

**FINANCING PRACTICES AND ACCESS TO FINANCIAL SERVICES
AMONG SMALL AND MEDIUM ENTERPRISES IN KENYA**

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**A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL
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DECLARATION

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DEDICATION

This thesis is dedicated to my mother and late father, Agness Namarome and Alfred Kiring'a Cheloti respectively for nurturing and mentorship. Further, Peninah my wife and Mike, Nicholus, Esther as well as Olivia my children for unwavering support and inspiration during the entire period of study.

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OPERATIONAL DEFINITION OF TERMS

Access to Financial Services	Level of access to credit services from financial institutions measured by accessed amount; bank loan, overdraft, micro loans, SME loans and asset based loans
Asset Based Lending	Assets are used as collateral for acquiring credit services, where financiers value specific assets under collateralization measured by collateral value, collateral adequacy and collateral quality.
Credit Information Sharing	A process of sharing credit information by financiers to users for reason of facilitating credit granting through credit reference bureaus.
Credit Rationing	Limiting access to loans by financiers based on borrowers provided requirements.
Financial Institutions	Banks and microfinance institutions. Lending that give loans and accept deposits from customers'
Financial Literacy	Entrepreneur's financial knowledge, investment literacy and debt literacy mandating proper judgement to improve financial health of an enterprise.
Financial Statement Lending	Guaranteeing credits centred on strength of a borrower's financial statements measured by financial reporting, quality of financial statements and financial information available.
Financing Practices	Rules and regulations observed by financial institutions before granting loan to SMEs measured by relationship lending, asset based lending and financial statement lending.
Information Asymmetry	Refers to a circumstances wherever one contracting entity possess added advantage with better information in comparison with participating party.
Lower Eastern Kenya	Machakos County, Kitui County and Makueni County

Relationship Lending	Refers to confidence established between the lender and the borrower as a result of repeated interaction measured by relationship duration, relationship scope and borrowing concentration.
Medium Enterprise	Refers to business enterprises that employ between 50 - 99 employees.
Small Enterprise	Refers to business enterprises that employ between 10 - 49 employees.
Small and Medium Enterprise	Business that have a private ownership, minimal market share and operation and financing with informal organizational structure and aren't large enterprises comprising 10-99 employees.

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
BFI	Bank and Financial Institutions
CBK	Central Bank of Kenya
CCA	Caucasus and Central Asia
CHFS	China Household Finance Survey
CIS	Credit Information Sharing
CRBs	Credit Reference Bureaus
COVID	Corona Virus Disease
FGLs	Feasible Generalised Least Square
FSD	Financial Sector Deepening
GDP	Gross Domestic Product
IMF	International Monetary Fund
ITA	International Trade Centre
IFRS	International Financial Reporting Standards
KBA	Kenya Bankers Association
KCSE	Kenya Certificate of Secondary Education
KNBS	Kenya National Bureau of Statistics
KU	Kenyatta University
MBA	Masters of Business Administration
MENA	Middle East, North Africa, Afghanistan and Pakistan
MMR	Moderated Multiple Regression
MPSR	Regression Movable Property Security Rights
MSEA	Micro and Small Enterprises Authority

MSEs	Micro and Small Enterprises
MSMEs	Micro Small and Medium Enterprises
NACOSTI	National Commission for Science Technology and Innovation
NPLs	Non-Performing Loans
SACCOs	Savings and Credit Co-operatives Societies
SME	Small and Medium Enterprise
SMEs	Small and Medium Enterprises
OECD	Organization for Economic Co-Operation and Development
OLS	Ordinary Least Square
PhD	Doctor of Philosophy
POT	Pecking Order Theory
UK	United Kingdom
UN	United Nation
UNCTAD	United Nation Conference on Trade and Development
US	United States
USA	United States of America
VIF	Variance Inflation Factor
WB	World Bank

ABSTRACT

Policy makers and scholars acknowledge the significance of small and medium enterprises in stirring the economic growth and development in developing and developed economies. In spite of the generally fast pace by which access to financial services for small and medium enterprises is being established, significant segments of the small and medium enterprises sector do not yet benefit from the expansion. Access to financial services by small and medium enterprises from financial institutions has been declining, falling from 27% in the year 2013 to 23.4% in the year 2015 then dropped to 17% in year 2016 and then by 2017 the success rate was only 34%. Empirical studies have failed to yield consensus on the effect of financing practices variables; relationship lending, asset based lending and financial statement lending on access to financial services. This study was therefore undertaken to investigate the effect of financing practices on access to financial services by small and medium enterprises in Kenya. The objectives of the study were; to establish the effect of relationship lending, asset based lending and financial statement lending on access to financial services by small and medium enterprises in Kenya. The study further sought to establish the mediating effect of financial literacy and moderating effect of credit information sharing on the relationship between financing practices and access to financial services. The study was based on credit rationing theory, information asymmetry theory, pecking order theory as well as financial intermediation theory. The philosophical foundation of the study was positivist. The study utilised explanatory research design. The target population comprised 4,253 small and medium enterprises in Kenya. A sample size of 366 SMEs was utilised by the study. The study adopted multistage sampling technique to obtain the SMEs respondents. Primary data was employed and acquired through semi structured questionnaires. Pilot testing was done on 37 small and medium enterprises owners. Validity of the research instruments was ensured through face and content validity. Cronbach's Alpha with a coefficient of above 0.7 was engaged to test reliability which was considered acceptable. Diagnostic tests like Shapiro-Wilk test was used for normality test. Variance inflation factor was used to test multicollinearity and Levene test as a test for heteroscedasticity. Data was analysed using descriptive and inferential statistics. Stata software version 17 and Heckman two step selection model were applied in analysis of data. Hypotheses were tested at 95% confidence interval for acceptance or rejection. The study findings showed that relationship lending and financial statement lending had a positive and significant effect on access to financial services among small and medium enterprises in Kenya. Asset-based lending was found to have a negative and insignificant effect on access to financial services among small and medium enterprises in Kenya. The study established that financial literacy had a significant mediating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya. The results established that credit information sharing had insignificant moderating effect on the relationship between financing practices and access to financial services among the small and medium enterprises in Kenya. The study concluded that financing practices play a critical role in access to financial services by small and medium enterprises in Kenya. The study recommends that small and medium enterprises owners should strive to meet the terms and conditions provided by lending institutions in their various financing practices while management of lending institution should adopt financing practices favourable to small and medium enterprises to increase their access to financial services.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Small and Medium Enterprises (SMEs) are lifeblood and engine of every country's economic growth and development. SMEs contribute immensely in attaining key development objectives of countries through creation of employment, promoting income equity, stimulating industrialisation, support economic growth, nurturing innovation and creativity and boosts business climate (OECD, 2017). It is acknowledged that small and medium enterprises in the world represents about 90% of enterprises (World Bank, 2018). SMEs contributes more than 55% of Gross Domestic Product (GDP) and more than 65% of jobs in developed economies (Singh & Venkata, 2017). SMEs represents more than 60% of gross domestic product as well as more than 70% of jobs in developing countries, more so they account to more than 95% of jobs and over 70% of GDP in middle income economies (Zafar & Mustafa, 2017).

Regardless of the tremendous contributions to the economy, SMEs experiences challenges in acquiring timely, affordable and adequate loans (Rithaa, Munene & Kariuki, 2019). Unreliable access to credit by enterprises has been consistently quoted as problematic by SMEs (International Finance Corporation, 2019). SMEs encounters external obstacles in terms of financial problems as a result of deprived access to financing (Yoshino & Taghizadeh-Hesary, 2017). Studies across the world, point out that owners of SMEs regularly rank acquisition of credit as a major restriction to their survival and expansion (Bakhtiari, Breunig, Magnani & Zhang 2020; Kumar, 2018; IMF 2018; World Bank, 2017; Sitharam & Hoque, 2016 & World Bank, 2015).

According to Fuentes (2018) Cambodia SMEs faces challenges in accessing finance as a result of more credit access requirements, long credit processing time and higher cost of borrowing. In Vietnam, according to Nguyen, Gan and Hu (2015) SMEs comprises 98% of firms. However, most of SMEs acquisition of loans from formal financial institutions is restricted. Wangmo (2017) opined that in Bhutan SME sector is small mainly due to scanty monetary information, collateral requirements and level of internal finance are obstacles facing SMEs in accessing bank loans. Chowdhury and Alam (2017) testified that insufficient acquisition of credit from lenders is a key impediment for thriving of Bangladesh SMEs. Berger (2017) confirmed that financial structure in Nepal is comparatively strong, however bank controlled at 79% of the financing assets. In spite of bank supremacy, they merely fund 2.5% of SMEs. Equally, in the region of Caucasus and Central Asia (CCA) as well as Middle East, North Africa, Afghanistan and Pakistan (MENAP) SMEs access only 7 % of bank loans (Fouejieu, Ndoye & Sydorenko, 2020).

In Africa small and medium enterprises access to credit facilities prospects remains unclear. Asare, Amankwah and Ankoma (2019) deduced that SMEs in Ghana faces inadequate access to capital markets as a result of perceived hostile credit repayment terms and extraordinary cost of borrowing. Decline in bank financing was confirmed in Nigeria by Central Bank of Nigeria (2017) where loans to SMEs reduced from 7.5% to 0.13% within 2003 and 2012 respectively then dropped to 0.07% in 2016. Chidoko and Matamanda (2017) presented that Zimbabwe SMEs view collateral requirement as the main barrier to access loans. Osano and Languitone (2016) in the context of Mozambique noted that SMEs are financially constrained because of unavailability of collateral, high interest charges, absence of quality financial plans and unavailability of financial statements. In Ethiopia, Nega and Hussein (2016) asserted that limited loans

has contributed to SMEs to perform dismally although being potential in economic growth. Arinaitwe and Mwesigwa (2015) confirmed that lack of collateral security by SME's, high interest rates charged, lack of audited books of accounts and financial institutions regarding SME's as high risk borrowers limits SMEs in Uganda from accessing credit.

In Kenya the essential role of economic development, poverty reduction and job establishment is attributed to SMEs as underscored in Kenya's Vision 2030 and Big Four agenda in industrialisation objective and long term development blueprint. In spite of the significance, above 85 % small and medium enterprises cannot acquire funds from financial institutions (Mwirigi, Gakure & Otieno, 2019; Mbogo, 2013). This impediments of acquiring credit facilities by SMEs originates from strict loan granting terms set by financiers. Viffa Consult (2018) affirmed that access to credit is placed as the most problematic in starting and running the business in Kenya as reported by 77% of SMEs owners.

1.1.1 Financing Practices

Financing practices are lending policies observed by financial institutions when granting loan to SMEs. A lending policy is a declaration of procedures, principles and philosophy that lenders follow when financing the customers (Nyachae & Warue, 2020). The decisions undertaken by the lending institutions involving awarding credit services are structured and outlined in funding policies. Financing practices can be viewed as set procedures and rules applied when extending finance to enterprises. In order to shield financial institution from credit risk, the rules and regulations are structured to minimise default in clients (Kamotho & Njoka, 2022). Financial

institutions have a preference of financing certain sector as compared to others viewed as risky for instance SMEs.

Due to exceptional environment of SMEs that has led to constraints in their viability assessment, financiers have invented certain financing practices such as financial statement rule, asset based rule, relationship lending and credit scoring to minimise credit risk (Ohachosim, Onwuchekwa & Ifeanyi, 2017). These rules are set to ensure recouping of all advanced funds by financial institution (Gizaw, Kebede & Selvaraj, 2015). SMEs evaluation and assessment principles are categorised into financial statement lending, asset based lending, relationship lending and credit scoring lending (Kusi, Agbloyor, Ansah-Adu & Dako, 2017).

The goal of financial institutions is to maximize the profit as a result they will minimize credit risk and increase returns on credit facilities by trading with borrowers who can pay high cost of credit and have low credit risk. (Boushnak, Rageb, Ragab & Sakr, 2018). Financiers always utilise certain criteria when assessing loan requests before awarding credit. Angilella and Mazzu (2017) confirmed that banks are key in awarding of credit to SMEs when addressing constraints to funding. However, strict rules and regulations are observed before the loans are granted hence weakening access to funding by SMEs. When financial institutions requirements are not met by the borrowers requests, funding gap emerges leading to adverse loaning decision as well as limiting SMEs credit accessibility (Boushnak *et al.*, 2018).

Relationship lending leads to granting of credit facilities by financial institutions to the borrower basing on the securing firm personal confidential information for a lengthy duration by means of creditors networking. Adverse selection problem can be reduced as a result of accurate analysis of enterprise and the owner due to information collected.

Information opaqueness for the financier decreases while the debtor creates a reputation as a relationship advances with time acting as collateral. Enterprises with longer lending relationships are able to acquire loans at ease and at a reduced cost of credit (Beatriz, Coffinet & Nicolas, 2018). Relationship financiers depend on soft information about the entrepreneurs qualitative features and personal data on the borrowers. Concentration of borrowing, relationship scope and relationship duration are the common measure of relationship lending.

The length of time the bank has provided financial services to the SME indicate relationship duration. Relationship duration has a positive relationship with information access that enhances increase in the financier's willingness to offer credit, hence accessibility of loans to the borrower's. Lengthier duration of banking relationships eases the loan terms, ameliorates credit restrictions and henceforth raising value of the firm (Ekpu, 2015). Interaction between the borrower and the bank over various services reflect relationship scope. Borrowers credit terms and lenders loaning comparative advantage results from information from these relations. Credit settlement ability for example results from assessing client's deposit account (Mureithi-Ollows, 2017). The number of bank relationships that a debtor upholds show concentration of borrowing. Single exclusive association encourages closer links between the borrower and financier but increase in relationships makes the borrower more risk due to weak monitoring. More borrowing concentration permits SMEs to acquire more credit at a lower risk premium (Bakiciol, 2017).

Asset based lending considers collateral of assets in order to extent credit services, where financiers value specific assets under collateralization. Bank of America Merrill Lynch White Paper affirms that asset based lending is a form of secured lending that is

centred predominantly on the adequacy, value and quality of the collateral pledged by the borrower (Tagoe, 2016). SMEs credit requirements is usually above their assets that are difficult to collateralise and have low turnover. SMEs experience financial constraints due to inability to meet collateral requirements (Haider, 2018). Lending institutions require collateral that act as a bait to borrowers who intent to default as well as convince the financiers that they will be able to repay the loan granted. Collateral security advanced for a loan can have absolutely effect on credit granting decision for SMEs because of minimizing credit risk (Nguyen, 2016). Collateral with high quality indicates more trustworthy borrower as well as nurturing decent behaviour in consuming loan, facilitating bank to alleviate moral hazard and adverse selection problems (Le & Nguyen, 2019).

Banks constantly demand from risky borrowers' highly liquid collateral to ease moral hazard as well as protecting themselves from credit risks. Japhet and Memba (2015) endorsed that good quality and more liquid collateral are preferred by lenders when granting loans and benefit SMEs due to rise in access to loans. Collateral is a constructive indicator for financiers to minimize moral hazard as well as adverse selection since only credit worth borrowers might give collateral (Rahman, Rahman & Belas, 2017). Collateral provision signifies good credit quality to financial institution thus increasing access to credit services. Veiga and McCahery (2019) approved that collateral security is the chief reason for SMEs failure to accessing funding from financial institutions.

Financial statement lending comprises guaranteeing credits centred on strength of a borrower's financial statements. Nemoto, Yoshino, Okubo, Inaba and Yanagisawa (2018) acknowledged that financial institutions need to assess credit risk and solvency

of SMEs before extending credit as a result financial statements are always essential. The decision to give a loan and the conditions of the credit agreement are predominantly based on the strength of the balance sheet, income and cash flow statements. Financiers examine financial statements to measure a business's current performance and ability of a firm to influence settlement of loan, overall credit risk and forecast future performance (Mashkour, 2020). SMEs with lengthy histories, comparatively transparent and robust audited financial statements are eligible for financial statement lending. SME with audited financial statements have high chance to acquire loans at a lesser cost than those lacking. Mbatha and Ngibe (2017) affirmed that maintaining financial records is critical for every enterprise but SMEs fail owing to insufficient, erroneous or missing books. Absence of organisational accounting expertise for decision making and non-existence of practical skills to make financial statements remain considerable problem to evolving of SMEs as is the failure to access loans (Karanja, Mwangi & Nyakarima, 2014). In respect to accounting standards, SMEs have a tendency to have inadequate financial records and involve limited or no experts unlike large firms Ezeagba (2017) as a result SMEs finds it expensive and beyond their capability and expertise to conform to accounting standards. Deficiency of reliable information revealed in income statement, cashflow statements and statement of financial position is the prime SMEs obvious trouble to loaning.

1.1.2 Access to Financial Services

Access to financial services refers to provision of credit, savings and insurance to needy business and individuals (Omondi & Jagongo, 2018). Financial access enables enterprise to take insurance cover against perils, expand economic undertakings and make payment as well as future savings (Nepal Rastra Bank, 2021). Access to financial services can be seen as the ability of businesses to acquire services of risk management,

insurance, payments, deposits and credit. Chaulagain (2022) defines access to financial services as easiness of acquiring banking services by firms and individuals. Access to financial services is a factor that determines performance of a business by exploitation of growth business prospects, effective asset allocation, improving entrepreneurship and innovation as well as provision of enterprise working capital (Fowowe,2017).

Access to financial services as credit payments and saving are critical in improving poor peoples standards of living, reduce income inequality, enhance productivity, widen investment chances and growth (Barajas, Čihák & Sahay, 2017). Offering to the underprivileged with credit, insurance, leasing and financial literacy training mount to access to financial services. Inability to access financial services can inhibit economic welfare and income prospects for SMEs, rural inhabitants, youth, women and poor individuals. Financial access services comprises financial literacy that enables enterprise management, savings and credit (Hameed, Hussin, Azeem, Arif & Basheer). Credit services is considered the cornerstone of all financial services as it eases difficult of SMEs growth and enhances equal playing fields for diverse size of enterprises (Gyimah & Boachie, 2018). SMEs limited access to financial services emanates from limited access to formal finance and failure to deliver physical security (Jagongo, 2017).

Access to financial services denotes level of access to credit services by SMEs from financial institutions. In spite of critical role played by SMEs, they are awarded extremely lesser credit share from financial institutions (Durst & Gerstlberger, 2020). Inability to access financial services by SMEs is due to financial sector policy distortions and information asymmetries (Ayyagari, Demirgüç-Kunt & Maksimovic 2017). The constraints faced by SMEs in accessing financial services is attributed to

their perceived higher risk profile. SMEs find their financial tap dried up entirely owing to banks' credit policy (Mutwiri, 2021). SMEs go through tedious and lengthier procedure when securing finances from formal financial institutions hence resorting to informal channels (Giz, 2021).

1.1.3 Financial Literacy

Financial literacy is financial knowledge, investment literacy and debt literacy mandating proper judgement to improve financial health. Financial literacy refers to financial understanding and skills that enables individual to implement authentic financial organisation policies in their business (Gathungu & Sabana, 2018). Financial literacy works as a mediator amid comprehensive personal finance with financial education (Son & Park, 2018). The main mediation strategy utilised to boost financial inclusion to financially disadvantaged citizens is financial literacy (Lyons, Grable & Joo, 2018; World Bank, 2018; Yuan & Jin, 2017).

Information asymmetry amid borrowers and financiers is reduced when the borrower communicate the financial needs to financiers but failure to do so creditors are less likely to loan owing to insecurity on usage of finances. The reason is that the financially excluded population require financial literacy training about accessing and utilizing financial facilities and shield from financial malpractice particularly while seeking credit (Lyons, Grable & Zeng, 2019). Financial literacy deficiency is recognized as a key reason for restrictive access to credit. Financial literacy makes SMEs owners to become experienced users of financial services.

The presence of knowledge and ability in good financial management is expected to encourage businesses to access finance or use banking services, helping in provision of working capital for them which in turn affect the performance of SMEs. Inganga, Njeru,

Ombui and Tirimba (2014) asserted that financial literacy is the major obstacle to acquire credit from formal financial institutions. A financial literate entrepreneur is knowledgeable when making decisions on financing and investment. SMEs owners with proper financial literacy can acquire credit facilities without difficulties.

1.1.4 Credit Information Sharing

A moderating measure aimed at helping financiers understand the repayment history of the borrower and reward the good borrowers is regulated by Credit Reference Bureaus (CRBs) (Otieno, Nyagol & Onditi, 2016). Credit information sharing benefits both lenders and borrowers hence increases economic activity of a country. Credit information sharing enables financiers to have knowledge of borrowers' history of repayment, outstanding loan size and credit worthiness (WB, 2018). Credit bureaus have enabled borrowers' information availability which assists financiers to come up with appropriate cost of credit due to proper risk evaluation and thus enables ease access to financial services by borrowers (Chavez, 2017). KBA (2012) explained that information sharing through credit reference bureaus has increased access to loans while lessening the cost of credit as borrowers are sanctioned and rewarded using past payment behaviour.

Credit information sharing can reduce information asymmetry arising from moral hazard and adverse selection (World Bank, 2018). SMEs owners who require credit can be denied because of adverse selection even when collateral is present and have ability to acquire credit at a higher cost. SMEs opaqueness, agency problem, information asymmetry with increased cost of credit deters SMEs owners from acquiring loans. SMEs are incapacitated with knowledge in order to produce quality financial statements, have information opacity and limited asset to collateralise (Sari, Rahmatika,

Fajri & Muttaqin, 2020). Martinez, Maria and Singh (2014) opined that improving credit information sharing policies through CRB can lead to increase in SMEs funding by 7 to 8 % and a decline in interest rate by 5%. Credit information sharing has been well-thought-out to be encouraging integrity and decreasing the information value that financiers have over their borrowers, as a result low cost of borrowing emerges and improved access to loans (Brown, Ongena, Popov & Yesin, 2011).

1.1.5 Access to financial Services by Small and Medium Enterprises in Kenya

SMEs are business that have a private ownership, minimal market share, work and finance with informal organisational structure and aren't large enterprises comprising 10-99 employees. SMEs have positive significance in sustainable economic development, poverty reduction as well as job creation in nations (Veiga & McCahery, 2019). Small and Medium Enterprises comprise 98% of firms in the country, creating 30 % of employment and 3% of gross domestic product yearly (Central Bank of Kenya, 2017). In Kenya SMEs has generated a lot of interest in relation to their importance to the achievement of development goals. They contribute a third of GDP and have created jobs for 78% of workers and constitute 80% of business (Krishnan, Were & Te Velde, 2019).

The significance of SMEs in Kenya in economic development was brought into public interest through a report of 1972 on equity, income and employment by United Nation Development Programme (Ndede, Wawire & Mbewa, 2015). The country's endeavour in attaining economic growth and development have instigated plans to enable the growth of SMEs. These policies are meant to overcome the constraints that are faced by SMEs which include; inadequate access to credit, inappropriate technology, lack of financial literacy and exorbitant transaction charges and poor networking (Obebo,

Wawire & Muniu, 2018). In Kenya numerous sessional papers through time have been established to handle the predicament of SMEs; Micro and Small Enterprises for Wealth and Employment Creation for Poverty Reduction paper No 2 of 2005, Small Enterprise and Jua Kali paper No. 2 of 1992 and Economic Management for Renewed Growth paper No.1 of 1986 (KNBS, 2016).

SMEs are plagued with funding problems exposing them to credit risks that hinder their expansion to enjoy the benefits accrued to large scale operations. SMEs are viewed as risky and attract less the banking sector's credit (FSD-Kenya, 2017). When SMEs find themselves poorly serviced by the financial institutions, their growth and development can be restricted leading to deterioration of the national economy. The financing sector contribution to economic development and growth has been weakened by non-performing loans prompting financiers to recede from providing loans to borrowers (Ndede, Wawire & Mbewa, 2015).

According to KNBS (2016) banks finance 5.6 per cent of SMEs, despite at least four out of every five small (87.9%) and medium (80.6%) enterprises owning a bank account. Small and medium enterprises as a result encounters difficulties while acquiring the credit to fund their activities. According to survey conducted by Kenya Bankers Association (KBA) between April 2017 and June 2017 indicated that out of the 3.2 million SMEs who applied for a loan from banks between the month of May 2017 and June 2017 only 1.1 million had their loans approved (KBA, 2017). This means that over 2 million applications were rejected representing 34% success rate. Further the survey revealed that loan application and disbursement over the same period dropped from 2.2 million to below 750,000 representing 32% decline. SMEs loan approval by banks is very minimal, as a result more SMEs have failed to secure funding

from this financial institutions (KNBS, 2016). Twenty five percent of adults in Kenya have no access to credit as established by CBK (2017).

1.2 Statement of the Problem

There is growing agreement that a better access to credit particularly bank loans and credit facilities for SMEs can boost their performance and consecutively empower achievement of country's developmental goals and economic growth. However small and medium enterprises encounters obstacles in their endeavour to fund their business due to credit acquisition predicaments (Ndede, Jagongo and Mbewa, 2017).

From the foregoing background, it's evident that SMEs are constrained in accessing financial services. Banks' lending to SMEs has been reducing over time, falling from 27% in 2013 to 23.4 % in the 2015 periods (Berg, Fuchs, Ramrattan, Totolo & CBK, 2015). However, a survey conducted by KBA in 2016 revealed that bank loans to SMEs had declined further to 17% (CBK, 2018). This was emphasized by a survey conducted by KBA in 2017 which showed that for any loan application done by SMEs, the success rate was 34%. Failure by SMEs to secure credit from banks is estimated to have lowered growth in 2017 by 0.4% (CBK, 2018). Banks finance 5.6 per cent of SMEs, despite at least four out of every five small (87.9%) and medium (80.6%) enterprises owning a bank account with the banks (KNBS, 2016).

The previous studies conducted provided mixed conclusions on direct relationship between assets based lending, relationship lending and financial statement lending on access to financial services. Some of the studies recognised a positive and significant interaction between financing practices and access to financial services (Aladejebi & Oladimeji, 2019; Mwirigi, Gakure & Otieno, 2019; Boushnak, Rageb, Ragab & Sakr, 2018; Chandio, Jiang, Wei, Rehman & Liu, 2017; Manaye & Tigro, 2017) whereas as

other studies established a negative and insignificant relationship (Iswoyo, Ermawati & Nugroho 2019; Githinji, Kiragu & Kiai, 2019; Rahman, Rahman & Ključnikov, 2016). The prior studies were conducted from other countries and focused on large or small enterprises utilizing a narrow scope, to bridge this contextual gaps the current study focused on SMEs in Kenya.

