

INFLUENCE OF COLLATERALS USED BY SMALL AND MEDIUM MICROENTERPRISES ON LOAN PERFORMANCE OF COMMERCIAL BANKS IN KISII COUNTY, KENYA

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Abstract

Collateral has been one of the most widely-used features of debt contracts. Collaterals are used as a mechanism to reduce equilibrium credit rationing and other problems that arise due to asymmetric information between borrowers and lenders. The specific objectives of the study were to establish the influence of motor vehicles used as collaterals on the performance of loans from banks in Kisii County, to find out the extent to which land and building used as collaterals influence loan performance from commercial banks in Kisii County and to establish the extent to which use of inventories as collaterals influence commercial banks loan performance in kisii county. The study covered all the 14 commercial banks in Kisii County. It aimed at obtaining the relevant information from bank employees dealing with loans processing and compliance department and respondents who are entrepreneurs of SMEs in Kisii County. The descriptive research design was adopted in the study. A census was conducted to gather relevant information from all the banks. Data was collected using a personally administered semi-structured questionnaire. To ensure reliability, the researcher pilot-tested the questionnaire by administering it to some clients and employees of family bank. Findings suggested that most banks prefer the use of motor vehicles as security in order to reduce the risk of default. Further, majority of the banks discourage clients from using land and buildings as collaterals.

Keywords: Borrower, Loan, Collaterals, SMEs, Banking, default risk

INTRODUCTION

Microenterprises firms that operate with 10 employees or less—are recognized as large generators of income and employment in the developing world, and there is increased interest among policymakers and researchers in improving their productivity (BenYishay and Pearlman, 2011). These businesses lead to creation of employment, alleviation of poverty, movement from welfare to work, decrease in population loss, improvement of farm and nonfarm earnings, and increase women employment (Rupasingha and Contreras, 2010). Small and Medium Enterprises (SMEs) are attractive because they are labour intensive, require low initial capital and there is ease of entry (Wickman, 2000) as quoted in Nyanamba (2011). Statistics indicate that today, Kenya's SME sector constitutes 90% of all businesses in the country, absorbs annually up to 50% of new non-farm employment seekers; has an employment growth rate of 12-14% and contributes 30% of total employment and 3% of Gross Domestic Product (GDP) (Riley, 2002), as quoted in Nyoike (2003).

Research on collaterals can be traced as back as Barro's study in 1976 which focused on pricing issues when collateral value was stochastic (Arnoud et al, 1991). However, the practical significance of collateral is recognized in recent studies on financial contracts in securing repayments, which put collateral as a primarily important factor in determining external financing and investment (Chen, 2001; Chen & Wang, 2006). Collateral refers to assets pledged by a borrower to secure a loan (Leitner, 2006), so that the lender can seize these assets if the borrower does not make the agreed-upon payments on the loan, so the lender has some protection if the borrower defaults. In his view therefore, the use of collateral can make it easier for firms to obtain loans to finance their investments.

The lender has the right, if you default on the loan, to obtain the collateral from you in lieu of payment (Baker, 2009). The research further claims that there are a various things that can be used as collateral. These include equipment, accounts receivable, business inventory fixed assets like cars, houses (Wallace, 2013) and gold (Belke et al., 2013). Leitner (2006) defines inside collateral as to the case where the borrowing firm pledges assets it owns, such as machines and inventories. The debt contract contains a bankruptcy clause that defines the project's assets as the inside collateral of the contract (Schäfer (2001). This clause enables the creditor to seize the firm's assets in the event of default. Elsas and Krahnert (2002) found out that inside collaterals not only define priority over future cash flows of the firm among lenders, but also providing incentives and/or valuable information for monitoring. Cadot (2011) observed that while collaterals may reduce the risk of overinvestment by entrepreneurs and so reduce the risk of repayment default, contracting collaterals may lead the bank to reduce the monitoring effort. For a long time, collateral has been one of the most widely-used features of debt contracts

(Berger et al, 2006). The authors further indicate that collaterals are used as a mechanism to reduce equilibrium credit rationing and other problems that arise due to asymmetric information between borrowers and lenders. However, as Berger et al (2006) observe, if it would be possible to shrink the information gap between borrowers and lenders, then this would lower the incidence of collateral. Besides, increases in a firm's collateral value relax the credit constraint faced by the firm, enabling the firm to borrow more (Chen & Wang, 2006). Berger et.al, (2011) noted that the lender selection effect appears to be especially important for outside collateral, the "risk-shifting" or "loss mitigation" effects for liquid collateral, and the "borrower selection" effect for no divertible collateral. The study also document that the lender selection effect is particularly strong for residential real estate collateral and that the risk shifting effect is important for pledged deposits and bank guarantees.

