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Credit History and Credit Rationing among Registered Small and Medium Enterprises in Kiambu County, Kenya

Njagi. Gilbert Nyaga
Lecturer, Department of Accounting and Finance, School of Business and Economics,
Mount Kenya University, Kenya
Dr. Ambrose Ouma Jagongo
Senior Lecturer, Department of Accounting and Finance, School of Business,
Kenyatta University, Kenya
Dr. Job Omagwa
Lecturer, Department of Accounting and Finance, School of Business,
Kenyatta University, Kenya

Abstract:
Substantial empirical evidence has shown that credit rationing is strongly experienced by Small and Medium Enterprises in Kenyan. On average Small and Medium Enterprises (SMEs) are awarded at most 17.4 percent share of amount of loans available in the credit market. The paradox surrounding credit rationing among SME is that sufficient credit is always available to SME sector, however the inadequate financing still persists. Several studies have pinpointed the factors contributing to the financial credit rationing; however, they have resulted to conflicting conclusions which creates a motivation for this study. Further, according to Resource Based Theory, business credit history determines the competitive advantage of SMEs in accessing bank credit. Therefore, this study sought to establish the effect of business credit history on credit rationing among registered Small and Medium' Enterprises in Kiambu County, Kenya. The study adopted positivism philosophy and utilized explanatory study design. The target population was 41,115 registered and active Small and Medium Enterprises and a sample size of 397 was used. The study used both structured questionnaire and data collection sheet to collect data. The data was analyzed using descriptive statistics and inferential statistics. Logistic regression model and moderating logistic regression model were used to test the respective hypotheses. The findings from logit analysis indicated that credit history have a statistical significance effect on credit rationing (p-value = 0.046< 0.05). The findings from the testing of moderating effect of inflation on the relationship between business credit history and credit rationing indicated that there exists statistically significant moderating effect of inflation on the relationship between business credit history and likelihood of SME being credit rationing (p- value = 0.002< 0.05). Guided by the findings, a number of recommendations were made. As envisioned by the Vision 2030, it should be mandatory for all SMEs to be registered under credit reference bureaus. By doing this, it will be possible to determine their past credit performance at minimal cost and rate them from facts rather than mere perception. Lastly, the existence of moderating effect of inflation implies that the government should pursue to maintain inflation levels as per Vision 2030 projections of one -digit figure.

Keywords: *Credit History, credit rationing, inflation, logit analysis, small and medium enterprises and moderating effect*

1. Background of the Study

The economic potential of Small and Medium-sized Enterprises (SMEs) have been recognized worldwide (Financial Sector Deepening-Kenya, 2016;World Bank, 2015 & Kongolo,2010) According to Domeher, Musah and Poku (2017) ,SMEs promote innovation and proprietorship, they are labor intensive and require minimal capital, however, SMEs are subject to more frequent credit rationing than large enterprises. According to Helsen and Aleschmelar (2014), SMEs recognize credit rationing as a major predicament to their growth and economic potential. Stein, Ardic and Home (2015) observe that despite SMEs' potential, the financing gap in developing countries, is within the range of 2.1 to 2.6 trillion British pounds. In support,

Financial Sector Deepening (2015) confirm that the proportion of SMEs financing to total lending in the world averages 23. 4 percent compared to that of large enterprises which on average is above 70 percent.

Reflecting the SMEs' precarious credit position in Kenya, World Bank (2014) contends that on average, only 43 percent of loan applications are approved out of applications received in a specific year and most receive less amounts that amount applied. This is despite the fact that Kenyan SMEs provide one of the most prolific sources of employment creation, income generation and poverty reduction (Ngugi & Bwisa, 2013: Ong'olo & Awino, 2013). According to Central Bank of Kenya (2014), the collaboration of International Finance Corporation, Central Bank and Ministry of Finance in 2007 resulted to establishment of credit reference bureau whose objective was to benefit SMEs. Micro and Small

Enterprises Act,55 (2012) indicates that establishment of Micro and Small Enterprise Development Fund was aimed at providing affordable and accessible credit to Micro and Small Enterprises. Despites all this efforts, World Bank and Central Bank of Kenya, (2015) reveal that on average, SMEs in Kenya hold at most 17.4 percent share of a mount of loans available in the credit market.