Earlier studies were based on a single financing practices variable (Erdogan, 2019; Angora, Aristei & Gallo, 2017; Bencheikh & Taktak, 2017; Ohachosim, Onwuchekwa & Ifeanyi, 2017) none of them employed all these financing practices in a single study; relationship lending, asset based lending and financial statement lending. Some of previous studies were largely based on logistic regression model design, this methodological gap was bridged by utilising Heckman two step regression model that goes beyond access and no access response to determining the quality of financial services for those who access. Besides, studies done locally focused on asset based lending, ignoring other financing practices like financial statement lending and relationship lending that influence access to financial services, therefore creating an empirical gap issue.

Furthermore the reviewed studies measured the direct relationship between the variables, which necessitated further study on how a moderating variable and mediating variable can be applied to determine the combined interactions of financing practices with SMEs access to financial facilities. This conceptual gap was filled by introducing financial literacy and credit information sharing as mediating and moderating variable respectively. Basing on empirical gaps revealed and access to financial services by SMEs being a critical factor to their success, the study sought to add value to the

existing literature by giving empirical proof on correlation among financing practices with SMEs access to financial services.

1.3 Objectives of the Study

The objectives of the study were centered on general as well as specific objectives.

1.3.1 General Objective

To investigate the effect of financing practices on access to financial services by small and medium enterprises in Kenya.

1.3.2 Specific Objectives

- i. To establish the effect of relationship lending on access to financial services by small and medium enterprises in Kenya.
- ii. To establish the effect of asset based lending on access to financial services by small and medium enterprises in Kenya
- iii. To establish the effect of financial statement lending on access to financial services by small and medium enterprises in Kenya.
- iv. To establish the mediating effect of the financial literacy on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya.
- v. To establish the moderating effect of the credit information sharing on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya.

1.4 Research Hypotheses

H₀₁: Relationship lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya.

- H02:** Asset based lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya.
- H03:** Financial statement lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya.
- H04:** Financial literacy has no mediating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya.
- H05:** Credit information sharing has no moderating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya.

1.5 Significance of the Study

The research findings were the basis of this significance that yield vital information to diverse stakeholders. To begin with policy formulation, the Micro and Small Enterprises Authority (MSEA) can achieve insight in factors influencing granting of financial services to small and medium enterprise as it's tasked to formulate and review policies for this sector. The policy formulated and developed by MSEA can alleviate constraints in access to loan by SMEs and alleviate the persistent problems of SMEs lack of growth and closures. The government will come to the limelight on predicaments that are constraining SMEs when accessing financial services and possibly create policies that can support, ease access to funding. SMEs owners may gain proper knowledge on how financing practices enables and deters access to credit services, hence laying a strategy in future to alleviate the constraints for instance setting a side some assets as collateral to use when in needy of credit as well as develop strong relationship with the bank to boost relationship lending. Providers of financial services, business practitioners may derive important information from the study that can lead

to formation of credit policy that will not only enhance accessibility to loans but also boost affordability by SMEs.

Furthermore, greater benefit will be derived in practice of finance. The financial institutions can know-well the SMEs characteristics that are critical and hence tailor favourable financing model instead of punitive one. This may yields quality lending policies as well as developing friendly and attractive terms for accessing of financial services for SMEs. Likewise Small and Medium Enterprises will attain a practical option on evaluating the usefulness and efficiency of three financing practices: relationship lending, asset based lending and financial statement lending, hence examine the suitability of each method on access to credit services in Kenya. The government of Kenya will benefit from the finding by appreciating the small and medium enterprise in realisation of kenya's vision 2030 that aims at provision of high quality life and achievement of industrialisation. The findings would benefit CBK, Capital Market Authority and Small Enterprises Authority in devising policies that would boost SMEs access to timely, affordable and sufficient credit services.

Finally the findings adds value to theory development by improving theories employed in the study through authenticating this theories with variables of the study. This theories have robustly been applied in other sector but SMEs sector applicability have been scanty. SMEs owners will discover the finding to be useful when making a financing decision basing on theories and so enhancing SMEs worth decision. The study finding, immensely contribute to the literature for upcoming researchers and equally form a foundation for more research in SMEs access to financial services. Consequently, the study provides pertinent reference information to researchers and

academicians to progress research curiosity by identifying the study knowledge gaps then develop a study to fill the gaps

1.6 Scope of the Study

The small and medium enterprises operating in Kenya was the study main focus. The choice of the SMEs was informed by their substantial influence in achievement of development goals as well as economic growth of countries. The study collected data about financing practices, specifically asset based lending, financial statement lending and relationship lending as to establish their effect on SMEs access to financing. The study geographically focused on Lower Eastern Kenya due to the fact that this region posted the least number of those accessing financial services at 3.5% when the country's average financial access was 7.5% for the period 2016-2019 (CBK, KNBS & FSD Kenya, 2019).

The study population targeted was 4,253 SMEs as a result a sample drawn was 366 SMEs. The study focused exclusively on the SMEs that were registered and were licensed to operate in Lower Eastern Kenya. Data collection time frame was within June 2020, employing semi-structured questionnaire. The study period was five years as from 2015 to 2019. This study period was critical for the study since majority of SMEs financial reforms were put in place to enable access to timely, affordable and sufficient services for example The Kenya Banking Amendment Act 2016 (CBK, 2018). The period was selected also due to establishment by KNBS (2016) survey report that SMEs encountered difficulties in access to credit services leading to their closure and stagnation.

1.7 Limitations of the Study

Respondents' targeted were suspicious and unwilling to disclose the information required. This limitation was solved through provision of evidence that the data was meant for academic reasons by producing research license from National Commission for Science, Technology and Innovation (NACOSTI). SMEs respondents' location was difficult to establish for the period of collection of data however this drawback was mitigated by facilitation of socio-economic planning, Budgeting and Revenue from lower eastern counties in provision of SMEs records containing their access information and location.

The study targeted all SMEs in Kenya, however data was collected from samples drawn from Lower Eastern Kenya. Biasness may occur as a result of sample selection but it was handled by increasing representation of the sample through multistage sampling. SMEs owners intended to conceal certain information that appeared confidential touching on firm loan status. This was addressed by having the introductory letter and NACOSTI research license, Appendix 1 and Appendix V respectively and reassuring the respondents that utmost confidentiality of information will be upheld.

1.8 Organisation of the Study

Five chapters made the structure of the study. Addressed in the first chapter; background of the study, problem statement, study objectives, hypotheses, significance of the study, scope of the study, limitations of the study as well as organisation of the study. The second chapter examined; theoretical and empirical literature of the study, summarised the literature review and research gaps and terminated by construction of the conceptual framework.

The third chapter deliberated on research methodology that was utilised to realize the study objectives. This methodologies are; the research philosophy, research design, model specification, operationalisation and measurement of variables, study location, target population, sampling technique, data collection instruments, pilot study, data collection procedure, data analysis and ethical consideration. Chapter four provided empirical results, presentations, interpretations and discussions of the study using both descriptive and inferential statistics in light of the literature reviewed. Chapter five comprised summary, conclusion and recommendations as per the research findings.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides theoretical literature, empirical literature, research gaps and conceptual framework appropriate in answering the research hypothesis of this study.

2.2 Theoretical Literature Review

Theories advanced by scholars concerning hypothesized relationships among variables of the study have been discussed. These theories are; credit rationing theory, information asymmetry theory, pecking order theory as well as financial intermediation theory.

2.2.1 Credit Rationing Theory

Credit Rationing Theory expansively explained by Stiglitz and Weiss (1981) was pioneered by Freimer and Gordon (1965) which focused on financing gap analysis. The theory explains that in a funding market occurrence of equilibrium will manifest when demand for finance equates to supply. Le, Phan and Cao (2021) opined that with presence of costless regulation and symmetry information in credit market, demand and supply interplay will fix interest rate. Credit rationing happens owing to financiers' failure to discriminate borrowers that are worthy and unworthy because of information asymmetries. The theory holds up that credit rationing for firms originates from information asymmetry where financiers modify the risk return causing disequilibrium between supply and demand for credit thus failing to award funds to needy firms (McCarthy, Oliver & Verreynne, 2017). When a client applies for a specific amount of money as loan and is provided less than they requested is termed as credit rationing as referred to Clemenz (2012). Information asymmetry is concerned with the information

of a client for their capability to be given loan and at per the agreed interest rate as assumed by the theory.

Information imbalance among lenders and borrowers in a credit market leads to credit rationing (Jin & Zhang, 2019). Information failure leads to execution of a transaction difficult for a deprived party for negative financial implications (Nyaga, Jagongo & Omagwa, 2020). Equilibrium in credit market is achieved when demand for credit equates supply for credit based on interest rate charged. Credit rationing will take place at optimal interest rate. Any change at this rate causes a decline in financial institution return deterring extension of credit to excess demand (Helsen & Chmelar, 2014). The requirement of a client to be give collateral, absence of adequate records, nonexistence of credit history and poor cash flow influence credit rationing. The study by Chirchir and Maina (2017) revealed that firms with good credit history, older and large enterprises are not denied loans, risky ventures are credit rationed by financial institutions and firms that offer highly valued collaterals are not credit rationed.

Credit evaluation for SMEs is problematic due to absence of reliable and sufficient information resulting to credit rationing. Restrictive extension of credit by financiers is a shield from credit default by unworth borrowers because of incapability of interest rates to modify disequilibrium in loan market in existence of information failure (Aristei & Angora, 2022). The credit rationing theory is important to this study as it ascertains financing practices as causes of unreachability to credit. Access to debt by firms is restricted through non-price terms like asset requirement as security, transaction charges, need of financial statement as well as evidence of bank relationship (Kuhn & Bobojonov, 2021). Wang, Lee and Ko (2020); Jin and Zhang (2019) contend that collateral, financial statements and relationship lending reveals enterprise credit

worthiness thus access to financial services being underpinned on credit rationing theory. Access to financial services by SMEs is restricted by information opaqueness and insufficient credit history leading to their credit rationing (Aristei & Angora, 2022). Credit rationing theory has received criticism, inspite of overwhelming applicability in loan market. The credit rationing theory focuses on bank allocation of available resources while ignoring endogeneity of money creation (Piegay, 1999). Banks always purpose to meet the creditworth borrowers financing demand by regulating the reserves instead of credit rationing (Nyaga, Jagongo & Omagwa, 2020). Information asymmetry being a key factor to credit rationing is seen as inflated capital market as misallocation of capital can arise without credit rationing (Bonnet, Cieply & Dejardin, 2016). Capital allocation in some markets can be very incompetent even though do not suffer from credit rationing rendering the theory untrue (Nyaga, Jagongo & Omagwa, 2020)

2.2.2 Information Asymmetry Theory

In the year 1970, Gerge Akerlof introduced the Information Asymmetry Theory. This theory argues that when two people come together and intend to make a decision on a specific issue, then one of the parties has to have more information than the other. In this case, the client who intends to apply for a loan, normally has information involving the loan usage and possible investment while the loan giver has less information on the borrower which makes the lender make the decision on whether to give the client the loan or not and at what interest rate. The SMEs predicaments originate from fragile financial structure and absence of business information thus mystifying loan access from banks (Mazeri & Saadouni, 2019).

The borrowers are probable to have more information on investments and their information related to risk. The two then tend to have imbalance of power due to

information asymmetry. This causes the financiers to slow the process of transferring funds to the SMEs. This then leads to the conclusion concerning information asymmetry as the main challenge that leads to delay of funds between financiers and SMEs. Banks and microfinance institutions cannot regulate the behaviour of borrowers as a result of imperfect and expensive information, hence they create covenants in loan agreements that reduces credit risks (Nega & Hussein, 2016).

The theory is of great significance to this study by remarking that information imbalance relating to enterprise assets, financial statements and firm-bank relationship reveals likely loan request result. Information that is inadequate and incorrect on SMEs is a basis for constraints of access to financial services (Le, Phan & Cao, 2021). The problem of information asymmetry can be noticeable through total credit request denial, partially debt granting or awarding credit at interest rate beyond risk-adjusted (Kodippiliarachchi, 2018). When information is not available lenders resort to financing practices that screen borrowers credit worth. The screening policies reduces those worth applying for credit and higher interest rate pushes proprietors to undertake more risk ventures causing debt overhang (Camacho & Cho, 2020). This theory is in line with Khuong, Phan and Cao (2021) that financial institutions solving the impediment of transaction costs and information asymmetry in financial market can drive away trade creditors. Information asymmetry is a real problem prevailing tangibly in China firms causing moral problems and adverse selection (Du, Shu & Xia, 2020).

The theory has been criticised in 1970 Akerlof's definition of information imbalance is not a great issue. The party possessing the information in any deal will be willingly to supply the information in consideration of the amount and cost of information to provide (Matagu, 2018). Provision of critical information takes into consideration the

competitors usage to avoid giving them competitive advantage thus equilibrium on what, when and how much information to provide should be maintained (Spread, 2015).

2.2.3 Pecking Order Theory

Myers and Majful (1984) advanced pecking order theory affirming that certain capital structure is given preference in firms financing decision making. The firm first utilizes its own finances and when they are depleted, it opts for a debt and if the debt is not given, they opt for equity. The cost of financing involves the sources of the finances as stated by the pecking order theory. In financial markets, businesses meet costs as they procure, organise and consume funds (Gathungu & Sabana, 2018). The internal retained earnings, external debt and equity are the three major sources of finances of a firm.

Elly and Kaijage (2017) stressed that financing of SMEs follows the order of priority; retained earnings, debt then equity basing on risk level. Owners of SMEs have information of the prospects of enterprises, risks and the investor's value conferring to the pecking order theory. SMEs are not interested in long term borrowing due to high costs of credit that is calculated on yearly basis by financial institutions (Chowdhury & Alam, 2017). SMEs fund their business majorly on pecking order where by internally generated resources are preferred seconded by debt and finally equity (Kanyare & Mungai, 2017). SMEs inclination to internal funding is as a result of information asymmetry predicaments deterring them from accessing loans (Beck, 2013).

Pecking order theory was relevance to this study by aiding understanding SMEs opaqueness and costly information due to unestablished market history (Mugisha, Omagwa & Kilika, 2021). The desire by SMEs proprietor to preserve control and independence by utilising internal finance then debt and finally equity causes opaqueness in the enterprise. POT was significant in explaining financing practices

adopted by financial institutions influences access to financial services by SMEs. This theory in Brazil is employed by proprietors of private enterprises (Zeidan, Galil & Shapir, 2018). Butt, Khan and Nafees (2013) supported utilisation of pecking order theory in Pakistan leasing sector. Bhama, Jain and Yadav (2018) observed that capital structure of the firms in India and China abide by Pecking Order Theory

Pecking order theory drawbacks arises from failure to integrate influence of financial distress chance to invest, agency costs, new share floatation costs and taxes. The theory have failed to show its robustness as key in determination of capital structure of an enterprise. Projects with positive net present value and financial slacks effect is given attention by the theory. Guizani (2020) illustrated that in Saudi Islamic enterprises financing did not adhere to pecking order theory especially during crisis period when use of equity was given first priority compared to internally generated funds and the debt. Yıldırım and Çelk (2021) holds that pecking order theory is invalid when dealing with enterprises that possess low and high leverage as their preference falls to debt and equity respectively. They further observed that during global financial crunch in 2000 to 2009 Turkey enterprises followed financing pecking order but shifted the financing strategy and began leaning on debt in 2010 to 2018 periods. Information asymmetry triggers failure of pecking order theory when indeed it should uphold in small businesses.

2.2.4 Financial Intermediation Theory

Financial intermediation theory established by Diamond (1984) is grounded in this study. The theory reveals connection between savers and borrowers in financial intermediation is facilitated by banks as they serve as a key source of externally generated funds (Akims, Omagwa & Mungai, 2020). The theory posits that in an

economy financially needy problems are solved by financially able agent through financial intermediation platform. Musau, Mwangi and Muathe (2018) elaborates that in financial market, deficit party can acquire funds from surplus party through bank financial intermediaries. The concept clarifies the impact of loans from the bank in economic development. Availing finances to SMEs by banking organization can stimulate SMEs growth.

Financial institutions serve as a mediators by offering loans from saving entity to borrowing entity for investment (Andabai & Eze, 2018). The theory provides a platform for examining bank policy on transactions to screen borrowing customers behaviour to gain the market competitive advantage. Theory aims at minimizing information asymmetries as well as cost of transaction through intermediation process. Information asymmetry costs pertaining to transaction and information amongst financiers and borrowers is lessened in the presence of financial intermediaries. Mungiria and Ondabu (2019) postulates that productive investment can be achieved when funding is availed to firms through bank credit financial intermediation. Bank credit is a loan to a borrower centred on profitability and risk regarding financier's analysis (Chitom & Muogbo, 2018).

Financing intermediation boost effective resource apportionment by reducing the cost of financing between financiers and borrowers. Julia (2018) offers key purposes of banks in financial intermediation process; ameliorate borrowers and investors information problem, assets transformation and provision of financing liquidity. Absence of financial intermediaries leads to informational asymmetry that causes imperfections of the financial market creating occurrence of transactional costs (Levchenko & Ostapenko, 2016). Employment opportunities expansion in a country

originates from accessibility of financial services for investment by SMEs. Therefore, financial institutions should loan any profitable project at any time the expected return exceeds the investment cost. Financial institution intermediation role of credit offerings to SMEs is the main goal in expanding credit services to needy customers according to financial intermediation theory.

Financial intermediation theory was relevant to this study as it enlightened on financing practices employed by banks on access to financial services by borrowers from banks. Credit information sharing as a mediator variable has benefitted from this theory since it's the banks duty to monitor borrowers behaviour through credit rating offered by credit reference bureaus to shield themselves from credit unworthy customers. The theory clarifies importance of financial institutions policies like asset based lending, financial statement lending and relationship lending in financial intermediation to safeguard savers deposits and enable financial institutions growth.

2.3 Empirical Literature Review

This section identified and discussed empirical studies in line with the study objectives and provided critiques and summary of gaps and how the study filled them. Studies on relationship lending, asset based lending and financial statement lending and access to financial services has been elaborated. Financial literacy as a mediating variable influencing financing practices and access to financial services has been described. Equally discussion of credit information sharing moderation effect between financing practices and access to financial service has been explained.

2.3.1 Relationship Lending and Access to Financial Services

Relationship lending has been acknowledged as a key determining factor of access to financial services by small and medium enterprises. The probabilities of SMEs

accessing to loans depends on the presence of earlier relationship by the creditor. Rahman, Belas, Rosza and Kliestik (2017) affirmed that banking relationship is obvious method for financing SMEs because close relationship yields private information to the lender that precipitate funding to SMEs. Financial constraints lessens as lending relationship expands thus easing information asymmetries amongst SMEs and the banks. Banks grant more loans to clients in which they have a long relationship with (Agostino & Trivieri, 2017). Reduced cost of financing is granted to enterprise that maintains an exclusive relationship with the lender (Bakiciol, 2017). SMEs being opaque borrowers benefits more in terms of debt access with lending relationship because they possess inadequate public information (Khan, Li, Williams & Moerman, 2016).

In the study conducted with Erdogan (2019) on access to bank loans by SMEs in emerging markets confirmed that SMEs that embraced lengthier banking relationships improved access to bank loans. Information asymmetry is alleviated by relationship lending resulting to securing high loan facility; a share of more than 10% for those who embrace banking relationship (Li, 2017). The study used logit while the current study used Heckman two step selection for analysis. A direct relationship was carried out in the study while the current study introduced a mediating and a moderating variable. The study looked at a single variable but financial statements and asset based lending variables were also included as independent variables in the current study.

In a study by Behr, Entzian and Güttler (2017) on whether the lending relationship affect access to credit and loans conditions in microlending. The result of the study indicated that when lending relationship becomes intense, loaning approval becomes fast, few guarantee requests thus increasing credit access. These findings also proposed

that lengthier lending relationships between borrower and lender definitely benefit in lessening debtors information asymmetries. The study outcome was supported by Nguyen and Wolfee (2016) who proved that robust government bank linkage led to emergence of atmosphere of lending relationship culminating to SMEs securing increased loan maturity and size. However, the study used secondary data sampled from small borrowers in Mozambique unlike the current study that used primary data from SMEs in Kenya. The study also used a single variable of relationship lending thus the need to look at other variables that affect access to debt financing as was done in current study.

Angora, Aristei and Gallo (2017) analysed the lending relationships and access to loans in Italy. Results revealed that building strong relationships with the bank through multiple banking increases firms access to financing. The result again revealed that increase in relationship duration boosts SME in credit access. The study confirmed that relationship lending reduces the credit rationing probability of SMEs. D'Aurizio, Oliveiro and Romano (2015) was in agreement with the research stressing findings that scholars generating soft information with financial institution loaning effectiveness contend that gathering and analysis of soft information improves efficiency of bank loaning impacting positively on SMEs access to financial services. Nevertheless, the study was done in a developed nation and dealt on all types of firms unlike the present study that was carried in a developing nation and focused on SMEs. The study did a direct relationship even though a moderating and a mediating variable were introduced in the current study.

In another study carried by Fanta (2016) on relationship lending complementarity with collateral in accessing credit from banks by SMEs in Ethiopia. A survey method was carried out on 102 randomly selected manufacturing SMEs and analysis was done using

logistic regression. The findings shown that banks employ a practice of granting loans basing on relationship lending. Ekpu (2015) supports the results of this study by endorsing that financiers gather appropriate information concerning borrowers credit worth through previous relationships hence high likelihood of being preferred in credit extension. The findings of this research further are in line with Osei-Assibey (2014) who agreed that relationship lending had a significant and positive effect on securing of credit facility from banks. The study however, manufacturing companies in Ethiopia were dealt with by the research but SMEs in Kenya were focused on in the current research.

In a study conducted by Berg and Schrader (2012) on relationship lending, natural disaster and credit access in Ecuador established that relationships lending increases securing of loans by borrowers by lowering lending restrictions. The study used secondary data from microfinance institution while the current study utilised primary data from SMEs. Similar results were acquired by Canovas and Solano (2010) in European Continental concerning lending relationships and bank financing to SMEs. The study found that the SMEs that had long and strong relationships with banks accessed loans easily and fast at a cheaper rate. The costs of borrowing reduces and level of financing rises when a client establishes a good relationship with a bank as trust and guarantee is established. The research was done in industrialised countries unlike the current study that was done in emerging country hence the likelihood of getting different results. Equally in agreement with the study results were Chakravarty and Sharriar (2010) whose results showed that longer membership and credit history of the borrower enhanced high chance of approval of the loan asked for.

However, the findings are inconsistent with Rahman, Belas, Rosza and Kliestik (2017) who investigated relationship lending and bank ownership in developing countries. The findings of the study confirmed that relationship lending does not improve SMEs access to debt from commercial banks. The study used secondary data from banks while the current study utilised primary data from SMEs. The study considered one variable only of relationship lending while the current study incorporated asset based lending and financial statement lending. In the same way, Bolton, Freixas, Gambacorta, and Mistrulli (2016) informed that increase in loan facility of SMEs occurred when relationship lending declined. Conversely Mathias, Serrasqueiro and Costa (2010) contended that lengthier lending relationship doesn't have significant effect of improving credit access.

2.3.2 Asset Based Lending and Access to Financial Services

Asset-based financing is widely utilised and well known instrument relied on when extending financial services to SMEs by financiers. Collateral requirement is an important factor in loan agreements of SMEs because of involved riskiness in financing (Degryse, Karapetyan & Karmakar, 2019). Lack of flexibility by financiers in matters concerning collateral discourage firms from borrowing (Rithaa *et al.*, 2019). Credit rationing predicaments can be resolved through pledging collateral as collateral is helpful to lenders in alleviating information asymmetries. Growth of firms' tangible assets causes a decrease in credit rationing (Gou, Huang & Xu, 2018). Requirement of valuable collateral by lenders has made SMEs experience difficulties in accessing loans (Hasanova, 2018). Access to financial services would rise by 10% when firms maintains transferable assets collateral records (Love, Martinez & Singh, 2016).

In a study carried out by Mwirigi, Gakure and Otieno (2019) investigating credit access and collateral for SMEs owned by women revealed that collateral had a positive and significant effect on credit access by SMEs owned by women. The study used descriptive design and focused on women owned SMEs while the current study used explanatory design and focused on all SMEs. Direct relationship was utilised in the study but the current study brought in a mediating and a moderating variable. Equally supporting this findings was Bencheikh and Taktak (2017) who examined collateral and bank loan access for firms in Tunisia. The findings of the study results was that a positive relationship existed between collateral and bank loan access. However, the study focused only on a single variable that affect access to loan thus providing room to bring on board other variables that influence access to debt. The study utilised secondary data that focused on all Tunisian's enterprises but the current study engaged primary data and focused on SMEs in Kenya.

In a study carried out by Chandio, Jiang, Wei, Rehman and Liu (2017) on impact of collateral on access to credit in Pakistan discovered that collateral security had a positive and significant effect on access to financial services. The study was done in a single province of Sindh hence narrow scope and focused on farmers. The results from the study could not be reliable hence the need to use a wide scope. The present study was conducted in Kenya utilising a wide scope of a country and focused on small and medium enterprises. Equally, Chowdhury and Alam (2017) did a research in Bangladesh focusing on reasons influencing small and medium enterprises acquisition to financing. The findings revealed that collateral absence restricted SMEs access to funding. The study scope was limited by sampling a single city. The study did a direct relationship between variables. The current study had a wide scope that focused on Kenya giving large

representation that could lead to better results. The current study incorporated a moderating and a mediating variables that was missing from the study.

Rahman, Belas, Kliestik and Tyll (2017) did a study on SME credit and collateral security in visegrad nations. The study findings revealed that collateral security had a positive and significant influence on loans access, generally it was demanded for loans with lengthier maturity, awarded to riskier borrowers as well as female clients. The study was carried out in developed countries that have different economic, social and cultural aspects while the current study was carried out in developing country. The study used secondary data whereas the current study utilised primary data. The study employed logistic model unlike the current study that used Heckman two step selection model. The study did a direct relationship and did not take into account mediating and moderating variable as was done in the current study.

Further Manaye and Tigro (2017) conducted a research on access to finance by micro and small enterprise in Wolaita Soddo, Ethiopia. The study revealed that collateral absence was the chief reason for MSEs failure to secure loans from lenders. The study focused on micro and small enterprise with limited scope of a town using secondary data while the current study focused on SMEs with a wider scope of a country using primary data. Similarly Magembe (2017) studied reasons that impact access to credit by SMEs operators in Tanzania employing survey design. The findings affirmed that collateral availability positively and significantly impacted on loans granting. The study applied logistic regression while the current research employed Heckman two step selection. The geographical coverage was limited to Dar es Salaam city while the current study had a wide scope of Kenya that could culminate into more reliable results.