Ono et al., (2008) point out that while there is no question that the development of credit scoring technology has increased the availability of credit for small businesses, it is not clear if this is beneficial. Contrarily to that, in their opinion, it may be the case that easier access to credit is actually detrimental to small businesses, not to mention the economy as whole, if the diminished use of collateral has resulted in distorted lending decisions on the part of the lender and/or has induced moral hazard on the part of the borrower.

Although there is lack of data, and thus empirical work, on international securitized lending (Cao & Gete, 2012), evidence from research support the widespread use by foreigners of United States (US) Treasuries as collateral. The study also shows that cross-border collateralized lending exists, probably in large amounts. Gorton & Metrick (2011) as quoted in Cao & Gete (2012) shows that many foreign financial institutions borrow or lend against U.S. Treasuries in U.S. repo markets. Around 85% of the participants in the global Overseas Trading Companies (OTC) derivatives industry, including Chinese banks (Lee 2009), declare to accept U.S. Treasuries as collateral (International Swaps and Derivatives Associations, 2000, as cited in Cao and Gete, 2012). Further still, several foreign Central Banks and financial authorities from different regions of the world, accept U.S. Treasuries as collateral for borrowing transactions. Examples include, among others, the Bank of England, the Bank of Canada, the Korea Securities Depository or the Hong Kong Futures Exchange (BIS, 2006) cited in Cao and Gete (2012) and that Informal groups of private creditors on the international stage, as the London or Paris Clubs, ask for the debt to be collateralized by U.S. Treasuries (Central Bank of Nigeria 2007). It happens similarly with the Brady bonds (Barney 2000).

Statement of the Problem

Many businesses post collateral as security for loans so that it can protect the lender if the borrower defaults (Inderst & Mueller, 2000). Besides, collateral overall is associated with lower loan risk premiums and a higher probability of *ex post* loan nonperformance (Jimenez and Saurina, 2004; Berger et al., 2011). However, while research has shown that collateral greatly boosts a borrower's ability to be offered a loan, some studies have noted that collateral has little role under perfect information (Ono & Uesugi, 2005). There's even some evidence that loans with collateral attached may be riskier for lenders (Leitner, 2006). Besides, it has been observed that not all borrowers put up collateral when taking loans. Studies have also shown that although banks whose claims are either collateralized or personally guaranteed monitor borrowers more frequently (Ono & Uesugi, 2005), it has been noted that although collaterals enable borrowers to access loan, (Berger et al., 2012; Elsas and Krahen, 2002), most of the microenterprises do not possess assets of value that can be used as collaterals against loan and as such, access to finance has been an uphill task (Leitner, 2006). The use of collateral and personal guarantees, how it relates to the characteristics of loan performance, and the relationship between the two parties has therefore remained unclear hence empirical research has yet to reach decisive conclusions about the nature of this relationship (Ono & Uesugi, 2005; Berger et al., 2011). It is against this background that this research seeks to evaluate the influence of collaterals used by SMEs on loan performance of commercial banks in Kisii County.

Objectives of the Study

The study was designed to investigate the collaterals used by SMEs on loan performance of commercial banks in Kisii County. Study has following specific objectives;

- i. Establish the influence of motor vehicles used as collaterals on the performance of loans from banks in Kisii County.
- ii. Find out the extent to which land and building used as collaterals influence loan performance from commercial banks in Kisii County.
- iii. Establish the extent to which use of inventories as collaterals influence commercial banks loan performance in Kisii County.

THEORETICAL REVIEW

Ex Ante Theory of Collateral

The ex-ante information explains the gap between borrowers and lenders that can otherwise lead to an equilibrium characterized by adverse selection and credit rationing in the spirit of Stieglitz and Weiss (1981). Ex ante theories only hold for customers with short relationships with

the lender, that is, borrowers that are relatively unknown to the lender (Berger et al., 2009). In this case, collateral allows lenders to sort observationally equivalent loan applicants through signaling. Lenders offer a menu of contract terms such that applicants with higher-quality projects choose secured debt with lower risk premiums, while those with lower-quality projects self-select into unsecured debt with higher risk premiums. For instance, *ex ante* fixed seniority of lenders can serve as an instrument to strategically allocate bargaining power between lenders, thereby deterring costly conflicts *ex post* (Elsas&Krahn, 2002). *Ex ante* private information and suggests that collateral may allow lenders to sort observationally equivalent loan applicants through signaling. Specifically, lenders offer a menu of contract terms such that observationally equivalent applicants with higher-quality projects choose secured debt with lower risk premiums, while those with lower-quality projects self-select into unsecured debt with higher risk premiums (Berger et al., 2011).