According to Helsen and Aleschmela (2014), credit rationing is a loan application outcome such that lenders award less mounts of credit than the amount applied. S'lazak (2011) observes that when credit rationing exists, business entities receive inadequate financing, which restricts SMEs growth and in turn may have a negative impact on the national economy. According to IFC (2015), credit rationing is worldwide problem but strongly felt in developing counties. Credit history is a record of past loan repayment pattern of the borrower and can be deduced dependent on the borrower's reimbursement conduct. For example, late reimbursements, installments falling behind financially and to the extraordinary, nearness of defaulting, with respect to past legally binding monetary commitments and non-money related commitments (World Bank, 2017). Nyangoma (2012) outlines that SMEs credit history is an important determinant of whether a firm can obtain credit or not.

According to Mugambi (2014), lenders will offer more credit to old and more established borrowers with whom they shared a satisfactory track record. In similar note, Ngugi and Nasieku (2016), pinpoint that knowledge on borrower's credit history and checking on the past history of debt repayments reduces credit risk exposure to the lender, which finally benefits the borrower. Nyangoma (2012) assert that SME experience troubles in getting bank money particularly long-haul advances because of various reasons, among them insufficient record as a consumer. This circumstance is further amplified by the fact that the proprietor and the firm are blended and to some degree unclear, and subsequently banks are unable not separate the records of the proprietor and that of the firm (Berger, Espinosa-Vega, Frama and Miller, 2011).

Besides the variable business credit history, Harvie (2011) asserts that access to finance and terms attached to it are also impacted by factors beyond the control of the SMEs, in particular inflation. Akinkoge, Sanusi and Moses (2015) articulate that there is sufficient evidence from the theory that inflation derives down the rate of return on assets as well as lendable money and this in general increases credit market friction leading to credit ration. It is against this background that the study investigated the effect of business credit history on credit rationing among SMEs in Kiambu County, Kenya and also test the moderating effect of inflation on the relationship business credit history on credit rationing.

2. Statement of the Problem

Empirical evidence on business specific factors and credit rationing documents observable study gaps which demand being addressed (Mills & McCarthy, 2014; Kungu,2015 & Kamunge, Njeru & Tirimba, 2014 Mutiria (2017). For instance, Ata, Korpi, Ugurlu and Sahin (2015) studied on credit rationing and commercial lending process among manufacturing firms operating in Gaziantep region in Turkey. The study found that credit history has a statistical significance effect on the banks' lending process. Nevertheless, this study was based on banks' perception towards the SMEs and did not really consider the actual credit history from the perspective of SMEs proprietors or managers. Further, the study focused only on one sector of SMEs, manufacturing firms. This may lead to wrong generalization of results to the SME sector. Nyangoma (2012) studied on credit terms, access to finance and finance performance of SMEs in Kampala, Uganda and found that firms' credit history helped in accessing credit. Whereas the study sought to determine the obstacles to credit accessibility, the current study sought to determine the effect of credit history on credit rationing among SMEs. This formed a good basis for an empirical investigation to address the knowledge gap.

From local perspective, the available local studies (Mutiria, 2017; Kathuku, 2017; Mungiru & Njeru, 2015; Njiru, 2014; Wakaba, 2014) have largely addressed challenges faced by SMEs when accessing credit. Little attention has been given on the effect of business credit history on credit rationing. Further, Mutiria (2017) acknowledges that very little documentation on SME financing exists in the context of Kiambu County. It is on this basis that the current study will specifically analyze the effect of business credit history on credit rationing among registered SMEs in Kiambu County.

3. Review of Literature

3.1. Theoretical Review

The study is underpinned on three theories namely: credit rationing theory, resource-based theory, and monetarist theory of inflation. Credit rationing theory was put forward by Stiglitz and Weiss in 1981 (Malhotra, 2015). According to Helsen and Chmelar (2014), the theory indicates that there is an optimal interest rate beyond which the expected return to the bank will decrease, whose consequence is that for any excess demand at the optimal interest rate level, leaves the banks with no option rather than to ration credit. Jinand and Zhang (2019) assert that credit rationing is strongly experienced by the lenders when credit market is characterized by information asymmetries which refers to information imbalance between the parties involved in a given economic transaction.

Resource based theory was developed by Wernerfelt in 1981 (Seref, Kiran, & Mohamed, Abou, 2017). According to Pilar, Sabina, Jose, Jesus and Alfonso (2018), the theory indicates that the performance of any firm is determined by its internal attributes and capabilities. Margaret and Godwin (2015) outlines that an important lesson of the resource-based theory in business finance is that it allows identification of the resources associated with successful and unsuccessful access to bank credit. As indicated by Nega and Hussein (2016) and Essein and Arene (2015), the achievement of SMEs in getting to formal credit depends on its inward capability.