In a study conducted by Chirchir and Maina (2017) on effect of credit rationing and SMEs in sub-county of Eldama Ravine in Kenya on access to finance. The study findings revealed that firms that offer highly valued collaterals had a positive and significantly increased credit access. Osano and Languitone (2016) concurred with the study results by affirming that firms financing would increase when collateral is brought on board when making a contract for lending. The research did not incorporate a mediating variable and moderating variable effects on access to credit. Equally Nguyen and Wolfe (2016) in a study on Vietnamese SMEs on accessing loans from bank in Red River region established that asset security had a positive and significant effect on access to credit. The study used logit in analysis and descriptive survey design while the current study used Heckman two step selection and explanatory design.

The study conducted by Mashenene (2015) investigating debt financing constraints by SMEs from commercial banks utilising quantitative measures found that absence of collateral and collateral of low value were obstacles to acquire loans from banks. However the study utilised a direct relationship between variables and did not include a moderating and mediating variables. The study variables were measured through quantitative methods but the current study used quantitative and qualitative measures. The study results were similar with a study conducted by Gichuki, Njeru and Tirimba (2014) while investigating credit access by MSEs in Nairobi City County discovered that access to loans is positively influenced by availability of collateral security. The study focus was on micro and small enterprises using descriptive survey design. The current study focused on small and medium enterprises utilising explanatory design and incorporated relationship lending and financial statement lending variables.

Conversely, a study carried out by Rahman, Rahman and Ključnikov (2016) examined collateral security effects on credit access on SMEs financing in Bangladesh moderated by bank size. The study findings revealed that possession of collateral do not improve on loans accessibility. In support of this finding were Nkundabanyanga, Kasozi, Nalukenge and Tauringana (2014) who pronounced that collateral security had insignificant effect on access to bank loan. Therefore, there was no proof that SMEs can receive more credit from banks by possessing the collateral. The study did not incorporate relationship lending and financial statement lending as variables that affect access to finance. The study also used data from the banks unlike the current study that used data from SMEs. A mediating variable of financing literacy was not used as done in the current study.

2.3.3 Financial Statement Lending and Access to Financial Services

Financial statements plays a major role when financial institutions are appraising SMEs before granting credit services. Aladejebi and Oladimeji (2019) affirmed that absence of correct financial statements reduces SMEs chances of securing bank loans. Financial institutions finds enterprises financial statements valuable during loan requests but small and medium enterprises problems of access to financial services originate from insufficiency skills to adhere to international financial reporting standards (IFRS) in preparing financial statements (UN, 2017). Financial statements are utilised by banks in monitoring SMEs and fifty percent of loans granted are based on financial statements (Minnis & Sutherland, 2016). Incapacity to provide audited financial statements by SMEs makes financiers unwilling to grant them loans. Kwaning, Nyantakyi and Kyereh (2015) confirmed that credit expansion by financiers to borrowers will depend on audited financial statements because presentation of this statements increases reliability of debtor's hence lenders credit risk lessens.

Boushnak, Rageb, Ragab and Sakr (2018) carried out a study on reasons that influences lending to SMEs by Egypt's National Bank. The result of the study indicated that credible financial statement positively and significantly influenced securing of loan from banks. The study focus was on national banks of Egypt while the current study focused on SMEs in Kenya. The study scope was narrow that focused on national bank while the current study had a wide scope that focused on SMEs in Kenya. Direct relationship among variable was carried out in the study but the current study utilised a moderating and mediating variable. Further Fuseini, Baah-Nuakoh and Nketiah-Amponsah (2016) did a study on credit access by SMEs in Ghana. The study findings shown that financial statements had a positive and significant influence on access to credit. The study used secondary data while the current study employed primary data.

In a study conducted by Ohachosim, Onwuchekwa and Ifeanyi (2017) on what way financial impediments can be solved by Nigeria SMEs using information of accounting. The study results indicated that quality of financial statements positively influenced credit access by SMEs. The study focused only on financial statement lending and failed to capture the effect of asset based lending and relationship lending as variables that affect access to financial services. Moderating and mediating variables were not utilised as done in the current study. The study was done in Nigeria that is different with the Kenya's context in terms of economical, social and cultural aspects. The study applied logit model unlike the current study utilised Heckman two stage regression model.

In a study carried out by Ezeagba (2017) in determining the effect of reporting on financial accounts in Nigeria and access to SMEs loans. Data was obtained through method of survey that was longitudinal in nature using questionnaires. The results discovered that absence of financial statements limits funding of SMEs. Amoaka (2013)

supports the results by affirming that improper financial records jeopardises SMEs chances of securing bank loan. The study used descriptive survey design while the current study used explanatory design. The study used direct relationship and did not use credit information sharing as a moderating variable. The study also did not utilise financial literacy as a mediating variable. Relationship lending and asset based lending were not considered as factors affecting financial access as considered in the current study.

A study carried out by World Bank (2017) on impact of financial information on bank loaning practices to Serbia SMEs utilised a survey design. The result revealed that low access to financing and increased credit costs results from unreliable financial statements and unsatisfactory disclosures of profits and credit risks. The study focused on banks in Serbia while the current study focused on SMEs in Kenya. The study failed to include a moderating variable of credit information sharing and a mediating variable of financial literacy as variables that can affect access to loans as done in the current study. Conversely Pandula (2013) on examination of SMEs in Sri Lanka on accessibility to bank loan revealed that securing loan facility is positively and significantly influenced by accessibility of appraised financial statements. Logistic regression was used on secondary data for the study while Heckman two step selection was used on primary data in the current study.

A study conducted by Minnis (2010) examined the influence of financial statements and pricing of private firms debt in U.S.A. The results shown that financial statements that are audited supply more information, significantly influencing decision by the lender to grant loans. Financiers prefer firms with audited financial statements in comparison to firms with unaudited financial statements hence extending lower rate of interest to

audited firms as per the study findings. Aga and Reilly (2011) concurred with the findings upholding that accessibility to loans increased by six percent for firms that keep financial statements in comparison with those lacking. The study focused on privately held firms in a developed country of U.S. while the current study focused on SMEs in a developing country of Kenya. The study focused only on financial statement financing and failed to consider relationship lending and asset based financing as done in the current study.

However, Iswoyo, Ermawati and Nugroho (2019) did a study on bank loan access and quality of SMEs financial statements. The study results showed that financial statements quality does not influence access to loans from banks since small and medium enterprises produces unreliable statements that are not verified hence do not reflect a true picture of the firm. The study utilised a narrow scope of SMEs in few towns in Indonesia using partial least square analysis but the current study utilised a wide scope of SMEs in Kenya that can improve credibility of the results and employed Heckman two stage regression model in analysis.

2.3.4 Mediating Effect of Financial Literacy

Financial literacy is an important tool to help SMEs owners accept and use the products to which they increasingly have access. Financial success worldwide arises from financial experience and financial education founding components of financial literacy (Son & Park, 2018). When financial literacy increases, it statistically influence financial behaviour by 0.1% (Fernandes, Lynch & Netemeyer, 2014). Financial literacy lacking practical experience is inadequate to enable good financial behaviour in millennial era (Friedline & West, 2016). Financial inclusion of bank loans was noted to be mediated by

financial literacy (Nyarko, 2018). Individual possessing inadequate financial literacy are unwilling to utilise contemporary financial services (Hasanova, 2018).

In a study conducted by Anand, Mishra, Verma and Taruna (2020) on mediation effect of financial literacy between individual's financial wellbeing and COVID-19 awareness employed structural equation modelling. The findings of the study disclosed that complete mediation effect was posed by financial literacy on individual's personal finance for the period of COVID-19 epidemic. However, the study focused on health of individual finance during crisis of COVID-19 hence the results cannot be applicable to the current study that focused on access to financial services by SMEs. Likewise in a study carried out by Kumari and Azam (2019) on women's economic empowerment, financial literacy and financial inclusion in Sri Lanka on 426 needy women in rural area. The study results shown that women's economic empowerment was positively and significantly influenced by financial literacy. The study focused on countryside underprivileged women economic empowerment whereas the current study focused on access to financial services by SMEs.

In a study conducted by Mwatondo and Wekesa (2020) investigating SACCOs financial growth and financial literacy in county of Kwale. The study results shown that financial literacy positively and significantly influenced Sacco's growth. Nevertheless, the study focused on growth of SACCOs with a narrow scope of a county but the current study focused on SMEs access to financial services in Kenya. Similarly, Lyons, Grable and Zeng (2019) did a study on loan decision and financial literacy in China utilising 2013 China Household Finance Survey (CHFS). The study findings revealed that financial literacy had insignificant effect on access to loans by vulnerable individuals. The study

however used secondary data on financially excluded households in China while the current study used primary data on SMEs in Kenya.

Wamalwa, Rugiri and Laufer (2019) carried out a study on household Indebtedness, financial literacy and digital credit. The study revealed that digital credit utilisation decreases when financial literacy improves. The study focused on digital credit usage while the current study focused on SMEs access to loans. Further Mabula and ping (2018) carried out a study on access to credit, performance and SMEs financial literacy. The study revealed that SMEs performance and credit access was positively and significantly influenced by financial literacy. However, in the study financial literacy was employed as an independent variable whereas in the present study it was used as a mediating variable. Structural equation modelling was adopted in analysis in the study unlike the current study that used Heckman two step regression model for analysis.

A study conducted by Son and Park (2018) on personal finance and financial education mediated by financial literacy utilised Korea's index of consumer empowerment 2014. The study results revealed that reliable personal finance and financial education were mediated by financial literacy in middle and high income groups. The study however focused on credibility of personal finance, thus the results may not be related to the current study that focused on SME access to financial services in Kenya. Equally the study utilised secondary data of consumer empowerment index but the current study employed primary data on small and medium enterprises. Likewise a study by Wawoa and Kalsumb (2018) on small enterprise investment decision, investment experience, financial literacy and access to credit in Sulawesi. Research findings revealed that mediation effect of loans access was observed between investment decision and financial literacy. The study used sobel test in analysis while the current study utilised

Heckman two stage regression model. Financial literacy was used as a regressed variable but then the present study used it as a mediating variable.

In a study by Gathungu and Sabana (2018) on microfinance performance as a result of financial literacy, transaction costs and financial access in City County of Nairobi in Kenya. The study revelation was that financial literacy significantly and positively impacted on access to financing. However, the study used financial literacy as an independent variable. The current study utilised financial literacy as a mediating variable. The scope of the study was narrow and focused on Nairobi City County while the current study had a wider focus of a country hence more reliability of results. The results were complemented by Hoque *et al* (2016) in a study that was done in Bangladesh on SMEs credit rationing, the discovery was that access to bank loans was not influenced by financial literacy. The study did not utilise financial literacy as a mediating variable rather employed it as independent variable.

In study by Cheng and Usha (2016) investigating effect of financial literacy as a moderator and a mediator variable on Malaysian's personal bankruptcy. The research findings revealed that financial literacy acts as a fully mediator between personal finance and financial numeracy. However, the study focus was on personal bankruptcy although the current study focused on access to loans by SMEs. Structural equation modelling was used on secondary and primary data in the study for analysis unlike the current study that applied Heckman two step regression model on primary data.

Further a study performed by Kiplimo *et al.* (2015) on small farmers' credit access in eastern and western region in Kenya used regression model of logit. Results of the study pointed out that financial literacy positively influenced credit access. The study focused on small farmers' credit access unlike the current study that focused on SMEs credit

access. Similarly Nkundabanyanga, Kasozi, Nalukenge and Tauringana (2014) conducted a study on Uganda's SMEs loan access, financial literacy and loaning terms. The result of the study was that access to debt positively and significantly influenced by financial literacy. The study utilised financial literacy as an independent variable while the current study employed it as a mediating variable.

2.3.5 Moderating Effect of Credit Information Sharing

CIS is a main contributing factor that influences access to financial services by SMEs. Fosu, Danso, Agyei-Boapeah, Ntim and Adegbite (2019) verified that CIS signifies a proper way of improving information accessible by banks enabling them in granting loans to borrowers with ease. Financing decision to award credit by banks is based on quality and quantity of information emanating from CIS bureaus. Credit information sharing offers a chance to increase loan access through information capital building (James, Iraki & Korir, 2017). CIS alleviates information asymmetry allowing suppliers of funds to understand those in need of funds before extending credit to clients who possess robust credit history. CIS leads to expanding of quality of loaning portfolio allowing even riskier customers to access credit (Guérineau & Léon, 2016).

In a study carried out by Balakrishnan and Ertan (2021) on Credit information sharing and recognition of loss on loan showed that CIS improves recognition of bank loss on timely basis due to revelation of NPLs. This study focused on recognition of loss on bank loans hence findings cannot be generalised on the current study that focused on SMEs loan access. In another study conducted by Son, Khanh and Liem (2020) on financial development, corruption and credit information sharing between 2004 and 2017 in 120 republics. The study results showed that credit information sharing had significantly positively influences on financial intermediation activities. CIS led to

falling of non-performing loans and increase to loan access because of CIS influence of reducing corruption information asymmetry. The study focused on 120 countries and used secondary data. The current study focused on Kenya and used primary data.

In a study by Ahmad, Nazir and Nafees (2018) on trade credit influence by CIS and financial development by listed manufacturing firms in Pakistan. Time frame of the study was 2005-2015 on 327 enterprises employing panel model dynamic in nature. Trade credit usage and credit information sharing had a negative relationship as per study results. The study focused on listed manufacturing companies, used panel technique on secondary data in analysis. The current study utilised SMEs, used Heckman two step selection on primary data in analysis. Conversely, Kusi, Agbloyor Ansah-Adu and Gyeke-Dako (2017) and Chavez, Jiang and Kushnir (2017) approved that credit channelled to enterprises from banks increases as credit information sharing lowers credit risk.

Asongu and Odhiambo (2018) carried out a study on information asymmetry, financialisation and financial access in South Africa. This study investigated whether information sharing networks had improved access to finances and reduction in information asymmetry. The study was done within 2004-2011 utilising 53 countries in Africa. The study results was that significant and positive relationship existed among access to loans and credit information sharing. The study utilised secondary data and was based on African countries hence the results cannot be generalised to the current study. The current study focused on SMEs in Kenya and primary data was used in analysis.

Teeranutrannont (2017) carried out a study on the influence of credit information sharing on bank loans in 113 countries between 2005-2013 periods utilising panel model

approach. The finding of the study shown that bank credit risen with increased credit information sharing. The result further revealed that credit information sharing lowers credit risk. The study suggested that CIS bridges the information gap between financiers and borrowers. Banks will increase loans granting, stability and minimal reservation of negative information with improved credit information sharing. The study used CIS as an explanatory variable unlike a moderating variable usage in the current study.

In another study carried out by James, Iraki and Korir (2017) on credit accessibility and credit information sharing in Kenya. The study findings revealed that access to credit was positively and significantly influenced by credit information sharing. However, the study used credit information sharing as a regressed variable and employed secondary data from banks. In the current study CIS was utilised as a moderating variable and primary data was obtained from SMEs. A study conducted by Gietzen (2016) on CIS and interest rates in banks found that CIS improves loans access at a cheaper rate since it eliminates the problems of adverse selection. The study utilised CIS as an explanatory variable whereas the current study utilised it as a moderating variable.

2.4 Summary of the Literature Review and Research Gaps

The literature reviewed verified the relationship amongst the study variables; relationship lending, asset based lending, financial statement lending, financial literacy and credit information sharing. Summary of the literature review and research gaps are shown in Table 2.1.

Table 2.1: Summary of the Literature Review and Research Gaps

Author(s)	Title	Findings	Research gaps	Addressing the gaps
Erdogan (2019)	Access to bank loans by SMEs in emerging markets.	SMEs that embraced lengthier banking relationships improved access to bank loans.	A direct relationship between variables was carried out in this study and used a single variable.	Introduced a mediating and a moderating variable and other variables that influence credit access.
Behr <i>et al.</i> (2017)	Lending relationship effect on access to credit.	The result of the study indicated that when lending relationship becomes intense access to credit access improves.	The study used relationship lending alone. secondary data was used from microborrowers in Mozambique.	Asset based lending and financial statement lending were included and primary data from SMEs in Kenya were used.
Angora <i>et al.</i> (2017)	Lending relationship and access to loans in Italy.	Results revealed that building strong and long relationships with the bank increases firms' access to financing.	Only one variable was used and study focused on all firms in a developed country of Italy.	Asset based and financial statement lending were incorporated and the study focused on SMEs in Kenya.
Rahman <i>et al.</i> (2017)	Relationship lending and bank ownership in developing countries.	The findings of the study confirmed that relationship lending does not improve SMEs access to debt from commercial banks.	Secondary data was utilised from banks as well as focus was on a single variable.	Used primary data from SMEs and inclusion asset based and financial statement variables.
Fanta (2016)	Impact of relationship lending on SME bank credit accessibility in Ethiopia.	The findings show that banks employs a practice of granting loans basing on relationship lending.	The study did a direct relationship on manufacturing SMEs in Ethiopia.	Focused on SME in Kenya and included moderating variable and a mediating variable.

Author(s)	Title	Findings	Research gaps	Addressing the gaps
Berg and Schrader (2012)	Effect of relationship lending, natural disaster and credit access in Ecuador.	Relationships lending increases securing of loans by borrowers by lowering lending restrictions.	The study used secondary data from microfinance institution in Ecuador.	The current study utilised primary data from SMEs in Kenya.
Mwirigi <i>et al.</i> (2019)	Credit access and collateral for SMEs owned by women in Kenya.	Collateral has a positive and significant effect on loan access by SMEs owned by women.	The study used descriptive design and focused on women owned SMEs using a direct relationship.	The current study used explanatory design and focused on all SMEs and fitted in a moderation variable.
Bencheikh and Taktak (2017)	Collateral security and bank loan access for firms in Tunisia.	The study results shown that positive relationship existed between collateral and bank loan access.	The study focused only on a single variable and utilised secondary data from all firms in Tunisia.	Current study engaged other variables and used primary data but focused on SMEs in Kenya.
Chandio <i>et al.</i> (2017)	Impact of collateral on access to credit in Pakistan.	Collateral security had a positive and significant effect on access to financial services.	The study had a narrow scope and focused on farmers in Pakistan.	A wide scope was used and focused on SMEs Kenya.
Chowdhury and Alam (2017).	Reasons influencing Bangladesh SMEs acquisition to financing.	Findings revealed that collateral absence limited SMEs access to funding.	Narrow scope was used and utilised a direct relationship between variables.	The current study used wide scope and incorporated moderating and mediating variable.
Rahman <i>et al.</i> (2017)	SME credit and collateral security in visegrad nations.	The study findings revealed that collateral security had a positive and significant	Developed countries were concentrated on by the study and did a direct relationship.	Focused on SMEs in Kenya and include a mediating and moderating variables.

Author(s)	Title	Findings	Research gaps	Addressing the gaps
		influence on loans access.		
Magembe (2017)	Reasons that impact access to credit by SMEs in Tanzania.	The findings affirmed that collateral availability positively and significantly impacts on loans granting.	Logistic regression model was applied and scope was limited to Dar es Salaam city. Applied direct relationship.	Heckman two step selection was used and wide scope of entire country. Mediating and moderating variable were included.
Chirchir and Maina (2017)	Effect of credit rationing on SMEs access to finance in Eldama Ravine.	The study findings revealed that, firms that offer highly valued collaterals positive and significantly increased credit access.	A mediating variable and moderating variable were not incorporated and used a small sample.	Incorporation of moderating and mediating variable. Wide scope was focused on which increases the sample population.
Rahman <i>et al.</i> (2016)	Examined collateral security effects on credit access on SMEs financing in Bangladesh.	The study findings revealed that possession of collateral do not improve loans accessibility.	Collateral was the only variable utilised in SME of Bangladesh. A mediating variable was not included in the study.	The current study focused on SMEs in Kenya. A mediating variable was incorporated in the current study
Mashenene (2015)	Debt financing constraints by SMEs from commercial banks.	The study findings showed that absence of collateral and collateral of low value were obstacles to acquire loans from banks.	The study focused on direct relationship. Moderating and mediating variable were not utilised.	Included credit information sharing as a moderating variable and financial literacy as a mediating variable.

Author(s)	Title	Findings	Research gaps	Addressing the gaps
Iswoyo <i>et al.</i> (2019)	Bank loan access and quality of SMEs financial statements.	The study results showed that financial statements quality do not influence access to loans from banks.	The study utilised a narrow scope of few towns in Indonesia using partial least square.	The current study utilised a wide scope that can and employed Heckman two stage regression modeling analysis.
Boushnak <i>et al.</i> (2018)	Reasons that influences lending to SMEs by Egypt's banks	Credible financial statement positively and significantly influences securing of loan from banks.	The study focus was on national bank thus a narrow scope.	The current study focused on SMEs in Kenya hence wide scope
Ohachosim <i>et al.</i> (2017)	Effect of accounting information on access to finance by SMEs in Nigeria.	The study results indicated that quality of financial statements positively influences credit access by SMEs.	A direct relationship amid variables was used. Focused only on a single variable using logit model.	A moderating and a mediating variable were utilised, applying Heckman two step model. Other variables were included.
Ezeagba (2017)	Effect of financial reporting in Nigeria and access to SMEs loans.	Results discovered that absence of financial statements limits funding of SMEs.	The study used direct relationship and focused only on financial statement variable.	A moderating and a mediating variable were utilised. The study included asset based and relationship lending variables.
World Bank (2017)	Impact of financial information on bank loaning practices to Serbia SMEs.	The result revealed that unreliable financial statements and unsatisfactory revelations restricts acquisition of loans.	The study did a direct relationship between variables and focused on banks in Serbia.	The current study included a moderating and a mediating variable and focused on SMEs in Kenya.

Author(s)	Title	Findings	Research gaps	Addressing the gaps
Fuseini <i>et al.</i> (2016)	Credit access by SMEs in Ghana.	The study findings shown that financial statements had a positive and significant influence on access to credit.	The secondary data was utilised by the study and did a direct relationship	Primary data was used in this study and utilised mediating and moderating variables.
Anand <i>et al.</i> (2020)	Mediation effect of financial literacy between individual's financial wellbeing and COVID-19 awareness.	The findings of the study showed that complete mediation effect was posed by financial literacy on individual's personal finance for the period of COVID-19 epidemic.	The study focused on health of individual finance during crisis of COVID-19.	The current study focused on SMEs in Kenya on access to financial services.
Son and Park (2018)	Personal finance and financial education mediated by financial literacy	Personal finance and financial education were mediated by financial literacy.	The study focused on credibility of personal finance.	Current study focused on SME access to financial services in Kenya.
Son <i>et al.</i> (2020)	Financial development, corruption and credit information sharing.	The study results showed that CIS had significantly positively influences on financial intermediation activities.	The study focused on 120 countries and used secondary data.	The current study focused on SMEs in Kenya and used primary data.
James <i>et al.</i> (2017)	Credit accessibility and credit information sharing in Kenya.	The study findings revealed that access to credit was positively and significantly influenced by CIS.	The study used CIS as a regressed variable and employed secondary data from banks.	The current study CIS was utilised as a moderating variable and used primary data from SMEs.

Source: (Researcher, 2021)

2.5 Conceptual Framework

The interaction between research variables shown in conceptual framework model was anchored on empirical and theoretical literature review. The conceptual framework model illustrates the relationships amongst research variables; financing practices, credit information sharing, financial literacy and access to financial services as shown in Figure 2.1.

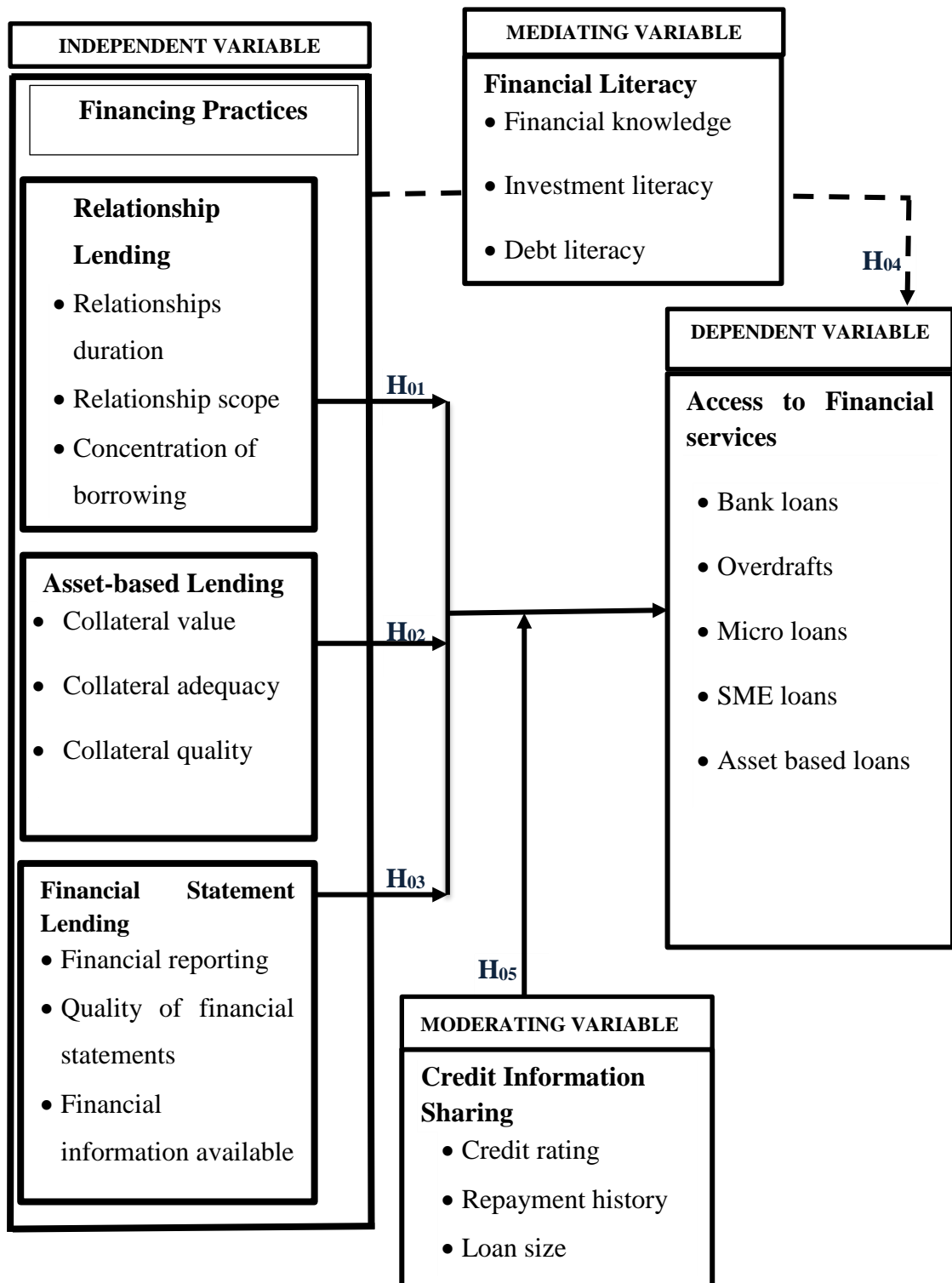


Figure 2.1: Conceptual Framework
Source: (Researcher, 2021)

The conceptual framework in figure 2.1 depicts that independent variable was financing practices operationalised with financial statement lending, relationship lending as well

as asset based lending as indicators. Dependent variable was access to financial services, indicators being access to bank loans, overdrafts, micro loans, SME loans and asset based loans. The moderating variable was represented by credit information sharing, indicators being credit rating, repayment history and loan size while mediating variable was financial literacy, operationalised indicators being financial knowledge, investment literacy and debt literacy (Sabana & Gathungu, 2018).

