global economy and the difficulties that they face in accessing external financing, Berger and Udell (1998) found that, these companies, comparing to big companies have high dependence on trade credit. Thus, if the managers of SMEs in Cameroon profoundly understand the relationship between account payable and financial performance, it would significantly promote business development of SMEs in the country. Secondly, Fisman and Love (2003) highlights the significant role of trade credit in countries with a poorly developed financial sector. Cameroon, a developing country with an underdeveloped financial system, is one of them. Firms operating in this country have few alternatives for obtaining external financing which make them more dependent on trade credit. Our results may therefore be of interest for others SMEs established in countries with similar financial systems as indeed occurs in most African countries.

The remainder of the paper is structured as follows. Section 2 reviews the related literature and develops the hypotheses. Section 3 outlines the methodology. Empirical results are discussed in Section 4. Some conclusions are given in the final section.

2. Account Payable and Financial Performance of SMEs: Theoretical Framework and Hypothesis Development

One major contributing factor to company companies' poor performance and failure is financial constraint. Because SMEs do not get easy access to capital market and bank financing, they use trade credit to finance a significant portion of their current assets. A high value of account payable ratio specifies that the company sponsors most of its current assets with the use of trade credit and a lower account payable ratio specifies that little current assets are sponsored with trade credit. Based on tradeoffs associated with borrowing from suppliers, the main question this section tries to answer is whether theoretical and empirical literature found any relationship between trade credit received from suppliers and the financial performance of small firms.

The financial literature explaining the positive impact of trade credit on financial performance of firms focus on mostly on benefits, consequences of the financial and the transactional motive. From a financial point of view, one of the main advantages of using trade credit as a source of financing by a SME is that, it may help the firm to overcome financial constraints (Schwartz, 1974), especially when the institutional credit is unavailable (Danielson and Scoot, 2004) or prohibitively expensive (Martinez-Sola, 2017). Meltzer (1960) view it as an efficient approach to address SMEs' financial frictions in short term. It provides liquidity insurance against exogenous financial shocks that may constrain internal or external financial resources (Cunat, 2007).

In fact, as earlier stated, because of the serious information asymmetry that generally exist between SMEs and potential investors, it is always difficult for SMEs to get access to the traditional financial system. However, suppliers as a business partner are able to access customers' private information such as product quality, operational condition cheaper than financial institutions. Huyghebaert (2006) then Van-Horne and Wachowicz (2008), after comparing trade credit to other source of financing view trade credit as a flexible and cheaper means of financing. Access to it does not need firms to pledge collateral, sign a note or adhere to a strict payment schedule on a note. Moreover, Biais and Gollier (1997) found that the extension of trade credit by SMEs' suppliers could give a positive signal to the investors about the creditworthiness of the firm regarding its financial situation. With regard to this, it is presumed that SMEs that receive most trade credit multiply their chances in getting financing from financial institution. As such, any SMEs that easily finance its activities at the cheapest cost will maximize its profitability.

In addition to the above-mentioned benefits, it also found from the transactional point of view that trade credit can enable the reduction of transaction cost (Ferris, 1981; Emery, 1997) thereby increasing profitability. This is because, in the absence of trade credit, SMEs may have to pay for goods or services bought when delivery are made. And in case of several transactions, this would have resulted in an increase in the number of times the firm has to make payment and therefore increasing the transaction and opportunity cost. However, credit period allows buyer to accumulate the amounts owing and to pay them at a period interval according to the credit period agreement, such as monthly or quarterly. Another cost benefit of trade credit is on the quality of items bought. Smith (1987) claims that prolonged payments grant buyers the time to verify quality of product given them the possibility to refuse the payments if products have quality problems. Thus, given lower bargaining power of SMEs, trade credit apart from financing and transactional benefits enable them to save time which could be spent on evaluating product quality and the cost on defective products as well as maximize profit.