Monetarist theory of inflation was developed by Milton Friedman in 1867. The theory outlines that inflation is caused by growth of money supply, such that the faster the growth, the faster the growth of inflation. In relation to credit market, Akinkoge, Sanusi and Moses (2015) note that the theory articulates that with increased money supply, the market players start expecting inflation and the credit lenders insist on higher interest rates to offset an expected decline in purchasing power over the life of their loans.

3.2. Empirical Review

Ata, Korpi, Ugurlu and Sahin (2015) studied on credit rationing and commercial lending process among manufacturing firms operating in Gaziantep region in Turkey. The study conceptualized that credit history, size of business, age of the business, ownership style, previous bank relationship, foreign trade exposure, liquidity, type of assets, capital structure and leverage, profitability and productivity may influence credit rationing. Further, the study classified SMEs into two groups; non-rationed and credit rationed firms based on loan approval outcome. Accordingly, if a loan application was approved and granted in full then the firm was considered as non-rationed firm. However, if the loan application was rejected or partially granted then the firm was regarded as credit rationed.

The study used logistic regression and discriminant analysis to estimate the credit rationing. The results indicated that credit history have a statistical significance effect on the banks' lending process. Nevertheless, this study was based on banks' perception towards the SMEs and did not really consider the actual credit history from the SMEs proprietors' or managers' perspective. Further, the study focused only on one sector of SMEs, manufacturing firms. This may lead to wrong generalization of results to the sector. The current study considered previous credit history of the SMEs from the proprietors themselves and links it to credit rationing. In addition, all sectors of SMEs operating in Kiambu County have been included in the sample size.

Nyangoma (2012) studied on credit terms, access to finance and finance performance of SMEs in Kampala, Uganda. The study undertook factor analysis to extract factors that measure access to credit using the principal component analysis and varix rotation methods and revealed that firms' credit history helped in accessing credit. Whereas the study sought to determine the obstacles to credit accessibility, the current study sought to determine the effect of credit history to credit rationing among SMEs. Beck, Demirgüç-Kuntand Pería (2009) analyzed lending behavior, models of business, facilitators and obstructers to financing of SMEs by commercial banks. The study collected data from 91 commercial banks, among 45 developing countries. Similar to related studies, it confirmed that credit history of the firm is an important criterion considered by banks when approving a loan and by extension a major determinant of credit rationing in developing countries. Nevertheless, the study was based on banks perception towards the SMEs and did not really consider the actual credit history of the SMEs proprietors. The current study will look on the actual previous credit history of the proprietors of sampled SMEs and link it to credit rationing.

Chepkorir (2011) explored credit appraisal techniques used by Kenyan commercial banks in lending to SMEs. Through the use of descriptive survey design and adopting multivariate, statistics in analyzing the data, the study found that among different components, installment repayment history of the firm was a key factor when deciding the amount to borrow. Though the study tried determined the impact of record of loan repayment as seen by the money lenders, the present study looks to explore on whether past financial record of the borrower causes credit rationing and its potential impacts.

According to Mian, Imran & Muhammad (2013), borrowing and lending operates within macroeconomics environment, and hence it is necessary to factor in macroeconomic variables when addressing credit rationing. In a comparative report, Saeed and Scheuermann (2014) explored the effect of budgetary advancement parameters that impact SME's entrance to outside monetary sources. The study utilized SMEs' firm level information and macroeconomics factors from seven less created nations in South America. By the utilizing replacement investigation, the outcome demonstrated that rising rate of inflation weakens SMEs from meeting their credit obligation.

Contrary to the above studies, Akinkoye, Sanusiand Moses, (2015) studied on the interaction between inflation and credit rationing in Nigeria for a period between 1970 and 2011 using data from the Central Bank of Nigeria. The results got by undertaking Autoregressive Distributed Lag (ARDL) bounds testing procedure and granger causality test indicated that there is no long run relationship between inflation and credit rationing. These studies have concentrated on determining the effects of inflation on credit accessibility by SMEs, without factoring any possible relationship between business attributes and credit rationing. As supported by the literature review, the current study extended the knowledge by incorporating inflation as a moderating variable which influences the relationship between business credit history and credit rationing.