Based on conceptual framework, it was hypothesized that relationship lending, asset based lending and financial statement lending have positive effect on access to financial services. Further it was hypothesized that financial literacy have a mediating effect on the relationship between financing practices and access to financial services. Finally the conceptual framework hypothesised that credit information sharing have a moderating effect on the relationship between financing practices and access to financial services hence affecting the direction and strength of the relationship.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter the study covered the methodology including; the research design, philosophy underpinning the study, location for the study, target population, sampling technique, sample size and data collection procedure. Also discussed are; Pilot study, reliability and validity, data collection instruments and data analysis and ethical consideration.

3.2 Research Philosophy

The foundation of the researcher's predispositions and assumptions are done through a research philosophy as it is related to the knowledge foundation. The conducting of any research involves some perceptions, beliefs and understanding of various theories that involve the study as it is a broad framework describing which makes up a research philosophy (Olive & Abel, 2014). A form of law is adopted at the end of the research after the adoption of positivism philosophy as observed in social reality (Saunders, Lewis & Thornhill, 2019). Throughout the analysis and investigation, the study is supposed to involve genuine, real and factual happenings which are then tested scientifically and empirically as emphasized by a positivist paradigm (Aliyu, Bello, Kasim & Martin, 2014). A positivist philosophy consists of model specification, hypothesis formulation and testing to clarify cause-effect relations, hence make generalisation of findings. Phenomenon discovery and explanation methodologically is embraced by positivistic paradigm by carrying out tests empirically (Pham, 2018).

The justification for positivistic philosophy in this study was that data was acquired from the field, grounding the study on observable social reality and given that

hypotheses were tested for rejection or acceptance. The philosophy was favoured as the study investigation stressed on correctness, impartiality and consistency as opposed to means of intuition and experience (Dudoviskiy, 2016). The study thus adopted the positivistic philosophy to find out the real proofs of individual effect of financing practices on access to financial services. The adoption of this philosophy was reinforced by use of Heckman two step regression model to analyse variable, test study hypothesis and make conclusions and recommendations on the study objectives. Data collection and analysis was done to comprehend fundamental issues on access to financial services enriched by positivism structure.

3.3 Research Design

Explanatory research design was employed to links concepts to assist in understanding cause-effect relationship in variables without influencing them. Explanatory research design clarifies variable linkage by analysing the problem to ascertain implication of deviation from the norm (Sekaran & Bougie, 2016). The descriptive information of a study is explained and accounted in the explanatory research. An explanatory research design main role is to provide evidence that supports the findings and also provide explanation of a specific finding and prediction. Explanatory research design is also used in providing evidence of how one factors relates to the other being investigated in the study (Asenahabi, 2019). The design also gives an explanation as to why there is a problem between the relations of the variables being studied and examine causality amongst them.

The effects that one variables has on the other and how their cause affected each other is explained in the explanatory research design. On the other hand, Howell (2013) argued that the casual relationships between two variables are explained by explanatory

research. Saunders, Lewis and Thornhill (2012) added that explanatory research normally an individual does not have control on the independent variables and tends not to influence how their effects occur on the dependent variable. This model is effective as it provides how the variables characteristics affect each other (Were & Wambua, 2014) and the researcher did not manipulate the independent variables. Explanatory research design was justified for the study as enabled identification and explanation of features and magnitude of cause-effect relationships between financing practices and access to financial services.

3.4 Empirical Model

The study adopted Heckman two step regression model for empirical analysis. The suitability of the models arose from the dependent variable of access to financial services that embraces two stages. Access to financial services has some two major steps that need to be followed. In the first stage, therefore, the dependent variable was taken as the probability of the SME owner to access credit services. The second step was the estimation of level of access which was determined by the credit access. Heckman's two-stage regression model eliminates selection bias problem which results from non-participations in credit services. The specifications for this rationale was the possibility of the owner's credit request being approved from the bank and another possibility was to decline the request for credit. Equally when approved, being credited with less amount than their intentions or whole amount requested (Heckman, 1976). Asymptotically and consistent parameter estimates are yielded by employing Heckman selection technique which treats the censored sample problem as a specification error (Heckman, 1979).

Thus, following the study of Ferri and Murro (2015) and Ferri, Murro, Peruzzi and Rotondi (2019) the model for access to financial services was illustrated as:

$$y_i = \begin{cases} 1 & \text{if } y_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \dots\dots\dots 3.1$$

$$y_i^* = \beta_0 + \beta_i X_i + \epsilon_i \dots\dots\dots 3.2$$

Where:-

y_i = Access to financial services

β_0 = Costant

β_i = Vector of the regression coefficients

X_i = Vector of independent variables

ϵ = Vector error term

Hence, the model for testing the proposed hypotheses was as:

$$\begin{aligned} \text{AFS} = & \beta_0 + \beta_1 \text{RDN} + \beta_2 \text{RSP} + \beta_3 \text{COB} + \beta_4 \text{COV} + \beta_5 \text{COA} + \beta_6 \text{COQ} + \beta_7 \text{FRT} + \beta_8 \\ & \text{QFS} + \beta_9 \text{FIA} + \epsilon \dots\dots\dots 3.3 \end{aligned}$$

Where:

AFS = Access to financial services

β_0 = Constant (intercept)

$\beta_1 - \beta_9$ = Coefficients of independent variable

RDN = Relationship Duration.

RSP = Relationship Scope

COB = Concentration of Borrowing

COV = Collateral Value

COA = Collateral Adequacy

COQ = Collateral Quality

FRT = Financial reporting

QFS = Quality of financial statement

FIA = Financial information available

ϵ = Error term.

3.4.1 Testing for Mediating Effect of Financial Literacy

Stepwise regression process was applied when testing for mediation effect (Baron & Kenny, 1986; Musau, Muathe & Mwangi, 2018). If the relationship between financing practices and access to financial services in Kenya was mediated fully by financial literacy, then zero would be the outcome of two variable sets. The path incase it was significantly different from zero, then partial mediation condition was prevailing. Figure 3.1 represented path for mediation diagram.

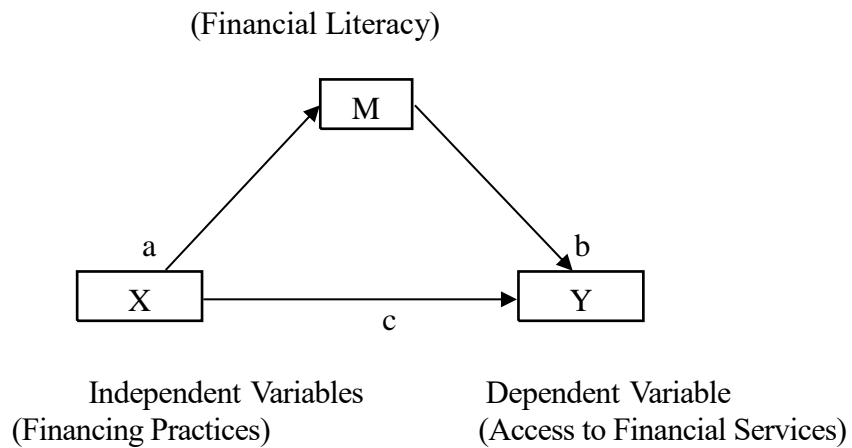


Fig 3.1: Mediation Analysis Model

Source: (Baron & Kenny, 1986)

Figure 3.1 was used to establish if any of the paths, that is, a, b and c was not significant. The study would then conclude that there was no mediation effect (Mwangi, Kosimbei & Muathe, 2014). To find out mediation effect of financial literacy influence amid

financing practices with access to financial services of SMEs in Kenya. The mediation test proposed four steps to be followed in which several regression analyses were conducted.

Step 1: A regression analysis with financing practices predicting access to financial services

$$AFS = \beta_0 + \beta_1 FPS + \epsilon \dots\dots\dots 3.4$$

If β_1 was significant then financing practices was a significant determinant of access to financial services.

Step 2: A regression analysis with financing practices predicting financial literacy

$$FLT = \beta_0 + \beta_1 FPS + \epsilon \dots\dots\dots 3.5$$

If β_1 was significant in the model, then financing practices was a significant determinant of financial literacy.

Step 3: A regression analysis with financial literacy predicting access to financial services

$$AFS = \beta_0 + \beta_1 FLT + \epsilon \dots\dots\dots 3.6$$

If one of the β_1 in the models 3.4, 3.5 and 3.6 was not significant, then mediation was not possible. If significant, we proceeded to step 4.

Step 4: A regression analysis with financing practices, financial literacy predicting access to financial services.

$$AFS = \beta_0 + \beta_1 FPS + \beta_2 FLT + \epsilon \dots\dots\dots 3.7$$

If the effect of financial literacy remained significant when financing practices was controlled then it indicated some form of mediation. If financing practices was not significant when financial literacy was controlled then this indicated full mediation.

Finally if both financing practices and financial literacy significantly predicted access to financial services then this was a case of partial mediation as indicated in Table 3.1.

Table 3.1: Mediation Decision Making Criteria

	Outcome	Criteria for Decision Making
1	$\beta 1$ significant in model 3.4	Complete Mediation
	$\beta 1$ significant in model 3.5	
	$\beta 1$ significant in model 3.6	
	$\beta 1$ insignificant and $\beta 2$ significant model 3.7	
2	$\beta 1$ significant in model 3.4	Partial Mediation
	$\beta 1$ significant in model 3.5	
	$\beta 1$ significant in model 3.6	
	$\beta 1$ significant and $\beta 2$ significant model 3.7	
3	$\beta 1$ significant in model 3.4	No Mediation
	$\beta 1$ significant in model 3.5	
	$\beta 1$ significant in model 3.6	
	$\beta 1$ insignificant and $\beta 2$ insignificant model 3.7	

Source: (Researcher, 2021)

3.4.2 Testing for Moderating Effect of Credit Information Sharing

The moderation test was based on Whisman and Mc Clelland (2005) which employs a two-step procedure. Moderated multiple regression method was engaged in comparison of two regression equations. Feasible generalised least square (FGLS) model was developed to determine moderation effect of CIS between financing practices and access to financial services by SMEs in Kenya as shown in equation 3.8

(FGLS model): $Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \epsilon_i$3.8

Moderation effect presence was determined by comparison of FGLS model and MMR model utilised by Koori, Korir and Gachanja (2015) as shown in equation 3.9

$$(MMR \text{ model}): Y_i = \beta_0 + \beta_1 X_i + \beta_2 Z_i + \beta_3 X_i * Z_i + \epsilon_i \dots \dots \dots 3.9$$

Where:

Y = access to financial services as the dependent variable.

X_i = composite index of Independent Variables

Z = Credit information sharing moderator

X*Z = Interaction effect between independent variables * credit information sharing

β₀ = Constant

β₁ = Regression coefficient for X

β₂ = Regression coefficient for Z

β₃ = Regression coefficient for product term

ε = Error term

The criteria for making decision for moderation was; if p < 0.05, significant value, then the null hypothesis is not accepted signifying CIS has a moderating effect. When moderating variable and independent variable interaction was not significant, implied that CIS was explanatory variable but not a moderating variable.

3.5 Operationalization and Measurement of Study Variables

The study variables list, the operational definition and study variables measurements were summarized in Table 3.2. The works of other studies were measured to find out how they operationalized and understood their constructs. Knowledge on previous related studies was employed in operationalisation and measurement of study variables.

The independent variable, financing practices used indicators which are relationship lending, asset based lending and financial statement lending, were adapted from Kusi *et al.* (2017). Dependent variable being access to financial services had indicators of access to bank loans, overdrafts, micro loans, SME loans and asset based loans was adapted from Ndede *et al.* (2017). Credit information sharing indicators was credit rating, repayment history as well as loan size as employed by (Otieno *et al.*, 2016). Measurement of financial literacy used indicators by Gathungu and Sabana (2018), comprising of financial knowledge, investment literacy and debt literacy.

Table 3.2: Operationalization and Measurement of Variables

Variable	Category of variable	Operationalization	Measurement	Scale
Relationship lending	Independent Variable	-Relationship duration -Relationship scope -Concentration of borrowing	- Number of years the lender has provided services to firm. -Number of credit ties. -Number of bank relationships that borrower upholds	Interval
Asset based lending	Independent Variable	-Collateral value -Collateral adequacy -Collateral quality	-Market value of assets given as security -Liquidation value of the assets given as security -Nature and condition of asset offered as security	Interval
Financial statement lending	Independent Variable	-Financial reporting -Quality of financial statements -Financial information available	-Presence of financial statements -Audited financial statements -Business performance ratios presented	Interval
Financial literacy	Mediating variable	-Financial knowledge -Investment literacy -Debt literacy	-Preparation of financial statements -Preparation of business plan -Preparation of loan repayment schedule	Interval

Variable	Category of variable	Operationalization	Measurement	Scale
Credit information sharing	Moderating Variable	-Credit rating -Repayment history -Loan size	-A number that reflects a person's creditworthiness from CRB report. -Number of times of loan default -Borrowers current debt level	Interval
Access to financial services	Dependent variable	Level of access to loans and credit services.	-Accessed amount; bank loans, overdrafts, micro loans, SME loans, asset based loans	Nominal

Source: (Researcher, 2021)

3.6 Study Location

The study was conducted in Kenya. The study focus was on SMEs concentrating on lower eastern counties of Kenya. In comparison with other regions in Kenya, the region posted the lowest number of those accessing financial services at 3.5% when the country's average financial access was 7.5% for the period 2016-2019 (CBK, KNBS & FSD Kenya, 2019). The region was also preferred due to high concentration of SMEs, accounting for about 80% of employment due to aridity climatic conditions that makes farming a challenge (Atela, Gannon & Crick, 2018).

3.7 Target Population

The study population target accounted for 4,253 SMEs licensed to operate in lower eastern region of Kenya counties that posted the least in access to financial services in Kenya within 2016 to 2019 periods. Unit of observation and unit of analysis should be ascertained in a study in a given population (Kumar, 2018). The unit of analysis was registered SMEs while the unit of observation was the proprietors of SMEs as shown in Table 3.3.

Table 3.3: Target Population

Enterprises	Frequency
Small Enterprises	4070
Medium Enterprises	183
Total	4253

Source: (KNBS, 2018)

3.8 Sampling Technique

Multistage sampling design was adopted by the study. This sampling process was carried out in stages and involved a number of sampling methods (Kothari, 2019). Sampling priority was first given to geographical location where SMEs operate; Makueni County, Machakos County and Kitui County. This was because stratified random sampling is effective in reducing biasness from the targeted population. The three strata were used to select SMEs in the second stage. Samples from each strata were selected by utilising simple random sampling. Finally purposive sampling was used to pick a single respondent within the selected SMEs. Hence, SMEs owner was chosen as was deemed to be utmost knowledgeable about enterprise access to financial services.

The study sample size was selected from target population of 4253 SMEs that were licensed to operate in Lower Eastern Kenya. In view of this, a representative sample was calculated from the accessible population at 95% confidence level using the formula as proposed by Yamane (1967) and cited by Singh and Masuku (2014).

$$n = \frac{N}{1+N(e)^2}$$

Where:

n = sample size

N = population size

e = margin of error at 5%

Therefore the desired sample size was;

$$n = \frac{4253}{1+4253 (0.05)^2}$$

$$n = 366$$

The sample size to each stratum was achieved by proportional allocation in equation:

$$n = \frac{P_i}{N} (S)$$

Where:

n = sample size of each stratum

P_i = Population included in the ith stratum

N = Total population

S = Sample size

The sample of 366 was apportioned basing on percentage strength of numbers in every cluster as reflected in Table 3.4.

Table 3.4: Sample Distribution

Enterprises	Population size (N)	Sample size (n)	Percentage (n/N)*100
Small	4070	350	95
Medium	183	16	5
Total	4253	366	100

Source: (Researcher, 2021)

3.9 Data Collection Instruments

A semi-structured questionnaire was used in collecting of the primary data which contained questions that were both open and close-ended. The collected data was qualitative and quantitative in nature. The main reason why a questionnaire was

preferred is because it's economical and collects data from a large population. The questionnaire was also simple to understand to enable the respondents to take a short time while answering them. Saunders and Rojon (2014) confirmed that questionnaires are less expensive and can be distributed to a large population at the same time, can be given directly to the intended respondents and that they reduce biasness as all the questions are the same.

The questionnaire captured data on two main sections. The first section focused on general information; gender, age group, education level, enterprise age, number of employees and type of business. The second section focused on collecting information on study variables; relationship lending, asset based lending, financial statement lending, financial literacy, credit information sharing and access to financial services as shown in appendix II. The respondents were owners of SMEs registered and licensed to operate in Kenya.

3.10 Pilot Study

Pilot testing was important for testing reliability, validity and viability of research instruments and the study. Data collection instruments as well as research design correctness and suitability was achieved through a pilot test (Saunders *et al.*, 2019). Pilot testing was important because it helped to detect weaknesses in research and instruments for data collection (Fraser, Fahlman, Arscott & Guillot, 2018). A sample of ten percent of the study population was used in the pilot study which was 37 SMEs. Mugenda and Mugenda (2012) pointed out that the sample size to be utilised for testing is governed by cost, time plus efficiency; however, 5-10% of the main sample is accepted. The piloted sample was not used in the main study. The results obtained was

used to create modifications wherever essential to guarantee that instrument measuring specification is credible (Saunders *et al.*, 2019).

3.10.1 Validity Testing

Validity is the extent where an instrument exactly measures its objective accurately as intended. Validity is the degree where methods of data collection precisely measures as planned as well as correctness of research findings (Gani, Rathakrishnan & Krishnasamy, 2020). Trustworthiness, dependability and utility is a pointer to validity (Zohrabi, 2013). This means that the findings of the research can be replicated by usage of similar instruments and procedure. The researcher ensured that instrument validity was achieved through the research questions that were adapted to the study purposes. Construct validity was realised through making sure that the association concerning the operationalised variables was in agreement with the embodied theoretical concepts as picked up in the literature examination. The study also intended to depend on instruments advanced in similar studies and theories produced from suitable literature (Mohajan, 2017). The researcher sought the assistance of the experts in research to help improve content and construct validity of an instrument, their comments were assimilated in the study (Taherdoost, 2016).

3.10.2 Reliability Testing

Reliability is a measure in which a research instrument produces trustworthy and consistency results after repetitive trials. Reliability deals in a study precision, consistency, credibility and repeatability (Chakrabarty, 2013). Instruments error, observer mistake or respondent inaccuracy can be a problem to reliability. Reliability of instruments was guaranteed through undertaking a pilot study so that similar respondents' answer questions in consistent manner. Trained research assistants were

utilised to reduce errors and condition for data collection was standardised. Coefficient of internal consistency Cronbach's alpha was used to measure reliability for the reason that it offers a unique quantitative estimation of internal consistency of the scale (Quinlan, Babin, Carr, Griffin, & Zikmund, 2019). Using the Cronbach alpha coefficient with a range of 1 to 0, high values shows better reliability. An alpha value of more than 0.70 designates robust internal consistency of the research instrument (Taber, 2018). In this study, the instruments were deemed to be reliable as overall reliability coefficient was 0.756.

3.11 Data Collection Procedure

The research authorization letter was obtained by the researcher from Kenyatta University Graduate School. National commission for Science Technology and innovation (NACOSTI) licence was acquired through the Kenyatta University Graduate School to undertake the data collection. On the same note research reported to lower eastern county commissioners before engaging in data collection. This enhanced the researcher to get permission to visit and collect data from the sampled entities and ensure that the security of the researcher was guaranteed. Respondents were informed on research purpose and significance as well as assurance of confidentiality through Appendix I, introduction letter attached to questionnaire. The researcher then administered the questionnaire to SMEs sampled for the study.

3.12 Data Analysis and Presentation

Descriptive and inferential statistics increases the strength of results, consequently they were utilised in data analysis. The finalised data was put into an Excel spreadsheet for amendment and coding to ease the data entry. The Interpretations of the analysed data was made consistent with the provisions of each test. Calculation and tabulation was

done for descriptive statistics of standard deviation, mean, frequencies and percentages. Inferential statistics that was included in this study involved the use of Heckman two step regression model to investigate the effect of financing practices on access to financial services by SMEs in Kenya.

3.12.1 Diagnostic tests

The conducted diagnostic tests were to evaluate the model assumptions and investigate whether or not there are observations with a large, unjustifiable effect on the analysis. The study conducted multicollinearity test, test for heteroscedasticity and test for normality.

3.12.1.1 Multicollinearity

To ensure the data collected was free from biasness and one variable data is not related to another variable data, the study conducted a multicollinearity test. Multicollinearity is detected when two variables have same linear relation (Field, 2013). Multicollinearity poses a problem of increasing the standard error of coefficients, producing unreliable significance checks and confidence interval. The Variance of Inflation (VIF) was used to test multicollinearity. VIF ranging from 1 to 10 indicate absence of multicollinearity while presence of multicollinearity is detected when VIF is more than 10 or less than 1 (Lindner, Puck & Verbeke, 2020). When the test fail you should drop the extremely related variables that causes other explanatory variables to appear significant (Brooks, 2019).

3.12.1.2 Test for Heteroscedasticity

Heteroscedasticity was carried out with the aim of establishing unequal variability of a variable under study (Astivia & Zumbo, 2019). Best linear and unbiased estimates

cannot be realised in the manifestation of heteroscedasticity. This study used Levene test to test for heteroscedasticity as suggested by Field (2013). Where the values of the Levene test probability statistics are more than significant level of $P > 0.05$ it means that the variances are equal. Value should be greater than 0.05 to meet the heteroscedasticity assumption and allow further analysis using the regression model. Hair, Black, Babin and Anderson (2014) affirmed that when $P > 0.05$ the null hypothesis will not be rejected while rejection will occur when $P < 0.05$. Inference is centred on White's heteroscedasticity corrected standard errors of OLS estimators to solve heteroscedastic problem (Brooks, 2019).

3.12.1.3 Test for Normality

Shapiro-Wilk test verified normality existence which according to Field contains more power to discover normality deviations (Field, 2013). Shapiro-Wilk test was used to test normality since the observations were below 2000. When the test P-value is above 0.05 ($P > 0.05$), then the sample data is selected from a population that is normally distributed signifying that the data is normally distributed (Mishra, Pandey, Singh, Gupta, Sahu & Keshri, 2019). The data is said to depart from the normal distribution if $P < 0.05$ (Brooks, 2019). Getting rid of outliers as well as employing standard distributions with data transformation is a solution to data that is not normally distributed.

3.12.2 Hypothesis Testing

Hypotheses were tested to find out whether the effect of independent variable was significant or not on dependent variable. At 5% level of significance the equation was statistically significant where the p-value generated was below 0.05. The relationship was contemplated at significance level of 5% to be significant when $p < 0.05$ (Hair,

Tatham & Black, 2010). Therefore when $P < 0.05$, then null hypotheses is rejected but incase $P > 0.05$ the study fails to reject the null hypothesis as set in Table 3.5.

Table 3.5: Hypothesis Testing

Objectives	Hypothesis	Statistical approach	Interpretation
Objective 1: To establish the effect of relationship lending on access to financial services by small and medium enterprises in Kenya	Relationship lending has no significant effect on access to financial services by SMEs in Kenya.	Heckman two step regression model	$H_0: \beta_i = 0$ $H_0: \beta_i \neq 0$ Reject H_0 if $p < 0.05$, otherwise fail to reject H_0
Objective 2: To establish the effect of asset based lending on access to financial services by small and medium enterprises in Kenya.	Asset based lending has no significant effect on access to financial services by SMEs in Kenya.	Heckman two step regression model	$H_0: \beta_i = 0$ $H_0: \beta_i \neq 0$ Reject H_0 if $p < 0.05$, otherwise fail to reject H_0
Objective 3: To establish the effect of financial statement lending on access to financial services by small and medium enterprises in Kenya.	Financial statement lending has no significant effect on access to financial services by SMEs in Kenya.	Heckman two step regression model	$H_0: \beta_i = 0$ $H_0: \beta_i \neq 0$ Reject H_0 if $p < 0.05$, otherwise fail to reject H_0
Objective 4: To establish the mediating effect of financial literacy on financing practices and access to financial services by small and medium enterprises in Kenya.	Financial literacy does not have mediating effect on financing practices and access to financial services by SMEs in Kenya.	Stepwise regression	$H_0: \beta_i = 0$ $H_0: \beta_i \neq 0$ Reject H_0 if $p < 0.05$, otherwise fail to reject the H_0
Objective 5: To establish the moderating effect of the credit information sharing on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya.	Credit information sharing has no moderating effect on financing practices and access to financial services by SMEs in Kenya.	Moderated multiple regression (MMR)	$H_0: \beta_i = 0$ $H_0: \beta_i \neq 0$ Reject H_0 if $p < 0.05$, otherwise fail to reject the H_0

Source: (Researcher, 2021)

3.13 Ethical Consideration

Ethical standards compliance was achieved through authorisation by Kenyatta University Graduate School (Appendix IV) to undertake a research. A research license was sought from the National Council for Science Technology and Innovation (Appendix V) before beginning data collection. An introductory letter was written stating the purpose of the research and specifying the kind of cooperation requested from target respondents (Appendix I) before research commenced. Informed consent from the respondents was acquired before undertaking to collect data from the field. Voluntary participation was upheld and avoidance was undertaken where respondent's rights was endangered. High level of confidentiality on the information that was provided by respondents through questionnaires was maintained. Coding was used to boost respondents' anonymity. The literature that was relevant and referred by the research was acknowledged.

CHAPTER FOUR

EMPIRICAL RESULTS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter provides empirical results, presentations, interpretations and discussions of the study using both descriptive and inferential statistics in light of the literature reviewed.

