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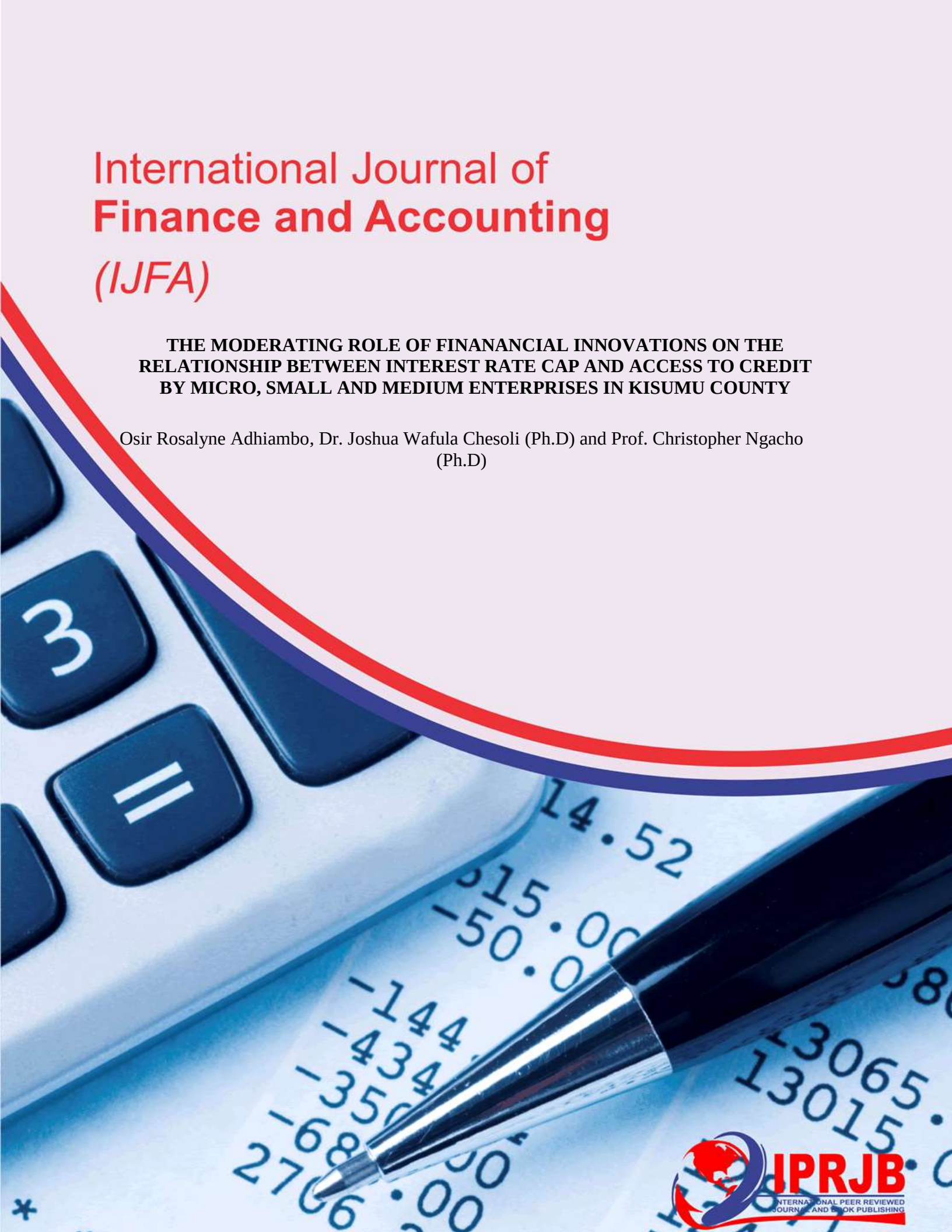

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Osir Rosalyne Adhiambo
PhD Student: School of Business and Economics
roseline_73@yahoo.com
Dr. Joshua Wafula Chesoli (Ph.D)
Kisii University
Prof. Christopher Ngacho (Ph.D)
Kisii University

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Abstract

Purpose: The purpose of this study was to investigate the moderating role of financial innovations on the effect of monetary interventions on access to credit by micro, small and medium enterprises in Kisumu County, Kenya. The specific objectives were to assess the effect of interest rate cap on access to credit by MSMEs and to investigate the moderating role of financial innovations on the effect of interest rate cap on access to credit by MSMEs in Kisumu. This study was guided by the Keynesian Liquidity Preference Theory.

Methodology: The study adopted a descriptive research design with a target population of the 1,472 micro, small and medium enterprises registered at the Department of Social Services in Kisumu County, Kenya. At a confidence level of 95%, a representative sample of 420 MSMEs was obtained based on Yamane Taro's formula. A closed ended questionnaire was administered to a stratified sample of the finance managers of the micro, small and medium enterprises. A Cronbach's alpha of 0.801 confirmed the reliability of the instrument while its validity was assessed by expert opinion of finance professionals. Data was analyzed using regression analysis.