From the above demonstrations, it can be seen that the benefits of trade credit are numerous. All these may contribute to influence SMEs' financial performance positively. However, despite these benefits, numerous studies suggest that purchasing firms face an exorbitantly high cost when employing trade credit as a mode of financing. Ng. et al. (1999), then Wilner (2000) found that there exists an implicit cost, which depends on the cash discount for prompt payment and discount period, that may act negatively on firms' financial performance because of the use of trade credit to finance business activities. Practically, when trade credit is granted, buyers are always given a date line for payment. In most cases this date is not respected because good might not be sold by then or customer of the buyers may also delay payment.

¹ This is especially relevant for products or services that take longer to verify (Smith, 1987)

Danielson and Scoot (2004), Wu et al. (2012) show that this late trade credit payment will imply other potential costs such as late payment penalties, deterioration in credit reputation, higher prices or less favorable delivery dates in the future. Nevertheless, because the cash discount is not widely used, Hill et al. (2013) point that trade credit is not expensive as suggested by the previous studies. In Cameroon, Omenguele (2011) found that many firms do not propose cash discount to their customers. Also, the majority of companies do not penalize SMEs for late payment (Marotta, 2005). In this vein, we postulate as follow:

- *H1: There is a significant positive relationship between account payable and financial performance of SMEs in Cameroon.*

Still in the financial literature, other theoretical models argue that there is an optimal credit policy (Emery 1984). Empirically, a number of recent studies have found a non-linear relationship between account payable and firm financial performance, that is, trade payable can have both positive and negative effects on firm financial performance. Specifically, at a low level, account payable can increase firm performance by helping to overcome financial constraint and reducing transactions costs. However, when account payable is sufficiently high, an increase of account payable ratio can decrease firm performance because its benefits are overcome by its costs, including late payment penalties, deterioration in credit reputation, higher price or less favorable delivery dates in the future, loss of cash discount (Wilner, 2000; Danielson and Scott, 2004; Martinez-Sola et al., 2017). Therefore, this research also allowed for the presence both effects of account payable, including positive and negative influences on firm performance, using a quadratic function, as used by Hoang et al. (2019). The study hypothesized that:

- *H2: There is a non-linear inverted U-shaped relationship between account payable and financial performance of SMEs in Cameroon (account payable is associated positively with firm value; however, at a high level, the relationship switches from positive to negative).*

3. Methodology

In what follows data, variables used are presented and, estimation procedures are described.

3.1. Data Source and Sample

This study utilizes balance panel data of 58 Cameroon SMEs for 6 years' period from 2012 to 2017. These data were extracted from the Statistical and Tax Return available at the National Institute of Statistics in Cameroon. The sample was restricted to companies with complete records on the key variables for the six consecutive years. The selection of SMEs was according to Law² No 2015/010 of 16 July 2015 on promotion of SMEs in Cameroon. Firms operating in financial sector, services business, renting and other services are not considered. The initial sample was made of 163 firms. In the filtering process, SMEs with missing data (like zero sale for some years) as well as those with negative value for equity were dropped. Finally, the Annual growth rate of GDP is from the World Development Indicators.

3.2. Variables Definition and Measurements

This section presents the variables used in this paper for the measurement of financial performance, trade payable, and control variables.

3.2.1. Measures of Financial Performance

Following Deloof (2003); Baños-Caballero et al. (2014); Kapkiyai and Mugo (2015); Le et al. (2018); Box et al. (2018); Hoang et al. (2019) three accounting-based measures have been used to measure financial performance in this study. They include:

- Return on equity (ROE) which enables to know owners' return from their investment,
- Return on Asset (ROA) which enables to know the firm ability to generate income based on its assets and
- Operating Profit Margin (OPM) which enables to know the firm ability to generate profit from sales.

3.2.2. Measure of Trade Payable

Similar to the studies of Boughaes et al. (2009), Makori and Jagonga (2013), Kapkiya and Mugo (2015), Martinez-Sola et al. (2017), Hoang et al. (2019); trade payable is proxied by account payable ratio (AP) given as the given of account payable to total asset. Following Hoang et al. (2019), the square of AP (AP²) is included in the quadratic equation to test for non-linearity.

3.2.3. Measure of Control Variables

In explaining financial performance of firms, account payable as dependent variable may overlap with other variables. Indeed, variance of a SMEs' financial performance may result from its size, sales growth rate, leverage, level of liquidity and gross domestic product of the country. As such, these five variables were used as control variables.