4.2 Response Rate

The study administered a total of 366 questionnaires to selected respondents. The results in Table 4.1 present the response rate recorded by the study.

Table 4.1: Response Rate

Response rate	F	%
Returned Questionnaire	320	87.4
Unreturned Questionnaires	46	12.6
Total	366	100

Source: Research Data, (2021)

The results in Table 4.1 show that 320 of the questionnaires were dully filled and returned which represented a response rate of 87.4%. On the other hand, 46 (12.6%) were not returned. The response rate of 87.4% was considered adequate for this study basing on the criteria provided by Babbie (2010) who suggested that for a descriptive study a reply rate of more than 50% should be accepted for analysing and reporting. A response rate is deemed excellent if it's above 70%, good when 60% and adequate if 50% in a study (Mugenda, 2009). Grounded on these affirmations from prominent intellectuals, 87.4% response rate was excellent for the study. It is believed that a high response rate improves acceptance and reliability of research (Krishnan & Pouloses,

2016). Data collection process for this study happened during the COVID-19 crisis which explains why some questionnaires were not dully filled and returned.

4.3. Results of Reliability Tests

The study carried out reliability tests to establish the reliability of the research instruments.

4.3.1 Summary of Reliability Results

Reliability test was carried out to establish the reliability of the constructed research instrument in collecting the data required. This study conducted a pilot test using 37 SMEs (10% of the sample) who were not included in the final study. Table 4.2 shows the results for reliability testing.

Table 4.2: Summary of Reliability Results

Variables	Reliability Statistics		Conclusion
	Cronbach's Alpha	N of Items	
Relationship Lending	0.743	7	Scale Reliable
Asset Based lending	0.767	7	Scale Reliable
Financial Statement Lending	0.796	9	Scale Reliable
Credit Information Sharing	0.708	8	Scale Reliable
Financial Literacy	0.714	6	Scale Reliable
Access to Financial Literacy	0.808	8	Scale Reliable
Overall Reliability	0.756	45	Instrument was Reliable

Source: Research Data, (2021)

As shown in Table 4.2, all the variables had α greater than 0.7 which confirmed that the scale used in questionnaire construction was reliable. The overall reliability of the entire research instrument was 0.756 which also implied that entire research instrument was reliable. Internal consistency was tested by Cronbach's Alpha displaying employed scale reliability. The threshold for Cronbach's Alpha was $\alpha = 0.7$ where variables with α greater than 0.7 were considered to have internal consistency or reliable. Taber (2017)

argued that coefficient greater than or equal to 0.7 is acceptable for research as it show excellent research instruments. In conclusion questionnaire responses realised internal consistency by the study.

4.3.2 Summary of Factor Analysis

A factor analysis was critical to be conducted because it summarize the information contained in a number of original variables into a smaller number of factors without losing much information. Research instrument construct validity and results summary are presented in Table 4.3.

Table 4.3: Summary of Factor Analysis

Variables	Factor Loadings	N of Items	Conclusion
Relationship Lending	0.507-0.76	7	Scale Reliable
Asset Based lending	0.518-0.741	7	Scale Reliable
Financial Statement Lending	0.518-0.74	9	Scale Reliable
Credit Information Sharing	0.505-0.872	8	Scale Reliable
Financial Literacy	0.500-0.688	6	Scale Reliable
Access to Financial Literacy	0.560-0.708	8	Scale Reliable

Source: Research Data, (2021)

The factor analysis result in Table 4.3 implied that not any of the items measuring the variables was detached since each had a factor loading of above 0.4 (Samuels, 2017; Rahim & Magner, 2005). These findings confirmed that all the factors significantly contributed to the overall variable. David, Patrick, Phillip and Kent (2010) stated that the general rule of the thumb applied for acceptable factor loading is 0.40 or above. Hair, Black, Babin, Anderson and Tatham (1998) and Tabachnick and Fidell (2007) noted that only factors with factor loading above 0.4 should be retained for further study. The factor loadings of each items used in the questionnaire are presented in Appendix III.

4.4 Demographic Information

The information on demographics relating to respondents' characteristics and enterprise characteristics was sought to be collected by the study.

4.4.1 Demographic Characteristics of the Respondents

This section presents the background information of the respondents which include gender, age bracket and highest education level attained by the respondent. The results are presented in Table 4.4.

Table 4.4: Demographic Characteristics of the Respondents

		Frequency	Percent
Gender	Female	149	46.6
	Male	171	53.4
	Total	320	100
Age Group	18- 28 years	90	28.1
	29-39 years	112	35
	40-49 years	68	21.3
	50-59 years	38	11.9
	Above 60 years	12	3.8
	Total	320	100
Highest level of educational qualification attained	KCPE	28	8.8
	KCSE	79	24.7
	Certificate	66	20.6
	Diploma	91	28.4
	University Degree	53	16.6
	No Formal Education	3	0.9
	Total	320	100

Source: Research Data, (2021)

The results show that 53.4% were male while 46.6% of the respondent were female. This finding implied that there was gender diversity among owners of SMEs located in Kenya. The finding further reveals that men are the majority owners of SMEs. The

outcome corroborated with Nyaga, Jagongo and Omagwa (2020) that cultural matters deter female to own SME. The government of Kenya have come up with initiatives to empower women financially in order to fully participate in this sector through; provision of women funds, sustainable development goals and Kenya's Vision 2030. This results further concurred with Atela, Gannon & Crick (2018) that majority of SMEs are owned by male individuals since women lack tangible assets like land title deed which they can pledge as collateral in order to access financial services.

The distribution of age group was as follows; 35% were aged between 29 and 39 years, 28.1% were between 18 and 28 years, 21.3% were between 40 and 49 years as revealed in Table 4.4. The finding implication was that majority of the participants comprised youths and middle age individuals. This results are in agreement with Nganu, Bula and Ofafa (2018) who found out that 70.7% of SMEs were owned by individuals below 39 years, majority being the youth.

The results further show that respondent had varying level of education with 28.4% being diploma holders, 24.7% KCSE certificate holders, 20.6% were college certificate holders while those without any formal education were 0.9%. Therefore, the educated and youth entrepreneurs run this sector. High education and experience is acknowledged as a significant determinant of access to financial services by SMEs (Son & Park, 2018). Emphasis on education came from CBK, KNBS & FSD Kenya (2021) confirming that 98.5% of individuals who possessed tertiary education easily accessed formal financial services whereas those with no formal education posted high rate of exclusion at 23.4%. Literacy level of respondents is essential when utilising questionnaire in order to realise research objectives (Australia Bureau of Statistics, 2018). The findings clarified that majority of respondents answered questions

adequately since they possessed post-secondary education hence data acquired was suitable for analysis. This results controverted KNBS (2016) findings of 31.4 % of SMEs were owned by people with no formal education, those with primary education comprised 39.7%, those in possession of secondary education were 19.1% and those that possessed post-secondary education were merely 8.8%.

The findings further implied that level of education was not a major determinant for one to start or manage an SME even though education level is attributed to increase in information and awareness which can affect firm's performance. This further point to the hypothesis that work experience was equally as important as education in managing SMEs. These finding supports those of Diabate, Allate, Wei and Yu (2019) that found that work experience is important in SMEs growth and development.

4.4.2 Background Information of Enterprises

This section provides the research's findings on the enterprise characteristics that include age of enterprise, number of employees and type of business engaged in. The results of enterprise background information are presented by Table 4.5.

Table 4.5: Background Information of Enterprises

		Frequency	Percent
Years of operation	1-5 years	97	30.3
	6-10 years	119	37.2
	11-15 years	75	23.4
	Over 15 years	29	9.1
	Total	320	100
Total number of employees in your enterprise	5 – 49	286	89.4
	50 – 99	34	10.6
	Total	320	100
Type of business	Manufacturing	7	2.2
	Wholesale	82	25.6
	Service provider	79	24.7
	Retail	152	47.5
	Total	320	100

Source: Research Data, (2021)

Table 4.5 presents the results for background information on the SMEs that were included in this study. The results show that 37.2% of the SMEs had been in operation for between 6 and 10 years, 30.3% had operated for between 1 and 5 years while 23.4% had operated for between 11 and 15 years. Those that had operated for over 15 years were the least at 9.1%. The findings shown that majority of SMEs have been in existence for more than six years, agreeing with Ipinnaiye, Dineen and Lenihan (2017) that business closure decline with increase in age. The age of the firm is very vital in determining the source of financing (Mallinguh, Wasike & Zoltan, 2020), indicating that SMEs that have operated for lengthier period comprehended trade dynamics (Muchira, Jagongo & Simiyu, 2019). This result indicates that the more the number of years a business has operated, the higher the likelihood of being financed because of reduced information asymmetry. The study concurred with Nganu, Bula and ofafa (2018) that SMEs with over 15 years were only 10% pointing to the fact that this is young industry.

The results further show that 89.4% had between 5 and 49 employees while 10.6 had between 50 and 99 employees. This findings revealed that majority of SMEs have less tha 50 employees. This study discovered that the sector is dominated by small enterprises. Small enterprise capital requirement for investment was less in comparison with medium and large as a result they form the majority in this sector (Landau & Everett, 2014). This findings negated those of Kiveu, Namusonge and Muathe (2017) that small enterprises10-49 accounted for 35% whereas medium enterprises (50-99) comprised 65%. This study by Kiveu, Namusonge and Muathe (2017) revealed that majority in this SMEs cohort came from mediun enterprises although they focused on small and medium enterprises in the manufacturing sector.

Almost a half (47.5%) of the enterprises operated in retail sector, 25.6% were wholesalers while 24.7% operated in services sector. The finding implied that there was sector diversification among the SMEs that were included in this study. Further dominance arose from retail sector that occupied nearly a half of the enterprise. The findings were in agreement with World Bank (2017) that small sized enterprises are established by proprietors in form of retail trade because of failure to secure loans from financiers.

4.5 Descriptive Analysis Results

This section presents descriptive statistics on the study variables; relationship lending, asset based lending, financial statement lending, credit information sharing, financial literacy and access to financial services.

4.5.1: Relationship Lending

The first objective of the study was to establish the effect of relationship lending on

access to financial services by small and medium enterprises in Kenya. Relationship lending leads to granting of credit facilities by financial institutions to the borrower basing on the securing firm personal confidential information for a lengthy duration by means of creditors networking. Enterprises with longer lending relationships are able to acquire loans at ease and at a reduced cost of credit (Beatriz *et al.*, 2018). Lengthier duration of banking relationships eases the loan terms, ameliorates credit restrictions and henceforth raising value of the firm (Ekpu, 2015). Operationalisation of variable was through concentration of borrowing, relationship scope and relationship duration as recommended by Mureithi-Ollows (2017).

This section presents the descriptive results on relationship lending and access to financial services by SMEs in Kenya. The respondents were asked whether they kept banking relationship with their banks. The results are presented in Figure 4.1.

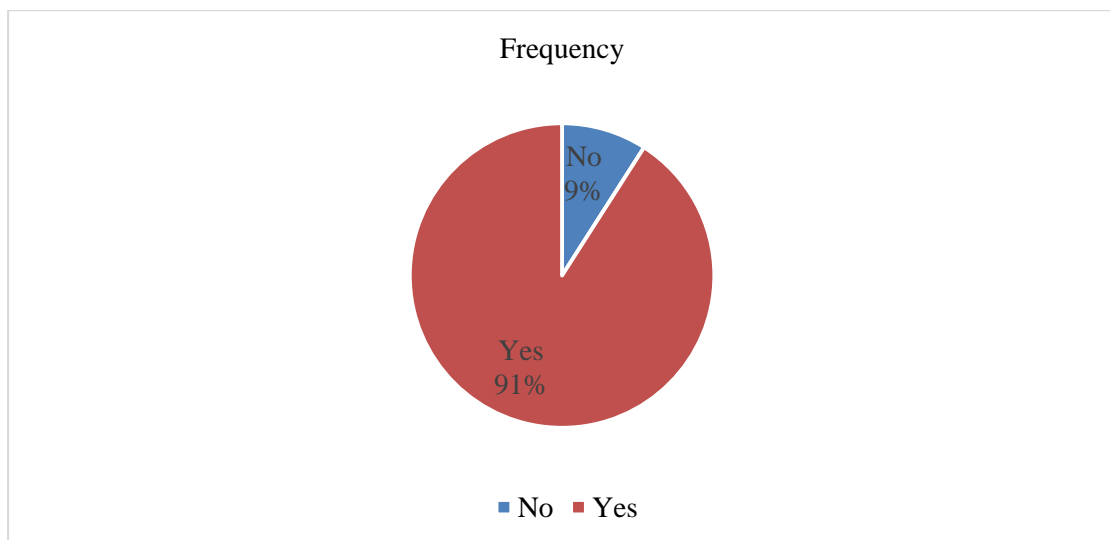


Figure 4.1: Kept Banking Relationship with Current Banks

Source: Research Data, (2021)

The results in Figure 4.1 show that 91% agreed while 9% disagreed. The findings implied that majority of the SMEs surveyed kept banking relationship with their banks. The findings concurs with (Li, 2017) who proved that Information asymmetry is alleviated by relationship lending resulting to securing high loan facility, a share of more than 10% for those who embrace banking relationship.

The study further sought to find the ground behinds which the SMEs kept banking relationship with their banks. The results are presented in Figure 4.2.

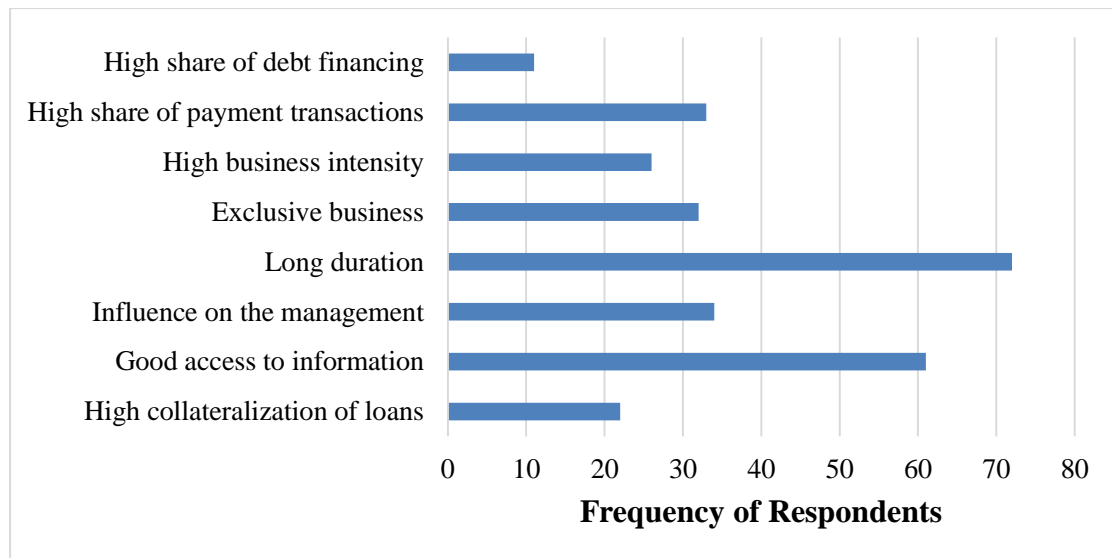


Figure 4.2: Grounds for Keeping Banking Relationship

Source: Research Data, (2021)

The results in Figure 4.2 show that long duration, good access to information and high share of payment transaction were cited by majority of the respondents as the grounds for keeping banking relationship with their banks. The study results agreed with Loukil and Jarboui (2016) who documented that increased transaction payment share, good access to information and long duration as the main factor underlying assessment of information increasing relationship banking.

The study in addition sought to obtain the respondents facts on how relationship lending affects access to financial services. In this section, respondents were required to rate aspects of relationship lending on the influence of access to financial services. Table 4.6 show the results.

Table 4.6: Descriptive Results for Relationship Lending

	No extent	Low extent	Moderate extent	High extent	Very high extent	Mean	Std Dev
Long relationship with the bank improves access to credit	4.7%	19.1%	25.9%	29.1%	21.2%	3.43	1.16
Increased credit ties improve access to loans	3.8%	12.9%	26.7%	39.3%	17.3%	3.53	1.04
Multiple banking relationships improves credit availability	5.4%	10.1%	25.9%	33.4%	25.2%	3.63	1.12
High share of debt financing positively influence access to loans	6.6%	16.9%	19.1%	31.0%	26.3%	3.54	1.23
Building a strong trust with a bank enables ease access to credit	4.7%	11.2%	23.4%	30.3%	30.3%	3.70	1.15
Remaining in one bank for a long time increases access to credit	6.6%	14.7%	25.4%	27.6%	25.7%	3.51	1.21
Strong social relationship with the bank increases credit availability at a lower interest rate	13.1%	15.3%	20.3%	27.2%	24.1%	3.34	1.34
Overall mean						3.53	

Source: Research Data, (2021)

The results in Table 4.6 show how the respondent responded to various statements used to measure the relationship lending. The respondents were asked whether long relationship with the bank improves access to credit, the statement had a mean of 3.43 which implied that some of the respondent agreed while other disagreed. The standard

deviation of 1.16 indicated high deviation of response to the statement. The findings implied that keeping long relationship increased access to credit in some banks but not all the banks. Respondents indicated high extent as indicated by the mean of 3.53 on whether increased credit ties improve access to loans.

Similarly, respondent agreed that multiple banking relationships improves credit availability as shown by the mean response of 3.63. The study further sought to establish the extent to which high share of debt financing positively influence access to loans, the results show that 26.3% and 31.0% of the respondent showed very high extent and high extent respectively. Low extent was posted by 16.9% while 6.6% indicated very low extent. The results further show that majority of the respondent indicated high extent on statement on whether building a strong trust with a bank enables ease access to credit and whether remaining in one bank for a long time increases access to credit. The results concurred with the findings of Perrien, Filiatrault and Ricard (1993) who asserted that development of a relationship was anchored on satisfaction, confidence and trust.

The responses on whether strong social relationship with the bank increases credit availability at a lower interest rate varied significantly as shown by standard deviation of 1.34. These implied that while strong relationship with certain banks led to low interest rates this was not the case for other banks. The overall mean of 3.53 implied that relationship banking increase access to financial services according to majority of the respondents. The study finding support those by Erdogan (2019) and International Trade Centre (2018) who argued that SMEs find it harder to access credit services because of failure to establish relationship with banks.

In the same line support came from Behr *et al.* (2017) and Banerjee, Gambacorta and Sette (2017) whose findings also proposed that lengthier lending relationships amid borrower and lender definitely benefits in lessen information asymmetries hence benefitting borrowers. The findings of this research are similar with Agostino and Trivieri (2017) that access to bank credit increases as the lending relationship duration increases. However, the findings are inconsistent with Rahman *et al.* (2017) that relationship lending does not improve SMEs access to debt from commercial banks. Conversely Bolton *et al.* (2016) failed to support the outcome and reported that when banking relationship reduces then SME access to credit rises. Further Cenni, Monferrà, Salotti, Sangiorgi and Torluccio (2015) contradicted the results by clarifying that relationship lending does not have a significant influence on small firms' access to credit.

4.5.2 Asset Based Lending

Asset-based lending and access to financial services by small and medium enterprises in Kenya was the second objective of the study. Collateral security advanced for a loan can have absolutely effect on credit granting decision for SMEs for the reason of minimizing credit risk (Nguyen, 2016). Collateral is pledged by borrowers to indicated credibility to financial institutions thus increasing access to financial services. Collateral with high quality indicates more trustworthy borrower as well as nurturing decent behaviour in consuming loan, facilitating bank to alleviate moral hazard and adverse selection problems (Le & Nguyen, 2019). Veiga and McCahery (2019) approves that collateral security is the chief reason for SMEs failure to accessing funding from financial institutions. Operationalisation of the variable was done through adequacy, value and quality of the collateral pledged by the borrower (Tageo, 2016).

Respondent's views was sought on the effect of asset-based lending on access to financial services by small and medium enterprises in Kenya. To begin with, the respondents were asked whether their banks required collateral. The results are presented in Figure 4.3

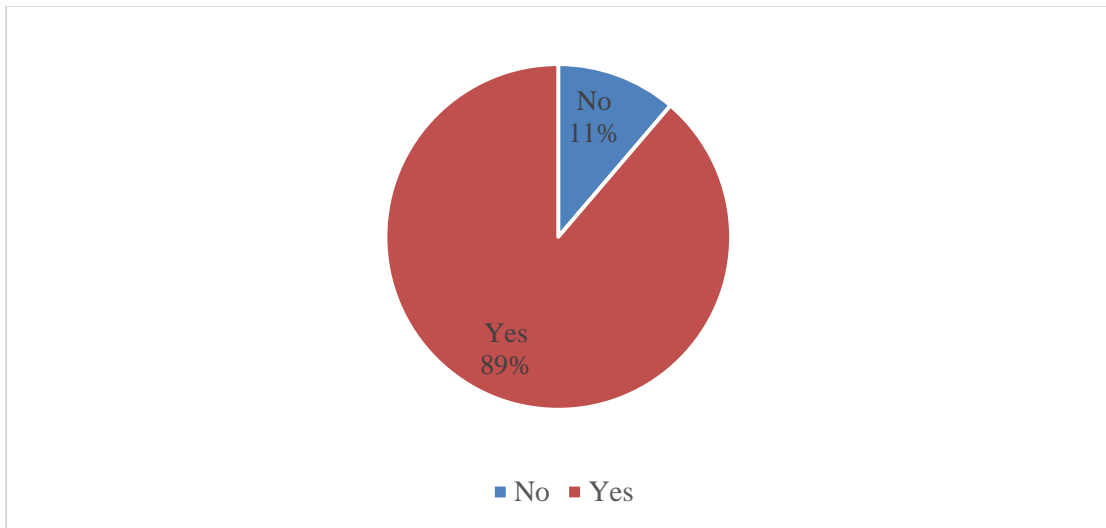


Figure 4.3: Collateral Requirement in Lending

Source: Research Data, (2021)

Figure 4.3 show 89% of respondents agreed as per the results. Implication of the findings was that majority of the lending institutions in Kenya required collateral during lending to SMEs. Collateral production is a condition from SMEs in order to be able to access loans from lenders (Duarte, Gama & Esperanca, 2017). The results of the study were in agreement with findings of Magembe (2017), Chowdhury and Alam (2017) that collateral requirement is a critical issue in awarding of loans. Similarly Calice, Chando and Sekioua (2012) agreed that request of asset security from banks stood at 94% as Kihimbo, Ayako and Omoka (2012) rated it at 91.7%. Equally Mwirigi, Gakure and Otieno (2019) and Mbogo (2013) reinforced this results through demonstration that

85% of SMEs cannot access loans from banks owing to failure to produce collateral demanded.

The study further sought to establish facts of the respondents on the type of collateral required by their commercial banks before granting of credit. The outcome of the respondents are as shown in Figure 4.4.

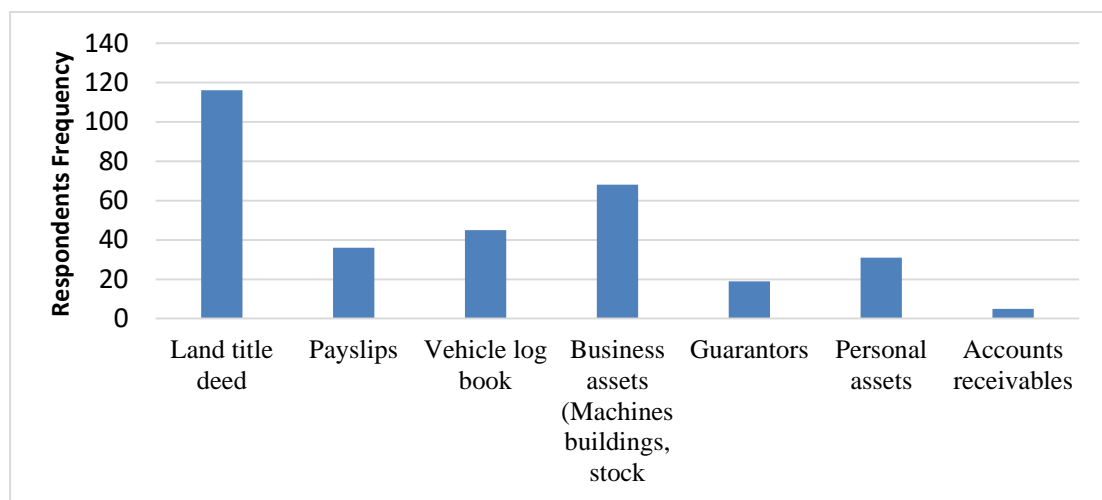


Figure 4.4: Type of the Collateral Required in Lending

Source: Research Data, (2021)

The results in Figure 4.4 showed that majority of the respondent mentioned title deeds and business assets as most common forms of collateral required by commercial banks. These findings support International Finance Corporation (2017) who argued that financiers rely on traditional model of providing loans based on fixed asset collateral such as land and building. The findings are in line with Bencheikh and Taktak (2017) who revealed equipment's, machineries, buildings and land positively influences loan access. These findings were inconsistent with the findings of Kislak, Menhoff and Neuberger (2013) who found that lenders rely less on collateral with longer borrower relationship and with shorter distance to the borrower.

Further, the participants were required to give facts on the extent to which the various components of asset-based lending affect the access to financial services. Table 4.7 provides the findings.

Table 4.7: Descriptive Results for Asset Based Lending

Statement	No extent	Low extent	Moderate extent	High extent	Very High extent	Mean	Std Dev
Firms that offer highly valued collaterals improves access to loans	23%	20%	26%	24%	7%	2.72	1.21
Having assets with high resale value increases access to credit	13%	18%	37%	27%	5%	2.93	1.08
Highly liquid collateral is preferred for loan lending	11%	28%	31%	23%	6%	2.82	1.18
Lack of adequate collateral limits access to loans	9%	28%	32%	27%	5%	2.94	1.12
Evidence of asset ownership results in positive credit appraisal	11%	31%	32%	22%	4%	2.77	1.12
Immovable assets are favoured in loan awarding	11%	33%	30%	22%	5%	2.80	1.17
Firms having tangible assets access loans with ease	13%	33%	31%	17%	8%	2.80	1.25
Overall Mean						2.83	

Source: Research Data, (2021)

The results in Table 4.7 shows how the respondents responded to various statement used to determine asset-based lending among SMEs in Kenya. The study asked the respondent whether firms that offer highly valued collaterals improves access to loans. The results show that 24% and 7% indicated high and very high extent respectively while 20% and 23% indicated low and no extent respectively. The finding implied that high value collateral improved access to credit for some SMEs but not for others. The findings coincided with Le and Nguyen (2017) that collateral with high quality

indicates more trustworthy borrower as well as nurturing decent behaviour in consuming loan, facilitating bank to alleviate moral hazard and adverse selection problems. Likewise Bencheikh and Taktak (2017) supports the results by revealing that equipment's, machineries, buildings and land positively influences loan access.