According to Berger et al. (2010), the collateral as arising from *ex ante* information gaps between borrowers and lenders lead to an equilibrium characterized by adverse selection and credit rationing. The study further acknowledges that in this case, collateral allows lenders to sort observationally equivalent loan applicants through signaling. Specifically, lenders offer a menu of contract terms such that observationally equivalent applicants with higher-quality projects choose secured debt with lower risk premiums, while those with lower-quality projects self-select into unsecured debt with higher risk premiums.

Ex Post Theory of Collateral

Ex-post-riskiness of the borrower is used to test the adverse selection hypothesis, the default variable takes the value of one if the borrower defaults on a loan after it is made. The authors find evidence supporting the moral hazard hypothesis. Brick, Kane and Palia (2004) obtain a similar result, using a default dummy variable for either the principal owner or the firm as a measure of the *ex-ante* riskiness of the borrower. This theory views collateral as part of an optimal debt contract by invoking *ex post* frictions, like moral hazard, and predicts that observably riskier borrowers are more likely to be required to pledge collateral (Berger et al., 2011).

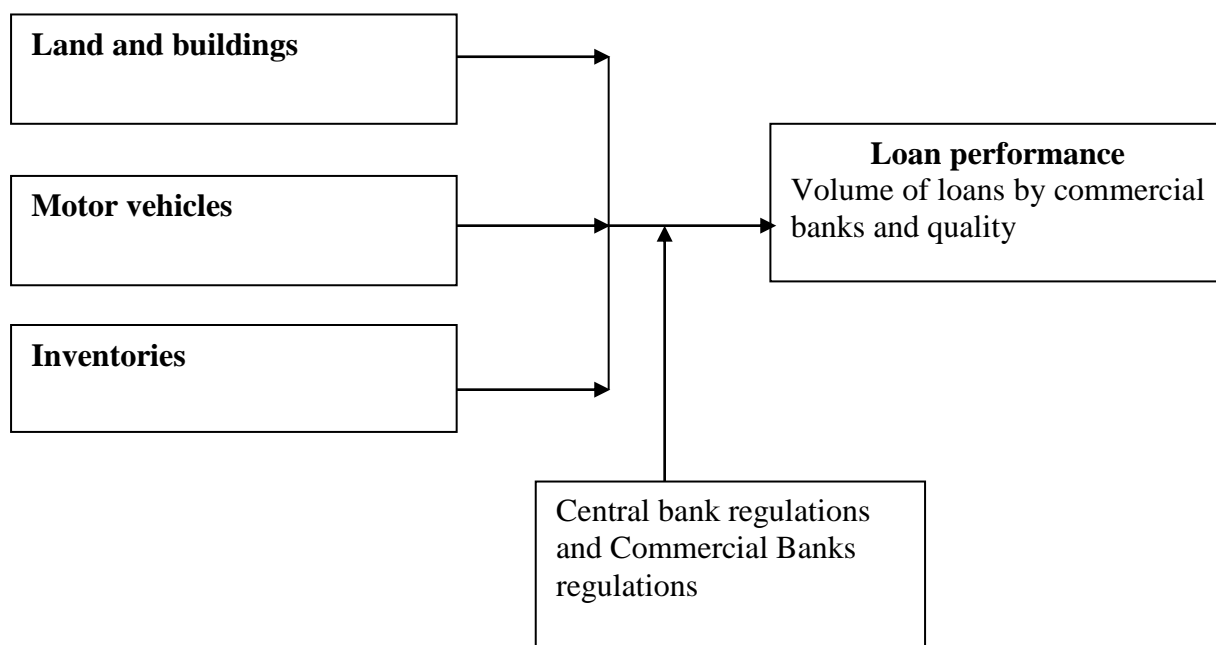
A study by Inderst and Mueller (2007) predicted that observably riskier borrowers should pledge more collateral and that, holding observable borrower risk constant, collateralized loans are more likely to default *ex post*). This claim is supported by Jimenez and Saurina (2004) and Berger, Frame, and Ioannidou (2011) who found out that *ex post* nonperformance of loans (delinquency or default) is positively related to collateral pledges. Similar sediments are shared by Dennis, Nandy, and Sharpe (2000) who supported the fact that riskier borrowers indeed