Figure 1 illustrates the conceptual model of the study. The effect of trade credit (AP) of financial performance is assessed separately using ROE, ROA and OPM. Control variables that exert to also have an impact on each of these measurements of financial performance are included in the econometric models to better isolate the effect of AP on FP.

² This Law consider as SME in Cameroon, any enterprise that operate in the country with a number of employees ranging from 1 to 100 and annual turnover ranging from 1FCFA to 3 000 000 000 FCFA. Due to some inconsistencies of turnover, we focus just on the number of employees.

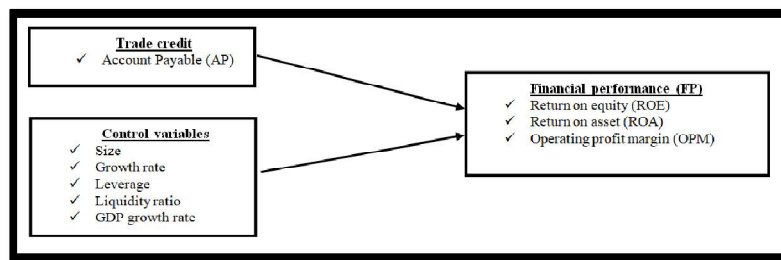


Figure 1: Conceptual Model on the Relationship between FP and AP
Source: Authors

Table 1 summarises the variables, their definition, their measurement and their expected signs.

Variables	Definition	Notation	Measurement	Expected sign	Source of Data
Dependent variable	Return on Equity	ROE	Ratio of Net Income to Owner Equity taking in absolute value		NIS
	Return on Asset	ROA	Net Income relative Assets		
	Operating Profit Margin	OPM	Net Operating margin relative to Assets		
Independent variables	Trade payable	AP	Account payable relative to Assets	+	NIS
	Quadratic term for AP	AP ²	AP Square	-	
Control variable	Firm's size	SIZE	Natural Logarithm of Total Assets	+	NIS
	Sales Growth	SGrowth	Percentage change in sales revenue over the previous year	+	
	Leverage	LEV	Debt as a percentage of equity	-	
	Liquidity	LIQ	Current assets divided by current liabilities	+	
	Annual growth rate of GDP	GDPgrowth	GDP per capita growth (annual %)	+	World development indicators

Table 1: Variables, Definitions, Notations, Expected Signs and Sources

3.2. Model and estimation strategy

In order to investigate the degree and the variables relationship between financial performance and trade credit in this study, we use both static and dynamic models and estimation techniques.

3.2.1. Standard Linear Panel Model

To test the linear relationship between AP and FP of SMEs, the general static model to be estimated is given by:

$$Y_{it} = \alpha + \beta_1 AP_{it} + \gamma Z_{it} + \epsilon_{it} \dots \dots \dots (1)$$

Where Y_{it} represents financial performance of firm i at period t and measured by ROE, ROA and OPM. AP_{it} is the rate of account payable in the balance sheet of firm i at period t. Z_{it} is a vector of control variables for firm size (*SIZE*), sales growth (*SGrowth*), firm leverage (*LEV*), firm level liquidity (*Liq*), *GDP* growth (*GDPGrowth*). ϵ_{it} is independent and identically distributed error term. It is assumed to be equal to α_i plus e_{it} , with α_i individual error component at firm level and e_{it} idiosyncratic error.

In addition of testing the linear relationship, this research used the quadratic function to allow a non-linear relation. The model to be estimated here should be given by:

$$Y_{it} = \alpha + \beta_1 AP_{it} + \beta_2 AP_{it}^2 + \gamma Z_{it} + \epsilon_{it} \dots \dots \dots (2)$$

An inverted U-shape relationship between AP and FP is hypothesized. In particular, at low level, AP is associated positively with FP meanwhile at high level, the relationship is negative. The adequate condition for this type of relationship is that $\beta_1 > 0$ and $\beta_2 < 0$.

$$\text{The optimal point: } AP^* = \frac{\beta_1}{2\beta_2} \dots\dots\dots(3)$$