The study also sought to establish whether having assets with high resale value increases access to credit, findings show majority of the respondent indicated moderate extent as shown by the mean of 2.93. Similarly, majority indicated moderate extent on whether highly liquid collateral is preferred for loan lending and whether lack of adequate collateral limits access to loans. The overall mean response was 2.83 which implied that majority of the respondent disagreed that asset-based lending increases access to financial services in their firms. The study supports Rahman *et al.* (2016) that possession of collateral do not improve on loans accessibility by SMEs. Also Nkundabanyanga *et al.* (2014) pronounced that collateral security has insignificant effect on access to bank loan.

However, the studies that were inconsistent with the results; Gou *et al.* (2018) that rise in collateral decreases the probability of credit rationing. In the same line Magembe (2017) found that SMEs indicated that they faced challenges in the requirements of producing collateral and the information required to ensure that they are capable to service the debt. Equally Chidoko and Matamanda (2017); Osano and Languitone (2016) explained that collateral positively influenced access to loan services as financiers will fall back on it in the event of defaulting. Likewise Chandio *et al.* (2017), Tagoe (2016) and Duniya and Adinoli (2015) declared that the presence of collateral has a positive and significant effect on the access to credit. On the same note Love *et*

al. (2016) affirmed that access to financial services would rise by 10% when firms maintains transferable assets collateral records.

4.5.3 Financial Statement Lending

Financial statement lending on access to financial services by small and medium enterprises in Kenya was study’s third objective. Financial statement lending was adopted because the decision to give a loan and the conditions of the credit agreement are predominantly established on the strength of the statement of financial position, income and cash flow statements. Financiers examine financial statements for measurement of a business’s current performance and ability of a firm to influence settlement of loan, overall credit risk and forecast future performance (Mashkour, 2020). Operationalisation of the variable was done through financial reporting, quality of financial statements and financial information available. This section presented the descriptive analysis to show how the respondents responded to statement on financial statement lending on access to financial services.

To commence with, the study sought to establish from the respondent whether their banks required financial statements before advancing credit to their enterprises. Table 4.8 presents the results of the outcome.

Table 4.8: Requests for Financial Statements by Banks

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	39	12.2	12.2	12.2
	Yes	281	87.8	87.8	100.0
	Total	320	100.0	100.0	

Source: Research Data, (2021)

The results show that 87.8% of the respondent agreed. These findings implied that majority of the commercial banks carried out financial statement lending to SMEs. The

results concurred with the findings of Aladejebi and Aladimeji (2019) who affirmed that absence of correct financial statement makes SMEs vulnerable in securing bank loans. The business information of the SMEs was the major factor that the bank required to give a loan (Saleh, Alkasasbeh & Bader, 2017). Problems for SMEs to secure credit facility from financial institutions happens because of absence of appropriate financial statements (Aremu & Adeyemi, 2011).

The study also sought the facts of the respondents on the various components of financial statement lending on access to financial services by SMEs in Kenya. Table 4.9 show respondents' sentiments.

Table 4.9: Descriptive Results for Financial Statement Lending

	No extent	Low extent	Moderate extent	High extent	Very high extent	Mean	Std Dev
Failure to provide financial statements limits access to loans	7.8%	20.7%	17.6%	32.9%	21.0%	3.39	1.24
Maintaining proper books of accounts increases access to loans	3.5%	13.2%	28.0%	38.7%	16.7%	3.52	1.03
Unsatisfactory disclosure of financial information negatively affects access to loans	5.3%	13.4%	26.2%	30.3%	24.7%	3.56	1.15
Financial statements prepared according to laid down accounting standards increases access to credit	5.0%	15.0%	21.9%	29.5%	28.5%	3.61	1.19
Unaudited financial statements restrict access to loans	7.2%	10.1%	26.7%	26.1%	29.9%	3.61	1.21
Availability of quality credible financial information boosts business access to loans	4.4%	12.3%	20.8%	31.5%	30.9%	3.72	1.16
Inadequate evidence to assure future cash flow for repayment negatively affect access to loans	6.9%	14.7%	19.7%	30.0%	28.8%	3.59	1.24
Insufficient confidence of financial information provided restricts granting of loans	9.7%	11.6%	19.4%	29.1%	30.3%	3.59	1.29
Firms insufficient profitability and liquidity limits access to loans	8.8%	11.2%	16.9%	29.1%	34.1%	3.68	1.29
Overall mean						3.59	

Source: Research Data, (2021)

The results in Table 4.9 presents the descriptive results of financial statement lending. To begin with, the study asked respondent whether failure to provide financial statements limits access to loans. The results show that 32.9% and 21.0% indicated high extent and very high extent respectively. On the other hand, 20.7% and 7.8% indicated low and no extent respectively. The finding implied that in some banks failure to provide financial statement limits access to loans but not in others. The respondents further indicated high extent as shown by the mean of 3.52 on the statement on whether maintaining proper books of accounts increases access to loans. The study findings were in agreement with Nemoto *et al.* (2018) who accredited that financial institutions need to assess credit risk and solvency of SMEs before extending credit as a result financial statements are always essential. Absence of organisational accounting expertise for decision making and non-existence of practical skills to make financial statements remain considerable problem to evolving of SMEs as is the failure to access loans (Karanja *et al.*, 2014).

The study further sought to find out from the respondent whether unsatisfactory disclosure of financial information negatively affects access to loans. The results show that majority as indicated by mean of 3.56 indicate to high extent. Respondent further agreed that financial statements prepared according to laid down accounting standards increases access to credit. The results show that majority of the respondent agreed that unaudited financial statements restrict access to loans. This findings concurred with Aladejebi and Aladimeji (2019) who affirmed that absence of correct financial statement makes SMEs vulnerable in securing bank loans. Equally Ezeagba (2017) established that in respect to accountng standards, SMEs have a tendency to have

inadequate financial records and involve limited or no experts thus limiting their credit access from lenders.

The results in Table 4.9 show that respondent agreed on the statement on whether accessibility to trustworthy financial information boosts firms ease of acquiring of loans, inadequate evidence to assure future cash flow for repayment negatively affect access to loans, insufficient confidence of financial information provided restricts granting of loans and whether firms insufficient profitability and liquidity limits access to loans. The overall mean of 3.59 implied that majority of the respondents agreed on use of financial statement lending among the commercial banks in Kenya.

The finding agreed with Boushnak *et al.* (2018) that credible financial statement positively and significantly influences securing of loan from banks. Similarly Ohachosim *et al.* (2017) indicated that quality of financial statements positively influences credit access by SMEs. Likewise, Ezeagba (2017) discovered that inadequate human resource, poor accounting system, failure to use banking system and lack of accounting records and books are the obstacles that SMEs experiences in preparation of financial reports and loan access. Equally Amoaka (2013) supports the results by affirming that improper financial records jeopardises SMEs chances of securing bank loan.

4.5.4 Financial Literacy

Financial literacy was embraced as a mediating variable in this study. Financial literacy, which is a result of financial education and experience, is acknowledged worldwide as a significant determinant of financial success (Son & Park, 2018). Financial literacy mediations is a main strategy utilised to boost financial inclusion to financially disadvantaged citizens (Lyons *et al.*, 2018; World Bank, 2018; Yuan & Jin, 2017). The

mediating variable of financial literacy was operationalized by means of financial knowledge, investment literacy and debt literacy. Financial literacy mediation effect on financing practices plus access to financial services by small and medium enterprises was to be established by the study. The section presented descriptive analysis of financial literacy among the SMEs in Kenya. The study asked the respondents whether they had undergone financial literacy training. The outcome of the respondents are presented in Figure 4.5

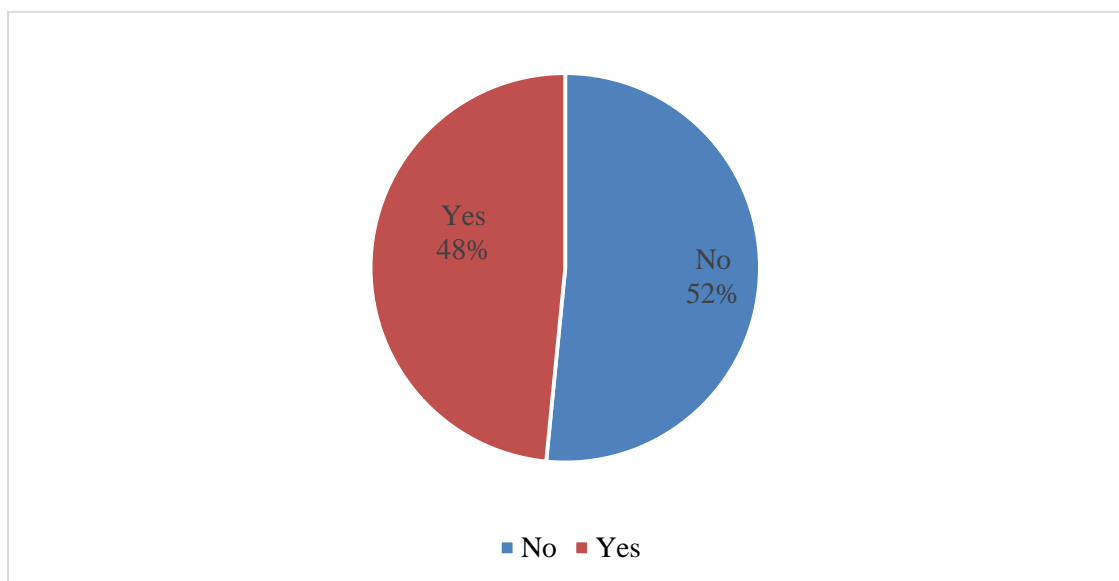


Figure 4.5: Financial Literacy Training

Source: Research Data, (2021)

The results in Figure 4.5 show that less than half (48%) agreed while 52% disagreed. The finding implied that majority of the surveyed SMEs were managed with individuals with no any form of financial literacy trainings. This therefore explain why majority of the SMEs struggle with access to financial services. The study agreed with Lyons *et al.* (2019) that financial literacy deficiency is recognized as a key reason for restrictive

access to credit. Financial literacy makes SMEs owners to become experienced users of financial services.

This study further sought the facts of respondents on aspects of financial literacy and small and medium enterprises access to financial services. Table 4.11 presented the views of respondent on parameters of financial literacy.

Table 4.11: Descriptive Results for Financial Literacy

	Very high extent	High extent	Moderate extent	low extent	No extent	Mean	Std Dev
Weak financial management skills is obstacle in access to loans	7.6%	15.2%	20.3%	29.7%	27.2%	3.54	1.25
Lack of training in book keeping and accounting hinders access to loans	6.0%	13.9%	25.2%	39.4%	15.5%	3.44	1.09
Inadequate skills in preparation and interpretation of financial statements restrict access to loans	6.9%	14.5%	26.1%	33.3%	19.2%	3.43	1.16
Insufficient business planning skills limits access to loans	6.6%	12.5%	19.7%	33.5%	27.6%	3.63	1.20
Lack of knowledge on enterprise credit rating hampers loan acquisition	7.9%	14.8%	26.4%	28.9%	22.0%	3.42	1.21
Low competency and experience on debt management constrains access to credit	8.8%	15.3%	21.2%	29.4%	25.3%	3.47	1.26
Overall mean						3.49	

Source: Research Data, (2021)

Basing on results of Table 4.11, the study asked the respondents whether weak financial management skills is obstacle in access to loans. A mean of 3.54 was obtained from the statement which shown majority of the respondent indicating high extent. On whether

lack of training in book keeping and accounting hinders access to loans, 39.4% indicated high extent, 15.5% indicated very high extent while 13.9% and 6.0% indicated low and no extent respectively. The results also show that 33.3% and 19.2% indicated high and very high extent on whether inadequate skills in preparation and interpretation of financial statements restrict access to loans.

On whether insufficient business planning skills limits access to loans, the mean of 3.63 indicates that majority of the respondents indicated high extent. The study results show that respondents were divided on the influence of financial literacy training on access to financial services as shown by the overall mean of 3.49. The findings implied that lack of financial literacy training could be compensated with experience obtained by SMEs owners as results of many years of operating their businesses. The study agreed with Friedline and West (2016) who argued that financial literacy lacking practical experience is inadequate to enable good financial behaviour in millennial era.

4.5.5 Credit Information Sharing

Credit information sharing was adopted as a moderating variable in this study. CIS is a moderating measure aimed at helping financiers understand the repayment history of the borrower and reward the good borrowers (Otieno *et al.*, 2016). Credit information sharing through credit reference bureaus has increased access to financial services and reduction in the cost of credit as borrowers are sanctioned and rewarded using past payment behaviour (KBA, 2012). Enhancement in CIS enables firms to acquire credit facility from banks as well as market credit (Doblas-Madrid & Minetti, 2013). Variable operationalised as anchored on the following indicators credit rating, repayment history and loan size as employed by Otieno *et al.* (2016). The study in this section sought to establish the moderating effect of the credit information sharing on the relationship

between financing practices and access to financial services by small and medium enterprises in Kenya. The section presented the descriptive analysis of credit information sharing on SMEs among the lending institution in Kenya. Table 4.10 shown results of the findings.

Table 4.10: Descriptive Results for Credit Information Sharing

Statement	No extent	Low extent	Moderate extent	High extent	Very high extent	Mean	Std Dev
It was difficult to access the loan from banks without CIS	11.0%	15.0%	22.3%	30.1%	21.6%	3.36	1.28
CIS has increased the volume of loan access than before	4.1%	15.0%	22.9%	36.1%	21.9%	3.57	1.11
SMEs with good credit score are not denied loans	5.3%	10.0%	25.0%	35.9%	23.8%	3.63	1.11
CIS has made loan accessed equivalent to loan applied	9.4%	12.2%	19.4%	32.6%	26.3%	3.54	1.26
CIS has reduced demand for collateral easing access to loans	6.9%	11.0%	21.5%	35.3%	25.2%	3.61	1.18
Firms with good credit repayment history are not denied loans	5.6%	11.6%	18.2%	35.7%	28.8%	3.71	1.17
CIS has improved lending relationship with the banks promoting access to loans	5.3%	13.2%	20.1%	37.6%	23.8%	3.61	1.14
CIS has reduced interest rates charged on loans improving access	11.0%	19.1%	21.0%	25.1%	23.8%	3.32	1.32
Overall mean						3.54	

Source: Research Data, (2021)

Basing on the results in Table 4.10, the study asked the respondent whether it was difficult to access the loan from banks without CIS. The results shown that 30.1% and 21.6% of the respondents specified high and very high extent respectively. Those who

indicated moderate extent were 22.3% while 15.0% and 11.0% indicated low and no extent respectively. The finding implied that some banks advanced credit without CIS and other insisted on CIS before advancing credit to SMEs.

On whether, CIS had increased the volume of loan access than before, the results shown that majority as indicated by mean of 3.57 indicated to high extent. Similarly, majority of the respondent indicated high extent on whether SMEs with good credit score are not denied loans. On whether CIS had made loan accessed equivalent to loan applied, 32.6% indicated high extent, 26.3% indicated very high extent, 19.4% indicated moderate extent.

The study results further shown that majority of the respondent agreed that CIS had reduced demand for collateral easing access to loans and that firms with good credit repayment history were not denied loans the statement had mean of 3.61 and 3.71 respectively. On whether CIS had improved lending relationship with the banks promoting access to loans, respondents majorly indicated high extent as revealed by the mean of 3.61. The respondents varied on whether CIS had reduced interest rates charged on loans improving access as indicated by standard deviation of 1.32. The finding implied that CIS reduced interest in some commercial banks but not in all the commercial banks. On average, majority of the respondents agreed as indicated by overall mean of 3.54 that CIS played a significant role in access to financial services by Kenya's SMEs. The results supported those of Asongu and Odhiambo (2018) that information sharing channels have a positive and significant impact on access to funding. The study also found that credit registries improved access to credit.

4.5.6 Access to Financial Services

Access to financial services was taken as a dependent variable in this study. SMEs experiences challenges in acquiring timely, affordable and adequate loans (Rithaa *et al.*, 2019). When SMEs find themselves poorly serviced by the financial institutions, their growth and development can be restricted leading to deterioration of the national economy. SMEs require loans for the expansion and improve performance of their businesses. The respondents were needed to specify if their applications for financing were successful or not and if application was approved how much was granted as a loan. The study pursued in discovering the magnitude at which SMEs in Kenya accessed financial services. The study asked the respondent whether they had applied for credit within the last two years. The results are presented in Figure 4.6.

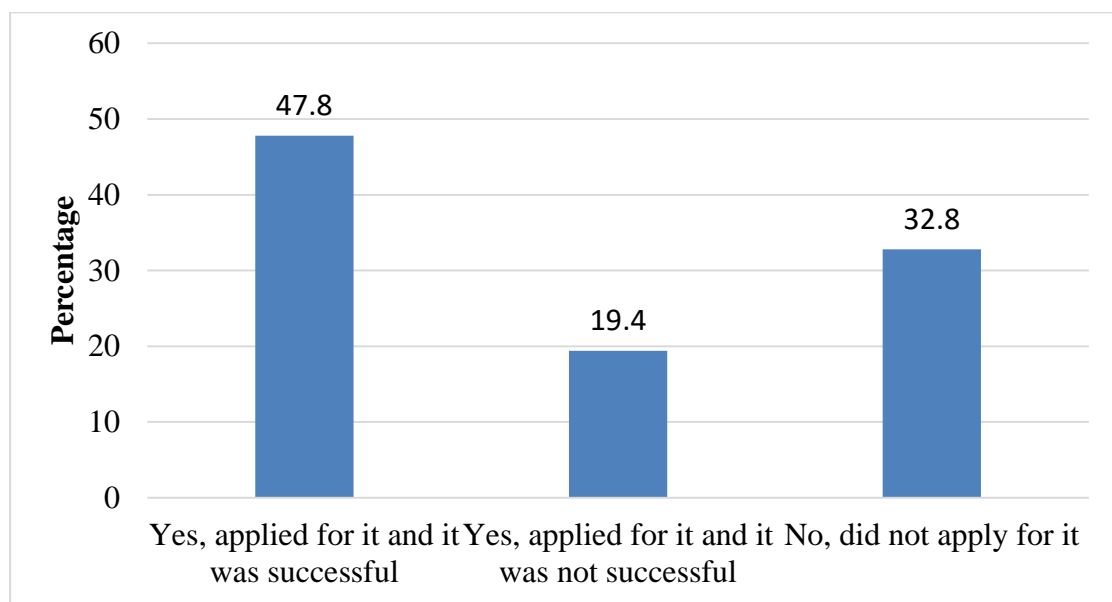


Figure 4.6: Firm Application of Credit within the Last Two Years

Source: Research Data, (2021)

Respondents results in Figure 4.6 illustrate that 47.8% agreed that had applied and were successful, 19.4% indicated they had applied and were not successful while 32.8%

indicated they had not applied for credit from any lending institution for the last two years. The results implied that Kenya's small and medium enterprises access to financial services was still below 50%. These findings supported KBA (2017) survey between April 2017 and June 2017 that indicated that out of the 3.2 million SMEs who applied for a loan from banks between the month of May 2017 and June 2017 only 1.1 million had their loans approved.

The study further sought to find out the status of the loan granted to those who indicated they were successful in their application. The results of the findings are presented in Figure 4.7.

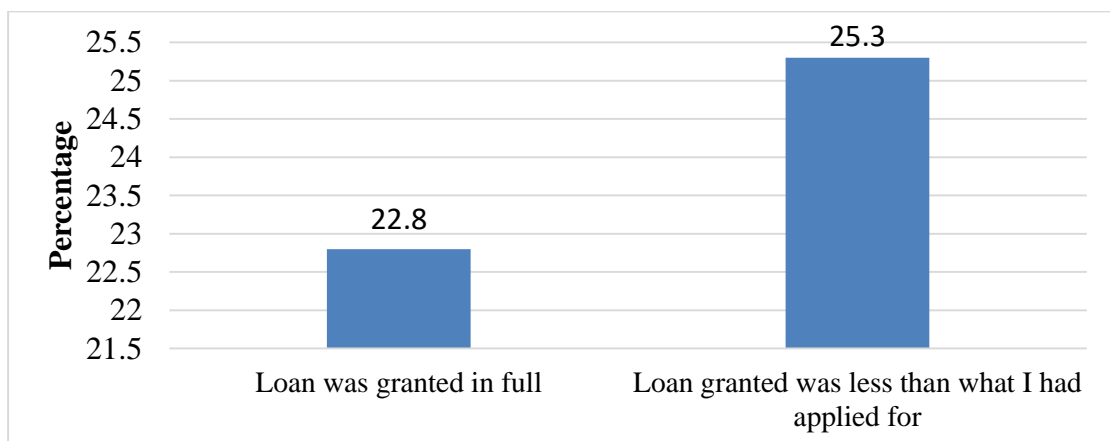


Figure 4.7: Success status of the Granted Loan.

Source: Research Data, (2021)

Figure 4.7 shows that 22.8% indicated they received an amount equal to what was applied while 25.3% got less than what was applied for. The findings implied that the quality of the loans granted to SMEs in Kenya was still very low.

The study further sought to find some of the reasons mentioned by those who indicated they had not applied for any form credit within the last two years. The results are shown in Figure 4.8.

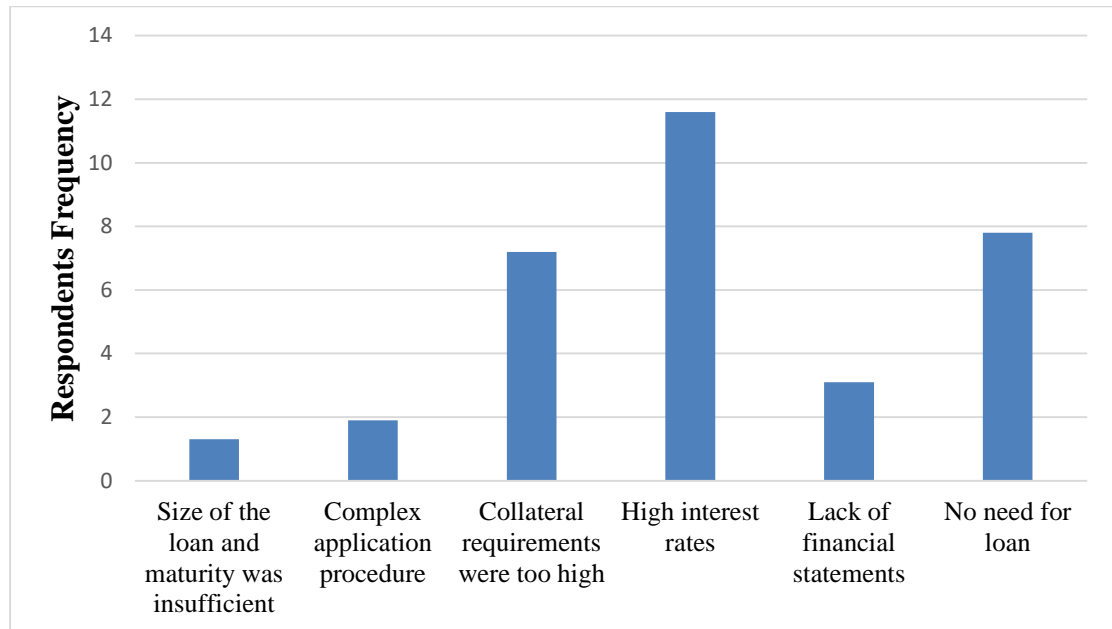


Figure 4.8: Reasons for Not Applying for Credit

Source: Research Data, (2021)

The results in Figure 4.8 shown that majority cited high interest rates, high collateral requirements as the main reasons for not applying for credits. These findings supported Haider (2018) that SMEs experienced financial constraints due to inability to meet collateral requirements. The study reinforced Magembe (2017) who found that SMEs indicated that they faced various challenges that include; high levels of interest rates, requirements of producing a collateral and the information required to ensure that the borrower is capable.

In this section the study further sought the facts of respondents on parameters influencing Kenya's small and medium enterprises access to financial services. Table 4.12 shown the study results.

Table 4.12: Descriptive Results for Access to Financial Services

	Strongly disagree	Disagree	Not sure	agree	Strongly agree	Mean	Std Dev
Firm access loans with ease from banks	10.1%	20.8%	17.6%	34.3%	17.3%	3.28	1.25
The firm access SME loans	6.6%	16.3%	21.9%	39.2%	16.0%	3.42	1.13
The firm is allowed overdrafts	7.5%	18.5%	19.4%	37.9%	16.6%	3.38	1.18
The firm access microfinance loans	6.9%	15.4%	17.9%	33.5%	26.3%	3.57	1.22
The firm access asset-based loans	5.0%	17.2%	21.9%	30.3%	25.6%	3.54	1.19
The firm acquires sufficient loans from financiers	8.8%	24.5%	25.5%	23.6%	17.6%	3.17	1.23
The firm access loans on timely basis	10.0%	29.1%	21.2%	25.3%	14.4%	3.05	1.23
Firm access loans at a low interest rate	17.5%	30.0%	18.4%	17.8%	16.2%	2.85	1.35
Overall Mean						3.28	

Source: Research Data, (2021)

The results in Table 4.12 presented the responses based on various parameters utilised to measure the level of Kenya's small and medium enterprises access to financial services. The study aimed to determine from the participants whether their firm access loans with ease from banks. The results showed that 34.3% and 17.3% agreed and strongly agreed while 20.8% and 10.1% disagreed and strongly disagreed respectively. On whether their firm access SMEs loans, 39.2% and 16.0% agreed and strongly agreed while respectively 16.3% and 6.6% disagreed and strongly disagreed.

On whether the firms accessed overdrafts, micro loans respondents were divided with some agreeing while other disagreed. These finding implied that level of access to financial services varied from one SMEs to another as indicated by the overall mean of 3.24 which implied that while some SMEs enjoyed access to financial services others were struggling to access similar services from the lending institutions. These points to differential Kenya's small and medium enterprises access to financial services. This could be attributed to availability of assets-based lending, financial statements and relationship banking among other financial practices. The study was in accord with Magembe (2017) that SMEs faced various challenges that included; high levels of interest rates, requirements of producing a collateral and the information required to ensure that the borrower is capable.

4.6 Diagnostics Test Results

This section presented the diagnostics tests that were carried out to ensure that assumptions of regression were adhered to and that data was adequate for inferential statistics. Among the diagnostics test conducted included test for normality, test of multicollinearity and homoscedasticity test.