4. Research Methodology

4.1. Research Philosophy and Design

The study adopted positivism philosophy. Scotland (2012) asserts that philosophy assumes classification of the social environment in an objective way for the purpose of observation and analysis of data. The positivism philosophy was suitable for this study since events of interest are objective, external and independent of each other. Further there will be no socialization and interaction of social reality as assumed by social constructivism philosophy. The study employed explanatory research design. According to Wyk (2011) and Sunders et al (2007), the main aim of explanatory study is to identify any causal links between factors or variables that pertain to a research problem. Explanatory research design was necessary since the study attempted to explain how business credit history affects credit rationing among the registered SMEs in Kiambu County.

4.2. Empirical Models

In order to determine the effect of business credit history on credit rationing, the study used logit regression model. Williams (2015) and Muchabaiwa (2013) pinpoint that logit regression model is a model used to determine the likelihood of the outcome of a categorical dependent variable based on one or more independent variable. The current study hypothesized linear probability model connecting the dependent variable and the independent variables as follows: -

$\ln\left[\frac{P}{1-P}\right] = \alpha + \sum_{i=1}^{k} \beta\, Xi$ ……………………………………………………………….(1)

Where: CR= Credit rationing status (1= for partial credit award and 0 = denied credit); α = Constant of the model; β = Coefficient of the model; X= Business credit history of SME; i = Specific SME and k = Number of independent variables under study. To determine the moderating effect of inflation on the relationship between business credit history and credit rationing, the study adapted moderating logit regression model by Newsom (2016) & Marshall (2007) as follows:

$\text{Ln}\left[\frac{P}{1-P}\right] = \alpha + \beta_1 X + \beta_2 Z + \beta_3 X{*}Z$………………………………………………….. ……….. (2)

Where: ln = Natural logarithm; α = Constant of the model; β_1, β_2 and β_3β2andβ3= Coefficients of the model;p = Probability of being partially awarded or denied credit; X= Independent variable and Z = Moderating variable

4.3. Target Population and Sample Size

The target population of interest for this study was 41, 115 registered SMEs in Kiambu County within the study period (2013-2017).The sample size is three hundred and ninety-seven (397), which was determined by the use of Slovin's formula (1967)-: n = N / (1+N (e) ^{2}); Where: n = Sample size;
N = Population size;e = Margin of error to be decided by the study. Using margin of error of 5 percent, the size of the sample was calculated as follows: -

n = N / (1+N (e)^2)
= 41, 115/ (1 +41, 115*0. 05^2)
= 397 Small and Medium Enterprises

To identify the specific sample units, the study used purposive random sampling. Purposive random sampling was based on the inclusion exclusion criteria of the study, viz: -applied for a credit once within the study period (2013-2017) and obtained less amounts than amount applied. The respondents of the study were the proprietors and, in their absence, the managers of the sampled SMEs.

4.4. Data Collection Instruments, Data collection procure and Data Analysis Methods

The structured questionnaire was used to collect data relating to business credit history and credit rationing. The respondents were the proprietors and, in their absence, the managers of the sampled SMEs. Sekara (2000) supports the use of a questionnaire since it is cheap, quick to administer, avoids interviewer effects, has higher anonymity and it has wide respondents. The data on inflation was collected by the use of data collection. Bulgiba, Nordin and Ismail (2012) reckon that data collection may result to measurement error, which may affect the ability to find significance results in a research. This can also result to significance damage to the interpretability of scores or functionality of a testing instrument. To avoid such occurrence, the study undertook both reliability and validity tests on the data collection instruments and the results did not show any concern to undertake analysis of data.

Wooldridge, 2015 and Mordkoff, (2016) observes that any research undertaken should avoid model misspecification which can lead to adverse effects on sampling property of both estimators and tests. In compliance to this, the study undertook the following diagnostics tests: normality test, multicollinearity test, linearity of dependent and independent variables, overall model evaluation test, goodness of fit tests, tests of individual predictors, validations of predicted probabilities test and odd ratios. The results of these test, similar validity and reliability test, did not show any concern and henceforth the study proceeded to hypothesis testing.

5. Results, Findings and Conclusion

5.1. Hypotheses Testing

Logistic regression analysis was conducted at significance level of 0.05 to determine the effect of business credit history on credit rationing for 397 registered SMEs in Kiambu County, Kenya. The rule of the thump is that the null hypothesis should be rejected if the computed probability value (P-value) is less than significance level of 0.05. The findings of the logit regression analysis are in Table 1.