To avoid spurious regression analysis and to check stationarity properties of panel data of Eq.1 and 2 Harris and Tzavalis (1999) test has been used to verify the presence of unit root. The results show that the order of integration is equal to zero for all the variables to be introduced in our models, which suggests the absence of unit roots in the data. The different results of the specification test show that the panel is not homogeneous (P-value<0.05). The models with individual effects are therefore to be considered. Fixed effects (FE) and Random Effects (RE) estimation methods can be used. The results of the test of specification of Hausman (1978) revealed that, for the three models, the P-values (Prob>chi2) were all more than the normal significant level of 5%. As such, the general least square method (GLS), which is efficient if there is no correlation between the errors terms and the explanatory should be used for static model 1, 2 and 3 (p-value > 0.05). Moreover, Breusch-Pagan test was conducted and revealed a problem of heteroscedasticity. For correction, two methods can be used: either GLS (random effects model) or OLS (fixed effects model). GLS was preferred because of its advantages. Although FE using here will control for unobserved heterogeneity, it will not account for endogeneity problem, especially in short panel data (Cameron and Trivedi, 2005). To deal with this, some previous studies (e.g. Le and Phan, 2017) have suggested the use of instrument variables estimators (IV instruments) or dynamic panel GMM. However, the problem when applying IV estimators is the difficulty in searching for variables that can serve as valid instruments because with weak instruments, the IV estimators are likely to be biased, especially in short panel data. In other words, IV estimates with invalid instruments could still offer no improvement of GLS over OLS. Therefore, to deal with the endogeneity issue, this research applied the dynamic panel GMM provides by Arellano and Bond (1991).

3.2.2. The Dynamic Panel Model

Considering that financial performance (Y_{it}) of a firm i at a particular period t is influenced by the financial performance of the previous period $t-1$, the models of equations 1 and 2 will be re-estimated as follow:

$$Y_{it} = \delta Y_{it-1} + \beta AP_{it} + \gamma Z_{it} + \varepsilon_{it} \dots\dots\dots(4)$$

$$Y_{it} = \delta Y_{it-1} + \beta_1 AP_{it} + \beta_2 AP_{it}^2 + \gamma Z_{it} + f_i + e_{it} \dots\dots\dots(5)$$

Where: Y_{it-1} represents financial performance of firm i at period $t-1$ and measured by ROE_{it-1} (for dynamic model 1), ROA_{it-1} (for dynamic model 2) and OPM_{it-1} (for dynamic model 3). $f_i + e_{it}$ denote the firm specific effect and error term, respectively. Since Y_{it} is a function of f_i and Y_{it-1} is also a function of f_i , this suggest that a right-hand regressor is correlated with the error term. To estimate Eq.4 and 5, two step system GMM of Blundell and Bond³ (2000) have been used to estimate equation 4 and 5 due to its advantages over the original Arrelano and Bond (1991) estimators. Furthermore, Hansen's (1982) J-test of over-identifying restrictions was applied to examine the validity of the used instruments, under the null hypothesis that the instruments are uncorrelated with the error term. Finally, second-order (AR 2) serial correlation was tested using the test proposed by Arellano and Bond (1991), under the null hypothesis that there is no serial correlation. These specification tests are reported in the tables 4 and 5. Although the two-step system GMM estimators are now becoming increasingly popular, one of its disadvantages is that they are quite complicated and so easily create invalid estimates (Roodman, 2006). This research therefore, reported all results of FE and GMM to compare and ensure the reliability of the findings.

4. Results and Discussion

4.1. Descriptive Statistics and Correlation Analysis

Table 2 provides a summary of descriptive statistics of the dependent, independent and control variables used in this study. Two important indicators are highlighted. First, the mean of ROE, ROA, OPM are 0.0674, 0.0267 and 0.0654 respectively. This suggest that SMEs in Cameroon have relatively poor financial performance during the test period (2012-2017) in respect with ROE, ROE, OPM. This may be because, while the firms in the country were steel suffering the effects of the world financial crisis of 2008 (prolongation), the country enter into other crisis in 2014 (Boko-Haram in the Extreme North) and end of 2016 (Anglophone crisis in Nord West and South West). Some of the effects of the problems of these enterprises may be the increase of the amounts of obsolete fixed assets and inventories in their total assets, lack of managerial skills, reduction of skilled employees, lack of adequate financing source, heavy taxes; these problems may impact negatively on firm's performance.