4.6.1 Multicollinearity

The study conducted multicollinearity test to ensure that independent variables were not highly correlated. Variance inflation factors (VIF) was made use of for testing multicollinearity. A threshold of $VIF \leq 10$ was used to interpret that there is no problem of multicollinearity. According to Iacobucci, Schneider, Popovich and Bakamitsos (2017) VIF values of greater than 10 or a tolerance value of below 0.1 indicate high levels of multicollinearity problem. The obtained results from test for multicollinearity are illustrated in Table 4.13.

Table 4.13: Test for Multicollinearity

	Collinearity Statistics	
	Tolerance (1/VIF)	VIF
Relationship Lending	0.644	1.552
Asset based Lending	0.703	1.422
Financial Statement Lending	0.606	1.65
Credit Information Sharing	0.649	1.54
Financial Literacy	0.612	1.634

a Dependent Variable: Access to Financial Services

Source: Research Data, (2021)

The results in Table 4.14 shown that there was no threat of multicollinearity since all the variables had VIF of less than 10. The findings showed that multicollinearity assumption was adhered to. Lindner, Puck and Verbeke (2020); Poole and O'Farrell (1971) contended that if multicollinearity assumption is not satisfied and the independent variables are thus multicollinearity, the result is that the individual regression coefficients for each variable are not identifiable. Based on the results, there was no collinearity between the independent variables that can affect their predictive power, hence all the independent variables were appropriate for regression analysis.

4.6.2 Test for Heteroscedasticity

This study used Levene test to test for heteroscedasticity as suggested by Field (2013). Where the values of the Levene test probability statistics are more than significant level of $P > 0.05$ it means that the variances are equal. Value should be greater than 0.05 to meet the heteroscedasticity assumption and allow further analysis using the regression model. Table 4.14 shown the results of the study.

Table 4.14: Test of Homogeneity of Variances

Test of Homogeneity of Variances	Levene Statistic	Sig.
Relationship Lending	1.751	0.099
Asset based Lending	0.002	0.961
Financial Statement Lending	0.105	0.746
Credit Information Sharing	1.051	0.154
Financial Literacy	1.911	0.090
Access to Financial Services	1.451	0.076

Source: Research Data, (2021)

Table 4.14 results indicated that every variables had Levene statistics with p-value above 0.05 implying that the null hypothesis was not rejected by the study that there was no heteroscedasticity, hence this assumption was achieved. These findings were supported by Vynck (2017) who contended that ignoring the presence of this heteroscedasticity by fitting ordinary least squares regression models (a method that assumes homoscedasticity) results in inefficient regression parameter estimators and a biased and inconsistent covariance matrix estimator. The study therefore concluded that the variances were equal and the assumption of homoscedasticity was ascertained.

4.6.3 Test for Normality

In this study, Shapiro-Wilk test verified normality existence which according to Field (2013) contains more power to discover deviations from normality. Shapiro-Wilk statistic ranges from zero to one. The results for normality test are shown in Table 4.15.

Table 4.15: Test for Normality

Tests of Normality	Shapiro-Wilk Statistic	df	Sig.
Relationship Lending	0.971	320	0.762
Asset based Lending	0.968	320	0.061
Financial Statement Lending	0.970	320	0.090
Credit Information Sharing	0.966	320	0.110
Financial Literacy	0.968	320	0.091
Access to Financial Services	0.990	320	0.064

a Lilliefors Significance Correction

Source: Research Data, (2021)

The results presented in Table 4.15 showed that the Shapiro-Wilk-Statistics for all the variables had p-values above 0.05. As a result, the null hypothesis that data is not significantly different from normal distribution was not rejected implying the data for all the variables was normally distributed. Probabilities (Sig value) > 0.05 means normally distributed data whereas probabilities (Sig value) < 0.05 mean the data significantly deviate from normal (Razali & Wah, 2011). The data therefore adhered to the regression assumption of normal distribution.

4.7 Testing of Hypotheses

The study adopted Heckman two step regression model for the test of hypotheses. Access to financial services was regressed on by financing practices variables allowing the computation of a composite measure at a confidence level of 95%. The study aim was to investigate the effect of financing practices on access to financial services by small and medium enterprises in Kenya. Hypotheses were tested in priority of direct then mediated and concluded with moderated relationships. The results of the Heckman two step selection model are indicated in Table 4.16 for direct relationships.

Table 4.16: Heckman Selection Model - Two-Step Estimates

Access financial services	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Relationship Lending	0.23631	0.065388	3.61	0.000	0.108153	0.364467
Asset based lending	-0.08531	0.065874	-1.3	0.195	-0.21442	0.043804
Financial Statement lending	0.224912	0.066857	3.36	0.001	0.093875	0.355949
_cons	1.954402	0.259209	7.54	0.000	1.446361	2.462442
Access financial services						
RDN	1.25E-14	.	.	.	.	.
RSP	-2.39E-15	.	.	.	.	.
BRS	1.17E-14	.	.	.	.	.
COQ	4.75E-15	.	.	.	.	.
COV	2.03E-15	.	.	.	.	.
COA	2.44E-15	.	.	.	.	.
FRT	3.19E-16	.	.	.	.	.
QFS	-8.49E-15	.	.	.	.	.
FIA	1.29E-14	.	.	.	.	.
_cons |	6.072463	.	.	.	.	.
Lambda	0 (omitted)					
rho	0.00000					
sigma	.75605985					
Wald chi2(3) =						
38.88						
Prob > chi2 =						
0.0000						
Number of obs	= 320					
Censored obs	= 0					
Uncensored obs	= 320					

Source: Research Data, (2021)

The results of Wald chi2 (3) = 38.88, Prob > chi2 = 0.0000, implied that model fitted was statistically significance further implying a goodness of fit on the Heckman Model

4.7.1 Test of H₀₁: Relationship Lending and Access to Financial Services

The first null hypothesis was that relationship lending has no statistical significance on access to financial services among SMEs in Kenya. The Table 4.16 results indicated that the coefficient for relationship lending was $\beta=0.23631$, $p=0.000<0.05$. The findings shown that relationship lending had a positive and significant effect on access to financial services among SMEs in Kenya. The results further shown that increase in relationship lending would result to increase in access to financial services among SMEs in Kenya by 0.23631units. Based on these findings, the study rejected H₀₁ relationship lending had no statistically significant effect on access to financial services among small and medium enterprises in Kenya.

The study findings supported those by Veiga and McCahery (2019), Banerjee *et al.* (2017) and Behr *et al.* (2017) whose findings proposed that lengthier lending relationships definitely benefits in increasing loan access by lessen information asymmetries hence borrowers give less collateral and pay low rates of interest. The study finding further agreed with Erdogan (2019) and ITC (2018) that SMEs find it harder to access credit services because of failure to establish relationship with banks. Additionally Rahman *et al.* (2017) posited that relationship lending had a positive and significant effect on access to loans by softening credit terms to SMEs.

In the same way Nguyen *et al.* (2015), Lori (2014) reinforced that relationship lending inspired SMEs credit access. Likewise Osei-Assibey (2014) supported the findings that relationship lending increased securing of loan facility by 26 % and decreased rate of interest by 26%. Similarly, Canovas and Solano (2010) concurred with the results that the costs of borrowing reduced and level of financing risen when a client established a good relationship with a bank as trust and guarantee was established. Relationship

between bank and borrower guarantees reduction in agency complications, improvement in flexibility in contracts and enhances confidentiality climate by formation of reputation and improved control.

However, the findings were inconsistent with Angori *et al.* (2019) that lengthier banking relationship diminished medium size businesses chances to access improved credit from bank. Conversely, Rahman *et al.* (2017) affirmed that relationship lending does not improve SMEs access to debt from commercial banks. Equally Bentolila, Marcel, Gabriel and Sonia (2017) found out that bank credit access declined for firms that embraced relationship with the unstable banks. , Correspondingly, Bolton *et al.* (2016) reported that when banking relationship reduced then SME access to credit risen.

In the same way Cenni *et al.* (2015) clarified that relationship lending does not have a significant influence on small firms' access to credit. Similarly Beck, Degryse, Haas and Horen (2014) had contrary opinion that relationship lending does not influence credit access in the course of bank flourishing times. Equally Mathias *et al.* (2010), refuted the claim that lengthier lending relationship does have significant effect of improving credit access.

4.7.2 Test for H₀₂: Asset Based Lending and Access to Financial Services

The second null hypothesis was that asset-based lending had no statistical significance on access to financial services among SMEs in Kenya. Table 4.16 results shown that the coefficient for asset-based lending was $\beta = -0.08531$, $p = 0.195 > 0.05$. The findings shown that asset-based lending had negative and insignificant effect on access to financial services among small and medium enterprises in Kenya. Based on these findings, the study failed to reject H₀₂ that asset-based lending had no statistically

significant effect on access to financial services among small and medium enterprises in Kenya. Financiers place marginal attention on asset security as a result of inefficiencies in asset registration procedure (Central Bank of Kenya, 2015). Incomplete property registry hinders more assets to be used as collateral in securing of debt (Financial Sector Deepening, 2015).

These findings concurred with Githinji, Kiragu and Kiai (2019) that collateral security does not influence the loan size accessed from financial institution. Equally, Rahman *et al.* (2017) established that collateral does not influence access to financial services exclusively where proximity of borrower-bank prevailed. Similarly Bencheikh and Taktak (2017) revealed that assets collateral had a negative relationship with loan access apart from equipment's, machineries, buildings and land. Conversely, Rahman *et al.* (2016) supported the study that possession of collateral do not improve on loans accessibility by SMEs. Also Nkundabanyanga *et al.* (2014) pronounced that collateral security had insignificant effect on access to bank loan. Pandula (2011) further confirmed that asset based lending did not have significant influence on SMEs credit access.

However, the findings were inconsistent with the results of ITA (2018) that failure for SMEs to provide assets as security limits their chances of accessing financing from banks according to the study. Similarly the study results were inconsistent with Haider (2018) and Magembe (2017) that SMEs incapacity to produce collateral requirements obstructs financing and securing of loans from financial institutions. By the same token Gou *et al.* (2018) discovered that rise in collateral decreases the probability of credit rationing.

In the same way Chidoko and Matamanda (2017); Osano and Languitone (2016) explained that collateral positively influenced access to loan services as financiers will fall back on it in the event of defaulting. Likewise Chandio *et al.* (2017), Tagoe (2016) as well as Duniya and Adinah (2015) that the presence of collateral had a positive and significant effect on the access to credit. Finally, Comeig, Fernández-Blanco and Ramírez (2015); Oteng, Peprah-Mensah and Osei (2015) differed with the finding as they reported that pledging collateral increased success to acquire credit from financiers as only good borrowers would pledge collateral.

4.7.3 Test for H₀₃: Financial Statement Lending and Access to Financial Services

The third null hypothesis was that financial statement lending had no statistical significance on access to financial services among SMEs in Kenya. Table 4.16 results confirmed that the coefficient for financial statement lending was $\beta=0.224912$, $p=0.001<0.05$. The findings shown that financial statement lending had a positive and significant effect on access to financial services among SMEs in Kenya. The results further showed that increase in financial statement lending would result to increase in access to financial services among SMEs in Kenya by 0.224912 units. Based on these findings, the study rejected H₀₃ financial statement lending had no statistically significant effect on access to financial services among small and medium enterprises in Kenya.

The finding agreed with Ezeagba (2017) who found that inadequate human resource, poor accounting system, failure to use banking system and lack of accounting records and books are the obstacles that SMEs experiences in preparation of financial reports. The study finding also concur with World Bank (2017) result that further revealed that low access to financing and increased credit costs results from unreliable financial

statements and unsatisfactory disclosures of profits and credit risks. Banks too require current and periodic financial information, however SMEs provide low quality information obscuring access to finance. Financial statements are utilised by banks in monitoring SMEs and fifty percent of loans granted are based on financial statements (Minnis & Sutherland, 2016).

Kwaning *et al.* (2015) confirmed that credit expansion by financiers to borrowers will depend on audited financial statements because presentation of this statements increases reliability of debtor's hence lenders credit risk lessens. Leverage of SMEs is positively influenced by financial statement quality as elucidated by Caneghem and Campenhout (2012). Likewise Aga and Reilly (2011) discovered that accessibility to loans increased by six percent for firms that kept financial statements in comparison with those lacking. Minnis (2010) results revealed that lenders improved granting loans in the presence of more informative financial statements.

However, in disagreement with the study results was Iswoyo *et al.* (2019) in a study on bank loan access and quality of SMEs financial statements. The study results showed that financial statements quality did not influence access to loans from banks since small and medium enterprises produces unreliable statements that are not verified hence do not reflect a true picture of the firm.

4.7.4 Test For H₀₄: Mediating Effect of Financial Literacy

The study tested the fourth null hypothesis that financial literacy does not have a mediating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya. stepwise regression process was applied when testing for mediation effect (Baron & Kenny 1986; Musau *et al.* 2018).

The results for four steps for testing of mediating effect of financial literacy are presented in Table 4.17 to 4.20.

Step one: Regression of financing practices on access to financial services

The first step involved testing whether financing practices significantly predicted access to financial services among the SMEs in Kenya. Table 4.17 indicated the study results.

Table 4.17: Step 1: Financing Practices Predicting Access to Financial Services

Model		B	Std. Error	Beta	t	Sig.
Coefficients	(Constant)	1.955	0.265		7.388	0.000
	Financing Practices	0.371	0.073	0.274	5.088	0.000
ANOVA ^a		Sum of Squares	df	Mean Square	F	Sig.
	Regression	15.45	1	15.45	25.892	.000 ^b
	Residual	189.746	318	0.597		
	Total	205.196	319			
Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate		
	.274 ^a	0.075	0.072	0.77245		

a Dependent Variable: Access to Financial Services

b Predictors: (Constant), Financing Practices

Source: Research Data, (2021)

The results shown that the coefficient for financing practices was $\beta=0.371$ $p=0.000<0.05$. The findings implied that financing practices significantly predicted access to financial services among the SMEs in Kenya. Therefore there existed a relationship between to be mediated. The first condition for complete mediation was achieved.

Step Two: Regression of Financing Practices on Financial Literacy

In the second step, the study sought to establish if financing practices significantly predicted financial literacy. The results of financing practices predicting financial literacy was shown in Table 4.18.

Table 4.18: Step 2: Financing Practices Predicting Financial Literacy

Coefficients		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.734	0.211		3.472	0.001
	Financial Practices	0.771	0.058	0.596	13.235	0.000

ANOVA ^a		Sum of Squares	df	Mean Square	F	Sig.
	Regression	66.647	1	66.647	175.162	.000b
	Residual	120.994	318	0.38		
	Total	187.641	319			

Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.596a	0.355	0.353	0.61683

a Dependent Variable: Financial Literacy Mean

b Predictors: (Constant), Financial Practices

Source: Research Data, (2021)

Table 4.18 presented the results that revealed that the coefficient for financing practices was 0.771 with $p=0.000 < 0.05$. The findings implied that financing practices significantly predicted financial literacy among the SMEs in Kenya. Therefore the second condition for complete mediation was achieved.

Step Three: Regression of Financial Literacy on Access to Financial Services

In the third step, M model was fitted to test whether financial literacy predicted access to financial services as presented in Figure 3.1. Table 4.19 indicated the results.

Table 4.19: Step 3: Financial Literacy Predicting Access to Financial Services

Model		B	Std. Error	Beta	t	Sig.
Coefficients	(Constant)	2.383	0.203		11.728	0.000
	Financial Literacy	0.258	0.057	0.246	4.534	0.000
ANOVA ^a		Sum of Squares	df	Mean Square	F	Sig.
	Regression	12.46	1	12.46	20.558	.000b
	Residual	192.736	318	0.606		
	Total	205.196	319			
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.246a	0.061	0.058	0.77852		

a Dependent Variable: Access To Financial Services

b Predictors: (Constant), Financial Literacy

Source: Research Data, (2021)

Table 4.19 revealed that the coefficient for financial literacy was $\beta = 0.258$, $p = 0.000$, the finding implied that financial literacy significantly predicted access to financial services among the SMEs in Kenya. Therefore, the second condition for complete mediation was achieved.

Step Four: Regression of Financing Practices on Financial Literacy and Access to Financial Services

In the final model, the study sought to establish whether financing practices significantly predicted access to financial services in presence of financial literacy as presented in figure 3.1. Table 4.20 shown the results.

Table 4.20: Step 4: Financing Practices, Financial Literacy Predicting Access to Financial Services

Model		B	Std. Error	Beta	t	Sig.
Coefficients	(Constant)	1.856	0.268		6.915	0.000
	Financing Practices	0.134	0.07	0.129	1.922	0.055
	Financial Literacy	0.268	0.091	0.198	2.958	0.003
ANOVA		Sum of Squares	df	Mean Square	F	Sig.
	Regression	17.636	2	8.818	14.903	.000b
	Residual	187.56	317	0.592		
	Total	205.196	319			
Model Summary	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.293a	0.086	0.08	0.7692		

a Dependent Variable: Access To Financial Services

b Predictors: (Constant), Financing Practices, Financial Literacy

Source: Research Data, (2021)

Table 4.20 results shown that coefficient for financing practices was $\beta=0.134$, $p=0.055>0.05$ while that of financial literacy was $\beta=0.268$, $p=0.003<0.05$. The finding implied that financing practices insignificantly predicted access to financial services in presence of financial literacy.

The findings implied that conditions for complete mediation was achieved hence, the study rejected H_{04} : Financial literacy does not have significant mediating effect on financing practices and access to financial services by small and medium enterprises in Kenya and concluded that financial literacy had a significant mediating effect between financing practices and access to financial services by small and medium enterprises in Kenya. The study agreed with Gathungu and Sabana (2018) and Nkundabanyanga *et al.* (2014) who found out significant positive effect on financial access with possession

of financial literacy. Similarly, the study finding supported those by Kiplimo *et al.* (2015) who revealed that literacy level had a significant positive effect on access to credit. Equally, financial knowledge and technical training of SMEs owner has a positive and significant effect on access to financial services (CBK, 2015).

Likewise Wawoa and Kalsumb (2018) was in support of the findings by revealing that mediation effect of loans access was facilitated by financial literacy. Similarly Mabula and Ping (2018) was in agreement by stressing that SMEs performance and credit access was positively and significantly influenced by financial literacy. In the same line Kumari and Azam (2019) was of view that women's economic empowerment was positively and significantly influenced by financial literacy.

However, the findings were inconsistent with Lyons *et al.* (2019) who discovered that financial literacy had insignificant effect on access to loans by vulnerable individuals. Finally, Hoque *et al.* (2016) was with contrary opinion that access to bank loans was not influenced by financial literacy.

4.7.5 Test for H₀₅: Moderating Effect of Credit Information Sharing

The study tested the fifth null hypothesis that credit information sharing does not have a moderating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya. Credit information sharing moderating effect was tested by a two-step procedure as specified by Whisman and Mc Clelland (2005). The first step including a model where CIS was treated as a predictor variable while in the second model CIS was treated as a moderating variable.

In the first step the result for the moderation effect of credit information sharing being treated as a predictor variable as Table 4.21 showed

Table 4.21: Step One: Test for Moderating Effect of CIS

		B	Std. Error	Beta	t	Sig.
Coefficients	(Constant)	1.839	0.28		6.569	0.000
	Financing Practices	0.309	0.088	0.228	3.503	0.001
	Credit Information Sharing	0.096	0.076	0.082	1.259	0.209
ANOVAa		Sum of Squares	df	Mean Square	F	Sig.
	Regression	16.393	2	8.197	13.762	.000b
	Residual	188.802	317	0.596		
	Total	205.196	319			
Model Summary						
	Model	1				
	R	.283				
	R Square	0.080				
	Adjusted R Square	0.074				
	Std. Error of the Estimate	0.77175				

Source: Research Data, (2021)

The results in Table 4.21 shown that composite for financing practices had a coefficient of 0.309 with $p=0.001 < 0.05$. The finding implied that financing practices significantly influenced access to financing services by SMEs in Kenya. The coefficient of CIS was 0.096 with $p=0.209 > 0.05$. This implied that CIS had insignificant effect on access to financing services. Hence the study concluded that CIS can only act as a moderating variable of the relationship between financing practices and access to financing services among the SMEs in Kenya.

In the second step the results for the moderation effect of credit information sharing being treated as a moderating variable are shown in Table 4.22.

Table 4.22: Step Two: Test for Moderating Effect of CIS

Model		B	Std. Error	Beta	t	Sig.
Coefficients	(Constant)	2.776	0.99		2.803	0.005
	Financing Practices	0.028	0.298	0.021	0.094	0.925
	Credit Information				-	
	Sharing Mean	-0.182	0.291	-0.156	0.624	0.533
	Financing Practices*CIS	0.081	0.083	0.397	0.986	0.325
ANOVAa		Sum of Squares	df	Mean Square	F	Sig.
	Regression	16.973	3	5.658	9.498	.000b
	Residual	188.223	316	0.596		
	Total	205.196	319			
Model Summary						
	R	.288a				
	R Square	0.083				
	Adjusted R Square	0.074				
	Std. Error of the Estimate	0.77178				

Source: Research Data, (2021)

The result presented in Table 4.22 shown that the coefficient of financial practices was $\beta=0.028$, $p=0.094>0.05$, the results showed that the effect of financing practices became insignificant with the inclusion of moderating effect of CIS. The coefficients of CIS ($\beta=-0.182$, $p=0.533>0.05$) and that of interaction variable Financing Practices*CIS ($\beta= 0.081$, $p=0.325>0.05$) were all insignificant. The results implied that CIS had insignificant moderating effect on the relationship between financing practices and access to financial services among the SMEs in Kenya. The study therefore failed to reject H_{05} : Credit information sharing had no moderating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya. This findings were in line Ahmad *et al.* (2018) that credit information sharing had a negative relationship with credit access. Similarly Bos, de

Haas and Millone (2016) discovered that SMEs increased loan rejection in Herzegovina and Bosnia arose from tightening of credit terms by banks as a result of CIS.

This finding contradicted those of Son *et al.* (2020) and Asongu and Odhiambo (2018) results showed that credit information sharing had significantly positively influences on financial intermediation activities. In the same line Danso *et al.* (2019) verified that CIS signified a proper way of improving information accessible by banks enabling them in granting loans to borrowers with ease. Likewise Teeranutrannont (2017) study which asserted that CIS bridges the information gap between financiers and borrowers. Banks will increase loans granting, stability and minimal reservation of negative information with improved credit information sharing. Equally James *et al.* (2017) contradicted the findings by affirming that credit information sharing offers a chance to increase loan access through information capital building. In the same way Gietzen (2016) and Doblaz-Madrid and Minetti (2013) found that CIS improved loans access at a cheaper rate since it eliminated the problems of adverse selection. Finally, Guérineau and Léon, (2016) affirmed that CIS leads to expanding of quality of loaning portfolio sanctioning even riskier customers to access credit.

Test results for the study hypotheses as discussed in the study were summarised in Table 4.23.

Table 4.23: Overall Summary of Test of Hypotheses

Hypothesis	Analysis Results	Decision	Conclusion
H₀₁: Relationship lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya	$\beta=0.23631$, $p=0.000<0.05$	Rejected H ₀₁	Relationship lending has statistically significant effect on access to financial services by small and medium enterprises in Kenya
H₀₂: Asset based lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya	$\beta=-0.08531$, $p=0.195>0.05$	Failed to Reject H ₀₂	Asset based lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya
H₀₃: Financial Statement lending has no statistically significant effect on access to financial services by small and medium enterprises in Kenya	$\beta=0.224912$, $p=0.001<0.05$	Rejected H ₀₃	Financial Statement lending has statistically significant effect on access to financial services by small and medium enterprises in Kenya
H₀₄: Financial literacy does not have significant mediating effect on financing practices and access to financial services by small and medium enterprises in Kenya	<i>Step1:</i> $\beta_1=0.371p=0.000<0.05$ <i>Step2:</i> $\beta_1=0.771p=0.000<0.05$ <i>Step3:</i> $\beta_1=0.258,p=0.000$ <i>Step4:</i> $\beta_1=0.134,p=0.055>0.05$ $\beta_2=0.268, p=0.003<0.05$	Rejected H ₀₄	Financial literacy have significant mediating effect on financing practices and access to financial services by small and medium enterprises in Kenya
H₀₅: Credit information sharing has no moderating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya	Financing Practices*CIS ($\beta=0.081,p=0.325>0.05$)	Failed to Reject H ₀₅	Credit information sharing has no significant moderating effect on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya

Source: Researcher (2021).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides summary, conclusion and recommendations as per the research findings made by the study.

5.2 Summary

Investigation on effect of financing practices on access to financial services by small and medium enterprises in Kenya was the study aim. The objectives of the study were; to establish the effect of relationship lending, asset based lending and financial statement lending on access to financial services by small and medium enterprises in Kenya. The study further sought to establish the moderating effect of credit information sharing and mediating effect of financial literacy on the relationship between financing practices and access to financial services. The target population comprised small and medium enterprises in Kenya. The study adopted multistage sampling technique to obtain the SMEs respondents.

Primary data was utilised and was acquired through semi structured questionnaires. Stata 17 software was used in data analysis. The results reported came from 320 small and medium enterprise owners who participated in the study. Interpretation of the results were based on data from the questionnaires as completed by the respondents. Variable features were summarized by descriptive statistics while the relationship between variables employed inferential analysis, specifically Heckman two step regression model to predict influence of financing practices on Kenya's' small and medium enterprises access to financial services. Hypotheses were tested at 95%

confidence interval for acceptance or rejection. Significance level of 5% was employed for hypothesis testing. Objectives and hypothesis formed the basis of the study findings.

5.2.1 Relationship Lending and Access to Financial Services

The first objective of the study was to establish the effect of relationship lending on access to financial services by small and medium enterprises in Kenya. It was hypothesised that relationship lending had statistically no significant effect on access to financial services among SMEs in Kenya. The results from analysis shown that the coefficient for relationship lending was $\beta=0.23631$, $p=0.000<0.05$. The study findings showed that relationship lending had a positive and significant effect on Kenya's' small and medium enterprises access to financial services. The results further shown that increase in relationship lending would result to increase in access to financial services among small and medium enterprises. The findings implied that banking relationship is obvious method for financing SMEs because close relationship yields private information to the lender that precipitate funding to SMEs (Rahman, Belas, Rosza & Kliestik, 2017).