	B	S.E.	Wald	Sig.	Exp(B)
Credit History	0.462	0.232	3.981	0.046	1. 588
Constant	1.386	0.159	76.207	0.000	3.999

Table 1: Logit Regression Results
Source: Research Data, 2019

The objective sought to determine the effect of credit history on credit rationing among registered SMEs in Kiambu County. A null hypothesis was formulated that there is no statistical significance effect of business credit history on credit rationing among registered Small and Medium Enterprises in Kiambu County, Kenya. The results in Table 1, indicates that the coefficient value (β) of credit history of 0.462, Exp (B) value of 1.588, with a corresponding p-vale 0.046 respectively. The coefficient value (β) of 0.462 indicates that there is a statistical significance (p = 0.046 < 0.05) direct relationship between business credit history and credit rationing. The Exp (B) value of 1.588 indicates that the SME with good credit history was 1.588 times more likely to be partially awarded credit rather than denied compared to SME with weak credit history.

Therefore, at p-value = 0.046, which is less than the significance level of 0.05, the null hypothesis is hereby rejected. The finding of the hypothesis test is that business credit history has statistical significance effect on credit rationing among registered Small and Medium Enterprises in Kiambu County, Kenya. These findings collaborate with those of previous studies (Chepkoech, 2014; Kerubo, Alala & Musiega, 2014 and Sumari & Aikaruwa, 2013) that borrower's previous credit behavior is an important determinant of credit rationing in future credit applications. In line with these results, World Bank, (2017) notes that SMEs with a history of paying their loans in arrears are perpetually credit rationed in their future credit applications.

According to Okiya (2016), the non-payment of loans leading to bad credit history is a universal problem. However, CBK (2018) notes that the perceived non –repayment of SMEs by the lenders is due to the presence of information asymmetry and isolated lending activities amongst banks and this led to introduction and enforcement of CRB regulations (2008), which is a means to curbing non-repayments through mandatory credit information sharing on customer's credit, whose consequence is improving on credit repayment behavior of most enterprises. According to CBK (2018), Credit Reference Bureaus have gone about as an end to data asymmetry between the loan specialists and borrowers, coming about to improve credit data sharing system and help banks in embraced credit choices, which depend on the use of credit card history of borrowers. Credit reference authorities (CRBs) give various advantages to the lenders and the borrowers and this enables the banks to separate great and terrible account holders. Also, it diminishes the expense of appraisal as the borrowers become mindful that the market rewards and endorses them dependent on their reimbursement history (Osoro, Nyolei, Rotich & Odhiambo, 2015). Kenya Association of Bankers (2012) reckons that CRBs are particularly useful for the SME segment, which forms a large proportion of the loan market in Kenya and this may help in deepening credit access and lower risk premiums.

To examine the moderating effect of inflation on the relationship between credit history and credit rationing among the registered SMEs in Kiambu County, Kenya a corresponding hypothesis held that there no statistical significance moderating effect of inflation on the relationship between credit history and credit rationing among registered Small and Medium Enterprises in Kiambu County. The results of the test are presented in Table 2

Variables in the Equation							
		β	**S. E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
	Credit History	0. 468	0. 229	4. 177	1	0. 041	1. 597
	Inflation	0. 327	0. 157	4. 338	1	0. 037	1. 387
	Credit History* Inflation	0. 28	0. 091	9. 467	1	0. 002	1. 323
	Constant	1. 925	0. 693	7. 716	1	0. 005	6. 855

Table 2: Moderating Effect of Inflation on the Relationship between Business Credit History and Credit Rationing
Variable(S) Entered on Step 1: Credit History, Inflation, and Credit History Inflation*
Source: Study Data (2019)