appear to pledge more collateral and that, controlling for observable borrower risk, collateralized loans indeed appear to be riskier in the sense that they default more often (Jime´nez and Saurina, 2004; Jime´nez, Salas, and Saurina, 2006) besides having worse performance in terms of payments past due and nonaccruals (Berger and Udell, 1990). Berger et al., (2011) further point out that Ex post theories of collateral imply the existence of three individual channels with different predictions for the empirical relation between loan risk and collateral: the “lender selection” effect under which observably riskier borrowers are required to pledge collateral; the “risk shifting” effect that encourages borrowers to shift into safer investment projects when collateral is pledged; and the “loss mitigation” effect in which collateral reduces losses in the event of borrower default. Berger et al. (2011) observed that that the ex post theories are empirically dominant, although the ex ante theories are valid for customers with short borrower-lender relationships that are relatively unknown to the lender.

Conceptual Framework

Figure 1 shows the conceptual framework of the study. The independent variable is perceived to be collaterals which constitute inside motor vehicles, land and buildings and inventories. The dependent variable is perceived to be volume of loans of commercial banks. When an organization has high value collateral, the organization is likely to induce financial institutions to advance more loans to the SMEs. Besides, these high value collaterals enhances the profitability of the firm in the since the firm can access more loan capital at reduced interest rate.

Figure 1: Conceptual Framework



Research Gap

From the literature review above, it is evident that not much has been studied in this area. Kunieda and Shibata (2011)'s study only concentrated on Collateral Constraints and Legal Protection of Lenders while Menkh off et al., (2006) was only interested in Collateral-based lending in emerging markets. Pozzolo (2004) studied on possible differences between the roles of inside and outside collateral while Leitner (2006) researched on using collateral to secure loans. The only research which is closely related to this study was Ono et al., (2008)'s study which was on the effects of collateral on SME performance in Japan. However, Kenya and Japan are quite diverse economically. This is so because Kenya is a third world country while Japan is a first world country. Hence, the business environment in these countries is not likely to be the same. It is for this reason that this independent study was undertaken so as to bridge the gap.

RESEARCH METHODOLOGY

Descriptive research design was adopted. The study target population was 198 respondents consisting of 42 respondents who are bank employees dealing with loans processing and compliance department and 156 respondents who are entrepreneurs of small and medium micro enterprises operating in kisii town, Kisii County. Kothari (2004) defines target population as the total enumeration of the subjects under investigation.

Primary data was collected using questionnaire. The semi-structured format certainly allowed inclusion of both open ended and closed-ended question items, which are vitally essential in limiting response irrelevancies while facilitating timely analysis (Nyanamba, 2011).The researcher also requested for secondary data from the respondents for scrutiny.

The data collected was tabulated, then analyzed using descriptive statistics. Descriptive statistics involved the use of percentages, frequency tables, weighted averages and presented using graphs, and tables.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive statistics have been used to discuss the findings of the study. The study targeted 250 Respondents from which 198 filled in and returned the questionnaires making a response rate of 79.2 % this response rate was satisfactory to make conclusions for the study as Cooper and Schindler (2003), states that a response rate of between 30 to 80% of the total sample size can be used to represent the opinion of the entire population.

Effects of motor vehicles used as Collaterals on provision of loans to SME

The researcher sought to know how easy it is to acquire loans by the clients. The results obtained were recorded and analyzed as shown in table 1.

Table 1 Relating to the effects of motor vehicles as Collaterals on provision of loans to SME

Extent of effect	Frequency	Percentage	Cumulative %
Very easy	100	50.50	50.50
Easy	50	25.25	75.75
Not easy	22	11.11	86.86
Very hard	8	4.05	90.91
Not sure	18	9.09	100
Total	198	100	

The study sought to establish how clients could easily use motor vehicles as collaterals to access credit from commercial banks 50.50% of the respondents agreed that other banks are likely to advance credit very easily when clients are using motor vehicles as security as shown by percentage of 50.50%.