Second, as shown in Table 2, the mean value of the ratio AP is 0.1732; this result suggests that about 17.32% of total of SMEs in Cameroon are financed by trade credit. Comparing this average rate of trade credit with other countries, we can say that the rate of AP in Cameroon's SMEs balance sheet is low relatively to 25.09%, and 30 % reported

³ In fact, an issue of the original Arellano and Bond (1991) estimator, is that lagged variables can be weak instruments if the variables in regressions are close to a random walk, because lagged levels transfer little information about changes in the future. Therefore, Blundell and Bond (2000) developed the system GMM, in which the original equation is added to the system to increase instruments, thereby increasing the efficiency of the estimators. Two-step GMM is selected since in term of efficiency it is better than One-step GMM (Ajidur and Man, 2015)

respectively in the case of SMEs in Spain and in Netherlands. However, this rate is above far above the 8.05% reported from the balance sheet of non-financial listed SMEs from nine countries or territories located in the East Asia and Pacific Region by Hoang et al. (2019).

Variable	Observation	Mean	Std.Dev	Min	Max	VIP	Tolerance
ROE	348	0.0674	0.3562	-3.4707	0.7223		
ROA	348	0.0267	0.0656	-0.4612	0.2331		
OPM	348	0.0654	0.075	-0.2042	0.3667		
AP	348	0.1732	0.1455	0.0000	0.8341	1.11	0.8991
Size	348	9.4956	0.8891	7.2137	11.6612	1.01	0.9942
Sgrowth	290	0.10812	0.7216	-0.5197	11.5696	1.01	0.9950
Lev	348	4.1531	5.7807	0.0156	45.6879	1.14	0.8736
Liq	348	1.7482	1.4488	0.0424	10.9785	1.06	0.9432
GDPGrowth	348	0.2199	0.2327	-0.0270	0.6943	1.03	0.9679

Table 2: Summary Statistics

In addition, the results in Table 2 show that None of the tolerance levels is equal to 1 and the largest VIF value is 1.14, considerably below the critical threshold of 5 prescribed by Studenmund (2006). In the same vein, in Table 3 that reports the pair-wise matrix of correlations between variables, all correlation coefficients are less than the benchmark of 0.7 (Kennedy, 2008). So, there is no multicollinearity problem that can lead to misspecification of test results of the regression.

	AP	SIZE	SGrowth	Lev	LIQUID	GDPGrowth
AP	1.0000					
Size	-0.1533	1.0000				
SGrowth	-0.0245	-0.0124	1.0000			
Lev	0.1728	-0.0501	0.0133	1.0000		
LEV	0.1413	-0.0309	-0.0061	-0.1938	1.0000	
GDPGrowth	0.0395	-0.0420	0.0636	0.0634	0.0571	1.0000

Table 3: Correlation Matrix

4.2. Regression Analysis

4.2.1. The Linear Relationship between Trade Credit and Financial Performance

Table 4 presents the results of the linear effects of AP on FP after estimating equation 1 and 2 using both the GLS (column 1, 3 and 4) and the stow stage system GMM (column 2, 4 and 6). For each of the method of estimation, FP is measure by ROE (model 1), ROA (model 2) and OPM (model 3). Looking at the quality of adjustment, the result using the GLS, shows that the overall F-test (Wald Ch2) with all p-value below 1% report good fitness of the three models and most of the R² values are moderated, from 0.0912 to 0.1463. Specially, in ROE regressions, the value of R² indicate that the model explains approximately 14.63% of the change in the financial performance ratio, which indicates that other variables, such as managerial factors and macroeconomic factors (e.g. interest rates) affect the dependent variable. Also, the outcome of the system GMM shows that all P-Value of AP in the table are higher than 0.10, which means that the null hypothesis of no second-order autocorrelation cannot be rejected. Similarly, the results of Hansen J-tests reveal that the null hypothesis that instrument variables are valid or cannot be rejected.