Results: Results showed that interest rate cap had a statistically significant effect on access to credit by micro, small and medium enterprises. Further, financial innovations moderated the relationship between interest rate cap and access to credit. The study concluded that MSMEs' access to credit depended on the direct and the hierarchical effects of interest rate cap and also that financial innovations moderated these effects.

Unique contribution to theory, practice and policy: The study recommends that the MSMEs could save with commercial banks to enable them access credit made available through lower interest rates unlike those charged by MFIs. Also, they should take advantage of financial innovations at their disposal to enable them access credit cheaply and fast. The policy makers ought to aim at enhancing access to credit by employing sector specific interventions as opposed to blanket interventions like cushioning MSMEs from high interest rates by providing such funds as funds for inclusion of the informal sector (FIIS) and should also derive policies targeting on improving the process and role of financial innovations in the relationship between interest rate cap and access to credit by MSMEs in Kenya. The study supported the Keynesian liquidity preference theory by positing that interest rates are controlled by the rise and fall of supply and demand for money and should be allowed to adjust freely. This theory could therefore be applied to similar studies.

Keywords: *Moderating role, financial innovations, monetary interventions, access to credit*

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INTRODUCTION

The objective of this study was on the effect of monetary interventions on access to credit among micro, small and medium enterprises (MSMEs), with a focus on the moderating role of financial innovations. Financial innovations have been defined variously depending on the research context. They have been defined as the activity of making changes to products and processes, new organizations and gathering new knowledge and also the development of distribution of new products or services (Tufano, 2011). Gbadebo and Oladapo (2009) explain that these technological advances either facilitate information access, trading and payment or new financial instruments and services, and new forms of organizations. It is surprising that scanty empirical attention has been given to the possible role of such technological advances on the monetary interventions'-access to credit link. This study extended work on financial innovations by testing the moderating role of financial innovations on the effect of monetary interventions on access to credit by MSMEs in Kenya.

The global study on monetary interventions by Dhungana (2016) explains that the effects of monetary interventions on access to credit are different in different nations and are more underdeveloped in the developing nations. For developing countries, the use of certain instruments may not bear fruits owing to the underdeveloped nature of their monetary system.

In Nigeria, several monetary intervention tools such as OMOs have been in use since 1993 even though their inflation rate has not dropped to the desired unit digit. Like other nations of the world, the Central Bank of Nigeria has the mandate of formulating and implementing their monetary policies with an objective of keeping up price stability (Onwumere, Imo & Ugwuanyi, 2012).

In Kenya, Kamau (2015) also asserted that monetary interventions are used by the Central Banks to control the supply of money in the economy to manage prices, gain full employment and promote economic growth. (Kimani, 2013) further noted that the interventions were supposed to guide bank lending rates to limits where the growth of money and the demand for credit were at par with total supply. When the monetary interventions are well implemented and banks become innovative, then access to credit and information by the MSMEs among other sectors may be enhanced. Monetary interventions can be contractionary such that they reduce money supply and bring down inflation rates or expansionary by increasing money supply hence enhancing economic growth by reducing interest rates (Kamau, 2015).

Nyorekwa and Odhiambo (2014) did an assessment of the monetary policy frameworks and the related achievements in Kenya from 1963-2014. They noted that Kenya had undergone varied reforms since 1963, changing from the direct to the indirect monetary interventions in the 1990s. They found that in spite of the monetary policies being inert in the 1960s and early 1970s, the related macroeconomic achievements reflected in the high rates of growth, excess balance of payments and low inflation rates in that era has not been replicated. They also noted that despite Kenya's financial sector being among the most developed in Sub-Saharan Africa, after Nigeria and South Africa, the sector still experiences a myriad of challenges of which rapid financial innovations is among them.

The key monetary intervention instruments include interest rate cap (IR caps), cash reserve ratio, open market operations and moral suasion (Putunoi, 2016). However, this study focused on the moderating role of financial innovations on the effect of interest rate cap on access to credit among MSMES.

An interest rate cap sets the least interest paid on deposits and the highest interest charged for a credit facility while an interest rate is the price borrowers pay for the use of money borrowed (Miller, 2013). Global studies point to the fact that interest rate caps were meant to increase access to finance by protecting the weaker sectors but the application of IR caps on micro-finance loans caused MFIs to ignore the poor and those from more remote regions and increased their average loan size to improve their efficacy. Supply of credit also reduced in Japan due to IR caps with ratification of loan applications declining hence giving rise to unlawful lending, while in Poland interest caps did reduce access to credit (Maimbo and Gallegos, 2014). Many studies in the US found that financial freedom measures such as removal of interest caps affected small businesses' access to credit to an extent that there was migration of clients to states with less stringent lending conditions. In Nicaragua the use of IR caps caused MFIs to reduce lending and quickened several financial institutions to abandon rural areas due to high marginal costs and additional fees used for covering for their operations since these fees were not capped. Interest rate caps gravely affected the small firms in Colombia due to high operational costs of lenders (Maimbo and Gallegos, 2014).