Table 2 Statements relating to willingness of Banks to Accept Motor Vehicles Collaterals

Allowance	Frequency
Yes	190
No	8
Total	198

From the table most of the respondents showed that banks are willing to advance loans to their clients at 190 out of 198. This shows that a high percentage of the banks accept motor vehicles as collaterals by clients willing to take loans. This came out clear as most banks preferred the use of motor vehicles as security in order to reduce the risk of default. Pozzolo (2004) studied on possible differences between the roles of different collaterals and found out that outside collateral is more effective in dealing with debtor incentive problems because it increases the value of assets that the lender can withhold in the event of default.

Default Rates of Clients Who Use Motor Vehicles as Collaterals to Secure Business Loans

The survey sought to establish the rates of default by the clients on using motor vehicle as collaterals by clients as to secure loans in the banks. The findings were recorded and analyzed in the table 3.

Table 3. Relating Default Rates of Clients Who Use Motor Vehicles Collaterals

Rate	Frequency	Percentage	Cumulative percentage
Very high	0	0	0
High	8	4.05	4.05
Moderate	10	5.05	9.10
Low	30	15.15	24.25
Very low	150	75.75	100
Total	198	100	

The study sought to establish the default rate when clients use motor vehicles as security to access credit from commercial banks. From the table respondents agreed that when motor vehicles are used as security default rate is very low at 75.75%. This shows that very few clients default when using motor vehicles as collaterals to secure funding from banks. Menkhoff in 2006 found out that Thai banks use collateral primarily to reduce the higher credit risks of small and relatively young firms. This is also supported by Safavian et al. (2006)s' research which cites a study done by World Bank which demonstrated that in a competitive lending environment, the risk reduction that results from adopting an effective secured lending system can be passed on as savings to the borrower in the form of lower interest rates.

Table 4. Allowance of Clients to Use Land and Buildings Collaterals to Secure Loans

Allowance	Frequency	Percentage	Cumulative percentage
Yes	40	20	20
No	158	80	100
Total	198	100	

The findings sought to establish the extent to land and buildings are used as collaterals to secure loans in the banks. From the analysis in table 4, land and buildings are not most commonly used to secure loans by clients at 80%..It was found out that there are serious legal procedures followed when using land and buildings as security to secure bank loans. Majority of the banks discourage clients from using land and buildings as collaterals. This concurs with (FSD-Kenya, 2009) which established that, Land system in Kenya has its unique challenges, making clearing of the said asset quite slow and costly. Berger and Udell (1990), observed that net charge offs are likely to be higher when a loan is secured. These include costs such as of transferring control of the collateralized assets, which often involves legal and other administrative costs (Leitner, 2006).This is especially when land is used which increases the cost of obtaining loans.

Default Rate of Clients Using Inventories as Collaterals.

The researcher sought to establish the rate at which clients can default when using inventories as collaterals to secure loans. The findings were recorded and analyzed as shown in the table.

Table 5. Default Rate of Clients Using Inventories as Collaterals

Default rate	Frequency	Percentage	Cumulative percentage
Very high	67	33.85	33.85
High	47	23.75	57.60
Moderate	42	21.20	78.80
Low	30	15.20	94
Very low	12	6.00	100
Total	198	100	

From the analysis in table 5, above it shown that default rate is high when client use inventories as collaterals at 33.85%. However 6.00 % of clients record a low default rate. From the findings above 33.85% of client who use inventories as collaterals are more likely to default, and at a distant 6% of clients who used inventories were able to repay their loans to completion without default. Usually assets are pledged and incase of default the lender is able to seize the properties and auctioned to repay the loans which client default. In most cases clients who use inventories highly default because no serious personal attachments given to such securities unlike motor vehicles, land and buildings. This concurs to Leitner who said, Collateral refers to assets pledged by a borrower to secure a loan (Leitner, 2006), so that the lender can seize these assets if the borrower does not make the agreed-upon payments on the loan, so the lender has some protection if the borrower defaults. In his view therefore, the use of collateral can make it easier for firms to obtain loans to finance their investments.

IMPLICATIONS FOR FURTHER RESEARCH

From the findings of the study, given there are major positive effects of the lending policies on access to credit by SMEs in kisii county, there is need for further research therefore to determine the effect of the lending policies in other regions . There is also need for further research to determine the effect of the step/progressive lending on development on rapid growing enterprises since the study only noted that there was strict adherence of this mechanism on the previous borrowed credit. And there should be further research done on the possibility of lending based on character and ability of a client without using collaterals.

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