Looking at the coefficient values and sign of the dependent variable (AP), the findings show that firm financial performance is positively and significantly related to an additional franc CFA of account payable. From Table 4, we can observe that the value of the coefficient of this variable (0.5473 for ROE, 0.0766 for ROA and 0.0696 for OPM) and the level of significance (1% for ROE and 5% for ROA and OPM) vary depending on the FP measurement as well as the method of estimation. The magnitude of the coefficients is comparable to Martinez-Sola et al. (2017). Using a different valuation approach, they an additional €1 of accounts payable increases firm value by €0.1340. The findings are consistent with the aforementioned benefits of trade credit financing, such as mitigating financing frictions and adverse selection problems (Biais and Gollier, 1997; Schwartz, 1974), transaction cost saving (Ferris, 1981), financial flexibility (Danielson and Scoot, 2004), verifying product quality before paying (Long et al., 1993; Smith, 1987), and these advantages outweigh the implicit interest (if there is discount for prompt payment), refinancing risk and other potential disadvantages associated with accounts payable. Apart from the studies of Martinez-Solano et al. (2017) highlighted above, the positive relationship found between AP and FP also agree with Bougheas et al. (2009), Makori and Jagongo (2013), Kapkiyai and Mugo (2015); studies.

The estimated coefficient of firm size has a positive and significant relationship with firm performance measured by ROE. As compare to other studies, this result is consistent with the previous researches (Martinez-Sola et al., 2014; Abuhommous, 2018; Dary and James, 2019). As suggested by Rajan and Zingales (1995), larger firms have less information asymmetry and better access to the markets. They can employ more experienced managers, new technologies and production procedures, and can also access more (cheaper) capital from external sources, produce better quality

products, etc. Also, they tend to enjoy economies of scale (Goddard, Tavakoli and Wilson, 2005) while the average cost of a product is relatively lower and the profitability higher.

In the contrast, leverage shows a significant and negative relationship with all the measures used for financial performance independently of the method of estimation used, indicating that an increase of debts in a SME in

Cameroon is associated with a decrease of financial performance. This can be explained by the fact that, as earlier suggested by Psillaki and Daskalakis (2009), firms that take more debts increase their agency cost which may end up surpassing the benefits of debts received and influence negatively on profitability. Even worse, Jensen (1986) added that SMEs as compare to their large counterparts meet high interest rate loan to the information asymmetric. Therefore, it appears that, in the case of Cameroon, the cost of raising debts of SMEs surpass the benefits of taxation shield from debts, which leads to a negative effect on their financial performance

Variable		Model1 (ROE)		Model2 (ROA)		Model3 (OPM)	
		(1)	(2)	(3)	(4)	(5)	(6)
Lagged Dep. Variables	FP _{i,t-1}		-0.2513*** (0.0155)		0.1049*** (0.0392)		0.1933*** (0.0429)
Ind. variable	AP	0.5473*** (0.1572)	0.4717*** (0.0840)	0.0766** (0.0282)	0.0413** (0.0177)	0.0696** (0.0293)	0.0384** (0.0171)
Control Variables	SIZE	0.1069*** (0.0354)	0.3359*** (0.0251)	0.0159 (0.0061)	0.0185 (0.0139)	0.0077 (0.0079)	-0.0679*** (0.0204)
	SGrowth	0.0348 (0.0262)	0.0297* (0.0136)	0.0064* (0.0047)	0.0080 (0.0059)	0.0083* (0.0048)	0.0115 (0.0011)
	LEV	- 0.0190*** (0.0045)	-0.0419*** (0.0044)	-0.0029*** (0.0008)	-0.0037*** (0.0007)	-0.0035*** (0.0008)	-0.0046*** (0.0009)
	Liq	0.0073 (0.0168)	0.0331*** (0.0107)	0.0053 (0.0030)	0.0010 (0.0040)	0.0029 (0.0032)	-0.0009 (0.0032)
	GDPGrowth	0.2007 (0.1696)	0.3766*** (0.0689)	0.0225(0.0307)	0.0572** (0.0243)	0.0347 (0.0305)	0.0271 (0.0233)
Quality of adjustment	Wald Chi2	36.14***	663.78***	29.52***	41.64***	24.72***	91.22***
	R ² (between)	0.1552		0.2060		0.0667	
	AR (2)		0.2196 0.8262		0.3861 0.6994		-0.1494 0.8812
	Hansen Test		21.5042 0.0635		15.6109 0.2708		18.6065 0.1358