From the results in Table 2 shows the coefficients values (β), Wald statistic and p- values (sig) the variable after incorporating inflation as a moderating variable. First, the results show that credit history has coefficient value, likelihood ratio and p-value of 0. 468, 4.177 and 0.041 respectively. The coefficient value (β = 0. 468) indicate that there is a statistical significance (p-value =.041< 0. 05) direct relationship between business credit history and credit rationing. Further, Wald statistic of 4.177, with p-value of 0.041, which is less than the significance level of 0.05, indicates that SME with a good credit history is 4.177 times more likely to be partially awarded rather than being denied credit. The results show that inflation has coefficient value, Wald statistic and p-value of 0.327, 4.338 and 0.037 respectively. The coefficient value (β = 0.327) indicate that there is a statistical significance (p-value= 0.0.037< 0.05) direct relationship between business credit history and credit rationing. Further, Wald statistic = 4.338, with p-value of 0.037, which is less than significance level of 0.05, indicates that inflation have a statistical significance effect on the likelihood of SME being partially credit or denied credit. These findings support those of Gao, Gu and Hernandez-Verme (2012) and Akinkoge, Sanusi and Moses (2015) who found that periods of economic recession are marked with high level of inflation which is bound to increases credit rationing. However, the findings contradict those of Waters (2013) whose findings indicated that it is not existence of inflation that causes credit rationing but the actions of the government in an effort to reduce inflation during the periods of recession.

In addition, regression results presented in table 2 indicate the coefficient value (β) of Wald statistic and p-value (sig) after the interaction between credit history and inflation. The interaction between credit history and inflation has coefficient value (β) =0. 028, Wald statistic =9.467 and p-value of 0. 002. The coefficient value (β) =0. 028, indicate that there is a statistical significance (p-value = 0.017< 0.05) direct relationship between credit rationing and the interaction between business credit history and inflation. The value of Wald statistic = 9.467 with p-value of 0. 002 at 5 percent significance level indicate that the interaction between credit history and inflation have statistical significance effects on the likelihood of SMEs being partially awarded credit or denied credit. This result collaborates those of Rwigi (2018) and

Murigi (2014) that changes in inflation affects loan repayment behavior, such that clients are not able to repay loans and this calls for low credit ratings in future.

5.2. Conclusion

The study makes several conclusions from the findings of this study. First, the study concludes that business credit history has a statistically significant direct relationship with credit rationing. The direct relationship indicates that when the SMEs improves on its credit repayment as measured by timely repayment and repayments of the required instalments, the likelihood of the SMEs being awarded partial credit rather than being denied credit will be high. The statistical significance effect of credit history as a variable makes us conclude that credit history is a critical variable, whose status during the time of credit appraisal may affect credit outcome. Thus, the proprietors of SMEs should always strive to comply to the terms of loans in order to ensure they have outstanding credit history in future credit appraisal.

In view of the moderating effect of inflation on the relationship between business credit history and credit rationing, the study concludes that inflation have a statistically significant direct relationship with the credit rationing. The statistically significant direct relationship between inflation and credit rationing indicates that inflation, like business credit history also predicts the likelihood of SME being partially awarded credit or denied credit. Additionally, there is statistical significance moderating effect of inflation on the relationship between business credit history and credit rationing. Thus, the study concludes that inflation affects the relation between business credit history and credit rationing, which finally influences the amount of credit received by the SMEs.

6. Recommendations

Guided by the statistical significance of credit history, the results have shown that the SMEs with good credit history had a higher likelihood of being partially awarded credit or denied credit. This implies that in practice, the proprietors of SMEs should ensure compliance to stipulated time and amounts of loan repayments on existing financial credits as this may impact on the future credit applications. Further, sufficient information and frequent reminders should be availed by the lenders and channeled to borrowers.

The study recommends to the lenders that any credit appraisal is guided by the credit ratings from credit reference bureaus. This is as envisioned by the Vision 2030, that it should be mandatory for all SMEs to be registered under credit reference bureaus. By doing this, it will be possible to determine their past credit performance at minimal cost and rate them from facts rather than mere perception. Finally, the statistical significance moderating effect of inflation on the relationship between business credit history and credit rationing calls for a recommendation that the Central Bank of Kenya, should develop monetary policies which are directed to reduction, if not elimination of credit rationing among the SMEs. Further, through appropriate agencies, the government of Kenya should come up with policies which should ensure that inflation is maintained as per Vision 2030 projections of one-digit figure.

7. Areas for Further Research

The study found that business credit history has a statistically significant effect on the likelihood of SME being partially awarded credit or denied credit. Guided by this finding, further study can be done to determine the factors which may positively or adversely influence the business credit history of SMEs.On doing this, the owners, or in their absence, managers of SMEs will be empirically guided on how to manage these factors, and henceforth reduce the potential of experiencing credit rationing. Addition study can be done to develop workable model for determining probability of SMEs being rationed at a given business credit history position. This kind of a model can be a good tool to be used alongside the usual appraisal techniques,

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