The descriptive findings implied that relationship banking increased access to financial services according to majority of the respondents. The responses on whether strong social relationship with the bank increased credit availability at a lower interest rate varied significantly. The standard deviation results responses implied that while strong relationship with certain banks led to low interest rates this was not the case for other banks. The overall mean on response whether relationship banking increased access to financial services was 3.53. Relationship lending positively and significantly improved access to bank loans (Erdogan, 2019)

In conclusion the significance test established that relationship lending had a positive and significant effect on access to financial services among small and medium enterprise hence the study rejected the hypothesis that relationship lending does not have statistically significant effect on access to financial services by small and medium enterprises in Kenya.

5.2.2 Asset-based Lending and Access to Financial Services

The second objective of the study was to establish the effect of asset-based lending on access to financial services by small and medium enterprises in Kenya. It was hypothesised that asset-based lending does not have statistically significant effect on access to financial services by small and medium enterprises. Regression analysis results shown that the coefficient for asset-based lending was $\beta=-0.08531$, $p=0.195>0.05$. These findings established that asset-based lending had negative and insignificant effect on access to financial services among SMEs in Kenya. These findings back the arrangement that lenders do not rely on collateral when extending credit (Githinji, Kiragu & Kiai, 2019; Rahman, Belas, Kliestik & Tyll, 2017).

In conclusion the significance test established that asset-based lending had negative and insignificant effect on access to financial services among small and medium enterprise hence the study failed to reject the hypothesis that asset-based lending does not have statistically significant effect on access to financial services by small and medium enterprises in Kenya.

5.2.3 Financial Statement Lending and Access to Financial Services

The third objective of the study was to establish the effect of financial statement lending on access to financial services by small and medium enterprises in Kenya. It was

hypothesised that financial statement lending has no statistical significance on access to financial services among small and medium enterprises in Kenya. The regression results established that the coefficient for financial statement lending was $\beta=0.224912$, $p=0.001<0.05$. These findings of regression analysis shown that financial statement lending had a positive and significant effect on access to financial services among SMEs in Kenya. The results further showed that increase in financial statement lending would result to increase in access to financial services among SMEs in Kenya by 0.224912 units. This implied that financial institutions finds enterprises financial statements valuable during loan requests and approval (UN, 2017).

The descriptive results overall mean was 3.59. These descriptive analysis outcomes disclosed that majority of the participants approved on use of financial statement lending among the commercial banks in Kenya. The findings view that low access to financing and increased credit costs results from unreliable financial statements and unsatisfactory disclosures of profits and credit risks (World Bank, 2017). In conclusion the influence of financial statement lending on access to financial services among SMEs in Kenya was positive and significant and hence the study rejected the hypothesis that financial statement lending had no statistically significance effect on access to financial services among SMEs in Kenya.

5.2.4 Financing Practices, Financial Literacy and Access to Financial Services

The study also sought to investigate the mediating effect of the financial literacy on influence to financing practices and access to financial services by small and medium enterprises in Kenya. The accompanying hypothesis was that financial literacy does not have a mediating effect on financing practices and access to financial services by small and medium enterprises in Kenya. The results shown that coefficient for financing

practices was $\beta=0.134$, $p=0.055>0.05$ while that of financial literacy was $\beta=0.268$, $p=0.003<0.05$. The finding implied that financing practices insignificantly predicted access to financial services in presence of financial literacy.

The findings implied that conditions for complete mediation was achieved. The study established that financial literacy had a significant mediating effect on financing practices and access to financial services by small and medium enterprises hence the study rejected the null hypothesis that financial literacy had no mediating effect on financing practices and access to financial services by small and medium enterprises in Kenya and concluded that financial literacy had a significant mediating effect on financing practices and access to financial services by SMEs in Kenya.

5.2.5 Financing Practices, Credit Information Sharing and Access to Financial Services

The study finally sought to establish the moderating effect of the credit information sharing on the relationship between financing practices and access to financial services by small and medium enterprises in Kenya. It was hypothesised that credit information sharing does not have a moderating effect on financing practices and access to financial services by small and medium enterprises in Kenya. The result for testing moderating effect of CIS revealed that the coefficient of financing practices was $\beta=0.028$, $p=0.094>0.05$, the results shown that the effect of financing practices became insignificant with the inclusion of moderating effect of CIS. The coefficients of CIS ($\beta=-0.182$, $p=0.533>0.05$) and that of interaction variable financing practices*CIS ($\beta=0.081$, $p=0.325>0.05$) were all insignificant.

The results established that CIS had insignificant moderating effect on the relationship between financing practices and access to financial services among the SMEs in Kenya. The study therefore failed to reject the null hypothesis that credit information sharing does not have moderating effect on financing practices and access to financial services by small and medium enterprises in Kenya.

5.3 Conclusion

Based on the study findings, the following conclusions were made; first the study confirmed that relationship lending had positive and significant relationship with access to financial services. The positive relationship revealed that when lending relationship improved SMEs access to financial services increased. The study determined that SMEs with long relationship with their bank improved their access to credit. The study further resolved that small enterprises with multiple banking relationships and those that build a strong trust with a bank benefit from access to financial services. Relationship lending enable commercial banks or lending institution to gather enough data about the enterprises and hence can be able to structure loan facilities to meet the specific need of the businesses which explain why majority of lenders increase access to financial services to business they have long standing relationship with.

The study also verified that asset-based lending has negative and insignificant effect on access to financial services. Asset based lending statistical insignificant proved that the size of finance access is not determined by assets one possess. Therefore accumulation of more assets does not translate to increased access to financial services. Financiers place marginal attention on asset security as a result of inefficiencies in asset registration procedure (Central Bank of Kenya, 2015). Further, when a firm acquires assets beyond a certain level they start becoming liabilities. However, descriptive statistics revealed

that asset based lending is common among some lending institutions especially to businesses. This form of lending practices is meant to cushion lenders against any form of risk as a result of non-payment of the loan borrowed. Therefore, small and medium enterprises that are able to provide collateral in form of titles deeds or business assets in most cases are able to access financial services better than those without any form of collateral.

With regard to financial statement lending, a positive and significant relationship existed with access to financial services. Thus, the study resolved that financial statements play a critical role in ensuring small enterprises access financial services. Lenders can assess and determine the financial position of the business by analysing their cashflow in order to be able to advance the credit that the business is able to pay based on their financial statement. Majority of the SMEs in Kenya lack audited financial statement which block them out from accessing financial services from formal lending institutions.

Focussing on financial literacy as a mediating variable, it was established that financial literacy possess a statistically significant mediating effect on relationship between financing practices and access to financial services. This results predicts that as SMEs financial literacy increases access to securing debt facility improves. The study therefore recognized that financial literacy training plays a significant role in increasing access to financial services by small and medium size enterprises in Kenya.

The study finally acknowledged that credit information sharing as a moderator was seen to have negative and insignificant effect on the relationship between financing practices and access to financial services. In view of this, it was discovered that lending institution in Kenya have adopted the CIS to be able to identify defaulters. This CIS

systems such as CRB has helped lending institution to identify risk borrowers but at the same time has further increased credit inaccessibility by SMEs in Kenya.

5.4 Contribution of the Study to Knowledge

This study established that there are no fit-it-all financing practices among lending institutions in Kenya. The lending policies and practices varies depending on the lending institutions. The study established that some SMEs access financial services without having long standing relationship with the institution, without assets and financial statements however other failed to access financial services due to lack of assets and financial statement. The study therefore revealed that access to financial services went beyond the financing practices of lending institutions.

Further, earlier studies focused on direct relationship between financing practise variables and access to financial services. The study contribution to knowledge by revealing that financial literacy had a mediating effect on the relationship between financing practices and access to financial services.

Similarly, the study employed Heckman two step regression model that had been scanty used unlike the extensively applied logitic regression as a threshold when testing study hypothesis especially SMEs access to credit services.

Basing on empirical literature, the study is in tandem with prior studies that have revealed significant effect of financing practices and access to financial services. This study investigated the effect of financing practices and access to financial services by SMEs in kenya combining several financing practices in one study. Majority of earlier studies focused only on one variable and were carried out in developed countries.

The study focused on a wider scope of Kenya unlike previous studies carried out locally that focused on one county or a single town. The study has captured the results of financing practices and access to financial services; demonstrating that a positive and significant relationship existed between relationship lending, financial statement lending whereas asset based lending had a negative and insignificant effect on access to financial services. The study also realised that financial literacy mediated the relationship between financing practices and access to financial services whereas credit information sharing had statistically insignificant and negative relationship between financing practices and access to financial services.

5.5 Recommendations

Policy and practice recommendations were made based on the conclusions of the study. This recommendations are vital to government and its agencies, financiers of credit, non-governmental organizations and SMEs owners.

5.5.1 Recommendations for Practice

The following recommendation were made based on the study conclusions. First, relationship lending was statistically significant to access to financial services. The study confirmed that SMEs with long relationship with their bank improved their access to credit. The study further resolved that small enterprises with multiple banking relationships and those that build a strong trust with a bank benefit from access to financial services. The study therefore recommends that owners and managers of SMEs in Kenya should be in constant touch with their banking managers to build and establish trust and good relationship. These relationships build confidence from the lending institutions which allows the lenders to work together with enterprise to determine the best ways possible of assisting the business to meet their financial needs.

Secondly, The study established that asset based lending had statistical insignificant effect on access to financial services by SMEs. Asset based lending statistical insignificant proved that the size of finance access is not determined by assets one possess. The study recommends that financial institutions should put more weight on relationship lending, financial statement lending and financial literacy and recede extending funding mostly on asset holding by SMEs owners. The government to take initiative of maintaining a complete property registry and implement it to facilitate more assets to be used as collateral. However, the descriptive study acknowledged that use of assets is common among some lending institutions especially to businesses. Thus, the study recommends that management and owners of SMEs should plan and set aside resources with the intentions of acquiring assets such as land, motor vehicle and others asserts such as bonds. Whenever, SMEs are in financial distress they can use these assets as collaterals to acquire credit from lending institutions to boost their business performance. The study also recommends that lending institutions should customize their asset financing products to fit SMEs needs in order to help them build their assets for future financing needs.

Further , acknowledgement was made that financial statemet lending had a statistical significance effect on access to financial services. The study resolved that financial statements play a critical role in ensuring small enterprises access financial services. Hence, the study recommends that SMEs should start and maintain accurate financial statements which lending institution can utilize to determine their financial power to repay credit if granted. The study futher recommends that in order to improve preparation of credible financial statements SMEs needs to be offered free training by experts for example accountants and registrar of business to enforce SMEs financial

reporting standards. Recommendation to the governments to continue investing more in credit guarantee schemes due to decreased reliability on unaudited financial statements provided by SMEs as to boost access to loans by SMEs.

Likewise, the financial literacy had significance mediating effect on the relationship between financing practices and access to financial services. The study recognized that financial literacy training plays a significant role in increasing access to financial services by small and medium size enterprises. The study thus recommends that SMEs should endeavor to acquire relevant financial literacy skills and the financial lenders should capacity build SMEs before extending the credit services.

Finally, study found out that credit information sharing had insignificance moderating effect on the relationship between financing practices and access to financial services. This CIS systems such as CRB has helped lending institution to identify risk borrowers but at the same time has further increased credit inaccessibility by SMEs in Kenya. As a result the study recommends that financial institutions should not should take the CRB report as the main basis of awarding credit services to SMEs. The financial lenders need to place more importance on SMEs-bank relationships, financial statements, SMEs owner financial literacy when lending to SMEs.

5.5.2 Recommendations for Policy

The study discovered that relationship lending has a positive and significant relationship on access to financial services. The study established that long and strong standing relationship with the financial institution improved access to financial services by SMEs. The study therefore recommended that commercial banks or lending institution should embrace SMEs-bank relationship to enhance gathering of enough

data about the enterprises and hence structure loan facilities to meet the specific need of the businesses.

The the descriptive results established that asset based lending was a key requirement to access financial services. However, inferential results revealed that asset based lending has a statistically insignificant and negative effect on access to financial services. The study concluded that asset-based lending is not a common form of lending among the lending institutions especially to businesses. The study recommends that the Kenyan government need to implement the No.13 Act of 2017; Movable Property Security Rights (MPSR) Act by linking it to credit market. This will enable financiers to know the significance of assets as collateral security in debt financing. Study further recommends that MPSR Act No. 13 of 2017 should be made public to SMEs owners through capacity building by financiers and be implemented as planned by the State.

The study acknowledged that financial statements play a critical role in ensuring small enterprises access financial services. Lenders can assess and determine the financial position of the business by analysing their cashflow in order to be able to advance the credit that the business is able to pay based on their financial statement. Hence, the study recommends that the Registrar of businesses should see that SMEs adhere to financial reporting standards as well as embrace auditing of financial statemets.

The financial literacy mediated the relationship between financing practices and access to financial services. The study recognized that financial literacy training plays a significant role in increasing access to financial services by small and medium size enterprises in Kenya. Thus the study further recommends that board of director of

lending institutions should come up with policies to ensure that financial training short courses are offered to SMEs owners and managers before advancing credit to them.

Finally, credit information sharing had a negative and insignificant moderation effect between financing practices and access to financial services. This CIS systems such as CRB has helped lending institution to identify risk borrowers but at the same time has further increased credit inaccessibility by SMEs in Kenya. The study recommends that policy maker should relook at the CIS systems to ensure they do not further make it worse for SMEs owned by financially marginalized groups. CIS should be approved with caution to address the problem of credit inaccessibility. The study recommends that SMEs registration to credit reference bureaus should be optional but not compulsory as planned in Vision 2030.

5.6 Areas for Further Research

The study focused on three financing practices and how they affect access to financial services by small and medium enterprises in Kenya. There exist gaps on other financing practices such lending based on business viable models therefore further studies should focus on other financing practices besides relationship lending, asset based lending and financial statement lending and how they affect access to financial services by small and medium enterprises.

Similarly, further studies can be carried out in different context to bridge the contextual gaps. Thus body of knowledge can be expanded by carrying out financing practices and access to financial services by SMEs in diverse world; developed, middle and developing economies.

The study finding posted out that asset based lending had insignificant effect on access to financial services. In spite of the fact that asset collateral is the most preferred by financial institution in extending credit services. This results provides a platform for more research on the issues causing statistical insignificance of asset based financing.

A study should too be carried out on factors that makes credit information sharing findings to turn out negative and insignificant in bridging the relationship between financing practices and access to financial services in Kenya. The credit information sharing was introduced in Kenya to moderate the relationship between borrowers and financial institution but its not the case in this study.

Further, this study focussed on small and medium enterprises access to financial services thus future study can replicate the study with focus on large firms in specific industry like health, manufacturing and hospitality industry in order to compare the outcome. Finally, it would be valuable to understand the magnitude of generalization of the study results to other industry like health and hospitality.

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APPENDICES

Appendix I: Letter of Transmittal

Kiring'a Simiyu Edward

School of Business, Kenyatta University

Department of Accounting and Finance

P. O. Box 43844-00100 Nairobi, Kenya.

Email:kiringase@gmail.com

Dear Sir / Madam,

RE: FINANCING PRACTICES AND ACCESS TO FINANCIAL SERVICES BY SMALL AND MEDIUM ENTERPRISES IN KENYA.

I am a post graduate (PhD) student wishing to carry out a research on the above mentioned topic. The questionnaire attached is meant to gather information for this study. Ultimate privacy and confidentiality will be given to the information provided. The result of this research will form a basis for formulating policies for promoting access to financial services which has been a major problem confronting SMEs in Kenya. You are kindly requested to respond to all items in the questionnaire in open honesty. Your positive response will be highly appreciated.

Thank you in advance for your co-operation and your time.

Yours faithfully,

Kiring'a Simiyu Edward.

D86/CTY/32086/2015

Appendix II: Questionnaire

Data provided is strictly for academic reasons in this questionnaire. The study seeks to investigate **Financing Practices and Access to Financial Services by Small and Medium Enterprises in Kenya**. Confidentiality will be enhanced for information provided.

SECTION 1: GENERAL INFORMATION

(Please tick (✓) where applicable)

1. Please tick your appropriate gender: Male [] Female []

2. Please tick your appropriate age group
18- 28 years [] 29-39 years [] 40-49 years [] 50-59 years [] Above 60 years []

3. Tick the highest level of educational qualification attained
KCPE [] KCSE [] Certificate [] Diploma []
University Degree [] No Formal Education []

4. Please tick years your enterprise has been in operation
1-5 years [] 6-10 years [] 11-15 years [] Over 15 years []

5. Tick the total number of employees in your enterprise
5 – 49 [] 50 – 99 []

6. Please tick the type of business
Manufacturing [] Wholesale [] Service provider [] Retail []

SECTION 2: STUDY VARIABLES

Part A: Relationship Lending

7. Do you keep close banking relationship with your current bank?

- a. Yes
- b. No

8. If yes, please indicate by choosing any of this ground

- a. High collateralization of loans.
- b. Good access to information.
- c. Influence on the management.
- d. Long duration.
- e. Exclusive business.
- f. High business intensity
- g. High share of payment transactions
- h. High share of debt financing

9. This question seeks to obtain your facts on how relationship lending affects access to financial services in your enterprise. For each of the statement listed below tick the extent each affects access to financial services. Where; **5**=Very high extent, **4**=High extent, **3**= Moderate extent, **2**=low extent, **1**= No extent

Aspects of relationship lending	1	2	3	4	5
Long relationship with the bank improves access to credit					
Increased credit ties improve access to loans					
Multiple banking relationships improves credit availability					
High share of debt financing positively influence access to loans.					
Building a strong trust with a bank enables ease access to credit					
Remaining in one bank for a long time increases access to credit					
Strong social relationship with the bank increases credit availability at lower interest rate					

Part B: Asset Based Lending

10. The bank always request for collateral security

Yes [] No []

11. What kind of collateral does the bank require?

- a. Land title deed []
- b. Payslips []
- c. Vehicle log book []
- d. Business assets (Machines buildings, stock) []
- e. Guarantors []
- f. Personal assets []
- g. Accounts receivables []

12. What is your response on the various components of asset-based lending that affect the access to financial services in your firm? Respond to the statements in a scale of 1-5 where; 5= Very high extent, 4= High extent, 3= Moderate extent, 2= Low extent, 1= No extent.

No	Statement	1	2	3	4	5
a	Firms that offer highly valued collaterals improves access to loans					
b	Having assets with high resale value increases access to credit					
c	Highly liquid collateral are preferred for loan lending					
d	Lack of adequate collateral limits access to loans					
e	Evidence of asset ownership results in positive credit appraisal					
f	Immovable assets are favoured in loan awarding					
g	Firms having tangible assets access loans with ease					

Part C: Financial Statement Lending

13. The bank always request for financial statements before granting credit

Yes [] No []

14 Please indicate the extent you agree with the following statements as relates to financial statement lending and access to financial services in your enterprise. (Tick appropriate: 5 = Very high extent 4= High extent, 3=Moderate extent, 2=low extent, 1= No extent.

Aspects of Financial Statement Lending	1	2	3	4	5
Failure to provide financial statements limits access to loans					
Maintaining proper books of accounts increases access to loans					
Unsatisfactory disclosure of financial information negatively affects access to loans					
Financial statements prepared according to laid down accounting standards increases access to credit					
Unaudited financial statements restricts access to loans					
Accessibility to trustworthy financial information boosts enterprise loan access.					
Inadequate evidence to assure future cash flow for repayment negatively affect access to loans					
Insufficient confidence of financial information provided restricts granting of loans.					
Firms insufficient profitability and liquidity limits access to loans					

Part D: Credit Information Sharing

15. This section of the questionnaire seek your response on aspect of credit information sharing and access to financial services in your enterprise. (Tick appropriate: 5= Strongly agree, 4= Agree, 3= No opinion, 2=Disagree and 1= Strongly disagree)

Aspects of Credit Information Sharing	1	2	3	4	5
It was difficult to access the loan from banks without CIS					
CIS has increased the volume of loan access than before					
SMEs with good credit score are not denied loans					
CIS has made loan accessed equivalent to loan applied					
CIS has reduced demand for collateral easing access to loans					
Firms with good credit repayment history are not denied loans					
CIS has improved lending relationship with the banks promoting access to loans					
CIS has reduced interest rates charged on loans improving access					

16. How does credit information sharing affect access to finance in your firm

Part E: Financial Literacy

17. Have you undertaken any training in financial literacy?

Yes [] No []

18. What is your response on various components of financial literacy that affect access to financial services by enterprises? Respond in a scale of 1-5 with a tick, where: 5= Definitely true, 4=True, 3= No opinion, 2= False and 1= Definitely false

Aspects of Financial Literacy	1	2	3	4	5
Weak financial management skills is obstacle in access to loans					
Lack of training in book keeping and accounting hinders access to loans					
Inadequate skills in preparation and interpretation of financial statements restrict access to loans.					
Insufficient business planning skills limits access to loans					
Lack of knowledge on enterprise credit rating hampers loan acquisition.					
Low competency and experience on debt management constrains access to credit					

Part F: Access Financial Services

19. Within the last two years, has the firm applied for credit

- a. Yes, applied for it and it was successful []
- b. Yes, applied for it and it was not successful []
- c. No, did not apply for it []

20. What was the status of the granted loan if it was successful

- a. Loan was granted in full []
- b. Loan granted was less than what I had applied for []

21. If you did not apply for credit, what was the reason

- a. Size of the loan and maturity was insufficient []
- b. Complex application procedure []
- c. Collateral requirements were too high []
- d. High interest rates []
- e. Lack of financial statements []
- f. No need for loan []

22. If your application was rejected what was the main reason

- a. Lack of collateral []
- b. Poor repayment history []
- c. Failure to provide audited financial statements[]
- d. Poor credit score []
- e. Lack of close banking relationship []

23. To what extent are you in agreement or disagreement regarding the following statement on access to financial services from financiers? (Rank appropriate: 5= Strongly agree, 4=Agree, 3= Not sure, 2= Disagree and 1= Strongly disagree)

Parameters	1	2	3	4	5
Firm access loans with ease from banks					
The firm access SME loans					
The firm is allowed overdrafts					
The firm access microfinance loans					
The firm access asset based loans					
The firm acquires sufficient loans from financiers					
The firm access loans on timely basis					
Firm access loans at a low interest rates					

Thank you for your participation

Appendix III: Results for Factor Analysis

Communalities for Relationship lending	Initial	Extraction
Long relationship with the bank improves access to credit	1	0.76
Increased credit ties improves access to loans	1	0.66
Multiple banking relationships improves credit availability	1	0.528
High share of debt financing positively influence access to loans	1	0.507
Building a strong trust with a bank enables ease access to credit	1	0.565
Remaining in one bank for a long time increases access to credit	1	0.507
Strong social relationship with the bank increases credit availability at a lower interest rate	1	0.643
Extraction Method: Principal Component Analysis.		

Communalities for Asset based lending	Initial	Extraction
Firms that offer highly valued collaterals improves access to loans	1	0.595
Having assets with high resale value increases access to credit	1	0.643
Highly liquid collateral are preferred for loan lending	1	0.518
Lack of adequate collateral limits access to loans	1	0.583
Evidence of asset ownership results in positive credit appraisal	1	0.583
Immovable assets are favoured in loan awarding	1	0.741
Firms having tangible assets access loans with ease	1	0.651
Extraction Method: Principal Component Analysis.		

Communalities for financial statement lending	Initial	Extraction
Failure to provide financial statements limits access to loans	1	0.74
Maintaining proper books of accounts increases access to loans	1	0.654
Unsatisfactory disclosure of financial information negatively affects access to loans	1	0.53
Financial statements prepared according to laid down accounting standards increases access to credit	1	0.554
Unaudited financial statements restrict access to loans	1	0.595
Accessibility to trustworthy financial information boosts enterprise loan access.	1	0.518
Inadequate evidence to assure future cash flow for repayment negatively affect access to loans	1	0.529
Insufficient confidence of financial information provided restricts granting of loans	1	0.522
Firms insufficient profitability and liquidity limits access to loans	1	0.551
Extraction Method: Principal Component Analysis.		

Communalities for CIS	Initial	Extraction
It was difficult to access the loan from banks without CIS	1	0.641
CIS has increased the volume of loan access than before	1	0.709
SMEs with good credit score are not denied loans	1	0.561
CIS has made loan accessed equivalent to loan applied	1	0.505
CIS has reduced demand for collateral easing access to loans	1	0.544
Firms with good credit repayment history are not denied loans	1	0.509
CIS has improved lending relationship with the banks promoting access to loans	1	0.576
CIS has reduced interest rates charged on loans improving access	1	0.872
Extraction Method: Principal Component Analysis.		

Communalities for financial literacy	Initial	Extraction
Weak financial management skills is obstacle in access to loans	1	0.627
Lack of training in book keeping and accounting hinders access to loans	1	0.666
Inadequate skills in preparation and interpretation of financial statements restrict access to loans	1	0.567
Insufficient business planning skills limits access to loans	1	0.500
Lack of knowledge on enterprise credit rating hampers loan acquisition	1	0.584
Low competency and experience on debt management constrains access to credit	1	0.688
Extraction Method: Principal Component Analysis.		

Communalities for access to financial services	Initial	Extraction
Firm access loans with ease from banks	1	0.69
The firm access SME loans	1	0.698
The firm is allowed overdrafts	1	0.605
The firm access microfinance loans	1	0.563
The firm access asset-based loans	1	0.56
The firm acquires sufficient loans from financiers	1	0.63
The firm access loans on timely basis	1	0.708
Firm access loans at a low interest rate	1	0.577
Extraction Method: Principal Component Analysis.		

Appendix IV: Research Authorisation from Kenyatta University



KENYATTA UNIVERSITY
GRADUATE SCHOOL

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Our Ref: D86/CTY/32086/15

Date: 26th May, 2020

The Director General,
National Commission for Science, Technology & Innovation,
P.O. Box 30623-00100,
NAIROBI

Dear Sir/Madam,


RE: RESEARCH AUTHORIZATION FOR MR. KIRING'A EDWARD - REG. NO. D86/CTY/32086/15

I write to introduce Mr. Simiyu who is a Postgraduate Student of this University. He is registered for a Ph.D. degree programme in the Department of Accounting & Finance in the School of Business.

Mr. Simiyu intends to conduct research for Ph.D. thesis entitled "Financing Practices and Access to Financial Services among Small and Medium Enterprises in Kenya".




Any assistance given will be highly appreciated.

Yours faithfully,


PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

JG/cao

Appendix V: NACOSTI Research License

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 189893	Date of Issue: 08/June/2020
RESEARCH LICENSE	
	
This is to Certify that Mr. EDWARD SIMIYU KIRINGA of Kenyatta University, has been licensed to conduct research in Kitui, Machakos, Makueni on the topic: FINANCING PRACTICES AND ACCESS TO FINANCIAL SERVICES AMONG SMALL AND MEDIUM ENTERPRISES IN KENYA for the period ending : 08/June/2021.	
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