Table 4: Static Linear Estimations of the Relationship between AP and FP (ROE, ROA and OPM)

Note: This table presents results of our regressions for model 1, 2 and 3 using the General Least Square (GLS) and the General Method of Moment (GMM). Coefficients are in front of parentheses. Standard errors are reported in parentheses. The definition and the measurements of the variables used in this table are indicated in table 1. *** significant at the 1% level, ** significant at the 5% level *, significant at the 10% level.

4.2.2. The Non-Linear Relationship Trade Payable and Firm Financial Performance

Tests were conducted to check the existence of a non-linear relationship between trade payable and firm performance. The quadratic function that is unpinning by the work of Hoang et al. (2019) was used to allocate a non-linear relation. The results reported in Table 5 do not show any significant non-linear relationship between account payable and all the measure of firm financial performance used. These findings contradict those of Hoang et al. (2019) in the case of Pacific firm and implies that, in Cameroon, the use of trade credit as a source of financing has little or no negative effects that could cause profitability to drop. This can be justified by the fact that, many firms in the country did not penalize customers for late payment or even propose discount for prompt payment. The idea of making customer a 'King' seems to be working effectively.

Variable		Model1 (ROE)		Model2 (ROA)		Model3 (OPM)	
		(1)	(2)	(3)	(4)	(5)	(6)
Lagged Dep. Variables	FP _{i,t-1}		-0.2631*** (0.0152)		0.1032** (0.0400)		0.1929*** (0.0419)
Ind. variables	AP	0.0410 (0.3856)	0.0793 (0.1916)	0.0946 (0.0693)	0.0832 (0.0595)	0.1212* (0.0729)	0.0736 (0.0533)
	AP ²	0.9144 (0.6366)	0.6241 (0.3924)	-0.0326 (0.1146)	-0.0708 (0.0949)	-0.0910 (0.1201)	-0.0634 (0.0843)
Control Variables	SIZE	0.1082*** (0.0358)	0.3204*** (0.0288)	0.0159** (0.0061)	0.0186 (0.0138)	0.0081 (0.0077)	-0.0689*** (0.0202)
	SGrowth	0.0340 (0.0262)	0.0276** (0.0130)	0.0064 (0.0047)	0.0081 (0.0059)	0.0084* (0.0048)	0.0113 (0.0111)
	LEV	-0.0201*** (0.0046)	-0.0407*** (0.0046)	-0.0029*** (0.0008)	-0.0038*** (0.0007)	-0.0034*** (0.0008)	-0.0048*** (0.0010)
	LIQ	0.0069 (0.0168)	0.0343*** (0.0110)	0.0053* (0.0030)	0.0013 (0.0040)	0.0029 (0.0032)	-0.0007 (0.0033)
	GDPGrowth	0.1768 (0.1697)	0.3685*** (0.0670)	0.0225 (0.0307)	0.0594** (0.0244)	0.0371 (0.0309)	0.0290 (0.0234)
Quality of adjustment	Wald Chi2	38.27***	620.01***	25.19***	53.26***	25.19***	134.44***
	R ² (between)	0.1463		0.092		0.0912	
	AR (2)		0.1504 0.8804		0.3649 0.7151		-0.1635 0.8701
	Hansen Test		21.1484 0.0700		15.3781 0.2843		18.3092 0.1461

Table 5: Non-Linear Panel Estimation of the Relationship between AP and FP (ROE, ROA And OPM)

Note: Coefficients are in front of parentheses. Standard errors are reported in parentheses for various coefficients. For Hansen test and serial autocorrelation, the value in parenthesis represent the value for Prob>chi2 and Prob >z. The definition and the measurements of the variables used in this table are indicated in table 1. *** significant at the 1% level, ** significant at the 5% level *, significant at the 10% level.

4.2.3. Panel Granger Causality Test

We also investigate whether or not trade credit (account payable and financial performance are causality related. For this purpose, we run Granger (1969) causality tests to investigate whether past values of FP have significant linear predictive power for current values of AP given past values of AP. If so, Ap is said to linearly Granger cause FP. Bidirectional causality exists if Granger causality runs in both directions. The test for linear Granger causality between FP and AP involves the estimation of the following equations in a vector autoregression (VAR) framework for each SME $i = 1, \dots, N$ at time $t = 1, \dots, T$:

$$FP_{i,t} = \sum_{k=1}^K \gamma_i^{(k)} FP_{i,t-k} + \sum_{k=1}^J \beta_i^{(k)} AP_{i,t-k} + \varepsilon_{1i,t} \quad (6)$$

$$AP_{i,t} = \sum_{k=1}^K \delta_i^{(k)} AP_{i,t-k} + \sum_{k=1}^K \phi_i^{(k)} FP_{i,t-k} + \varepsilon_{2i,t} \quad (7)$$

γ , β , δ and ϕ are the parameters to be estimated; (ε_1 , ε_2) are zero mean error terms with a constant variance-covariance matrix. We assume that lag orders K are identical for all cross-section units of the panel.

To estimate equation (6) and (7), the number of lagged terms to be introduced in the causality tests is an important issue as in the case of the distributed lag model. Criterion like the Akaike (AIC) was supposed to be used to make the choice of the number of lags. But due to the short-term dimension of the panel, the lag length has been restricted to 1. From the results presented in Table 6, there is no bidirectional causality between AP and FP.

Variables	AP causes FP			FP causes AP		
	AP2016	AP2016	AP2016	ROE2016	ROA2016	OPM2016
ROE2017	0.0778					
ROA2017		0.0063				
OPM2017			0.0151			
AP2017				-0.0139	-0.1523	-0.1191

Table 6: Results of the Granger Causality Test of AP Granger Causes FP and FP Causes AP

Note: *** Significant At The 1% Level, ** Significant At The 5% Level *, Significant At The 10% Level.

5. Conclusion, Recommendations and Limitations of the Study

This study examines the relationship between account payable and financial performance of SMEs in Cameroon. After using the GLS and the two-stage system GMM to estimate both static and dynamic models under a panel dataset of 58 Cameroonian SMEs for the period 2012-2017, the findings indicate that there is a positive effect of trade payable on financial performance (ROE, ROA and OPM). Contrary to the studies of Hoang et al. (2019), we did not find any empirical evidence of the non-linear relationship between the two variables. In Cameroon, trade credit offers more capital for the development of SMEs and it also helps to save operational cost. Firm can improve on their financial performances by acquiring trade credit from supplies while suppliers are more likely to offer trade credit to whom they are familiar with. The study takes the next logical step and examines whether there is a reverse causality between FP and Ap. The Granger causality tests show that there is no bidirectional causality between the two variables.

The present findings are important for at least two reasons. First, they confirm findings of most previous studies conducted in other countries and support the growing body of the research suggesting that trade credit financing is not as expensive as typically assumed. That is, given our results, it seems unlikely that trade credit is as expensive as conventional wisdom implies or we will not observe a positive market reaction to increase use of this credit. Giannetti et al. (2008) show that most trade credit contracts are on simple net term and do not include a discount option. Thus, our results are also consistent with its opinions because, without discount option, trade credit represent free financing in SMEs in Cameroon. We strongly recommend that buyer firms should establish a long-term credit relationship with their suppliers to boost their performance.

Second, in contrast to most previous studies that focus just on certain industry sectors, the study takes into account all sectors.

Despite the above importance of our findings, a number of limitations encountered in this study can be regarded as indicating directions for future research. This study sample is, admittedly, limited to SMEs operating in Cameroon, so the present findings may not be directly generalizable to large companies or to include SMEs operating in different countries. To minimize the risk of sample bias, future studies could include large companies as well many countries with different financing systems. Also, the study failed to introduce variable industry. Concerning trade credit, the payment duration may vary among sectors than within sectors. Further studies could limit just on a particular sector.

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