In the European Union (EU), interest rate caps reduced credit access for borrowers with less income. Since the lenders could not charge the levels of interest rates necessary to cover higher risks they restricted credit accessibility accordingly. Moreover, interest rate caps also discouraged commercial banks from venturing into the rural and micro-credit markets and led to a reduction in consumer credit loaned. However, when interest rate caps were introduced in Poland and Germany higher credit market growth was witnessed while in Dutch the quantity of credit reduced after more stringent IR restrictions were introduced. Besides, IR caps were associated to lower consumer credit uptake in the different countries of the EU. The UK had the largest consumer market with no caps whereas Germany, which had laws that were more stringent, had the smallest consumer market (Udo, Renaud and Knobloch, 2010).

Heng (2015) writing on the impact of new financial services law in Bolivia reiterated that IR caps if set lower than the market rate could reduce credit access and affect financial inclusion. Financial institutions had to increase the loan quantities because they were faced with higher operational costs hence reduced their services to the rural and small borrowers. Many countries experienced market contractions after the introduction of IR caps and borrowers had to go to more expensive informal markets where they had no or little security.

Regionally, it has been documented that some of the challenges faced by Saudi SMEs in their bid to access finance included high costs due to interest rate caps, security requirements, long lead times before obtaining meager loans and stringent conditions for loan applications (Bandar, 2016). The studies in Saudi are consistent with the findings from studies in Ghana on challenges faced by SMEs when accessing funds from financial institutions, in that SMEs were perceived as a risky sector hence they were granted loans at high interest rates (Avevor, 2016).

In 2015, the National Assembly of Kenya passed the Banking Amendment Bill that set interest rate caps. The bill set the maximum interest rate chargeable for a credit facility in Kenya not to exceed 4% the base rate (BR) of the Central Bank of Kenya (CBK) and the minimum interest rate granted on deposits to be at least 70% of the base rate put forth by the CBK (Apex, 2016).

Interest rate capping by the government of Kenya affected the sustainability of the MFIs by reducing profits while increasing costs. Aslam (2017) explained that IR caps affected both the customers and the micro finance institution (MFI) because it substantially reduced the level of outreach of MFIs and customers paid a higher price in the long run. Olaka (2017) noted that in Kenya, the capping of interest rates would make banks to prefer lending to the government and reduce lending to the private sector, and in particular, to the MSMEs and low income borrowers. Whether the cap on interest rates is effective and how it may lead to access to credit by MSMEs is an open question.

Frame, Wall and White (2018) explained that financial advancements have changed greatly worldwide in recent years due to changes in technology resulting from improved telecommunications, information technology and financial practices. These have in turn resulted into financial innovations that have changed several financial products, services, production processes and organizational structures. Some of the new product innovations include subprime lending which is given to creditors with low credit histories. Innovations have also focused on product service innovations such as debit cards and online banking, process innovations entail Automated Clearing Houses (ACHs), distributed ledgers, Machine Learning, Artificial Intelligence and Small Business Credit Scoring (SBCS). Some of the new organizational innovations include Internet Only Banks and market place lenders (Frame,Wall and White, 2018).

Studies by Ajide (2016), Dabrowski (2017) and Lerskullawat (2014) suggest that financial innovations may impact on the efficacy of monetary policy transmission mechanism. Financial innovations differ in their effectiveness because on the one hand they could lead to a reduction in demand for money when they cause clients to prefer less liquid assets over the more liquid ones and on the other hand they could lead to increased money demand, if payment systems were enhanced causing demand for more liquid assets (Ajide, 2016).

The existence of ATMs, electronic money, credit and debit cards are alternative and more convenient ways of payments, that influence the speed of money supply. Insofar as central banks continue to retain control over interest rates, the effect of digital money on monetary transmission might be irrelevant. Moreover, since credit cards give some kind of financing, interest rate variations due to monetary policy would have a reduced effect on households as credit cards were used to cushion the effect (Putunoi, 2015).

The global problem of MSMEs relate to their inability to access the credit they require, to contribute to economic development, employment creation and poverty reduction (Etemesi, 2017; Ghulam and Mumbine, 2017). In the developed world the MSMEs contribute a large share of the GDP and employ over 50% of the total workforce. In Netherlands MSMEs compose of about 90% of the private sector, contribute to about 32% of the GDP and employ 55% of the

labor force. The role of MSMEs can be enhanced if they are given better access to credit policies that promote their ability to expand and develop (Ghulam and Mumbine, 2017). The need for specific interventions is evident from the fact that MSMEs are often seen as high risk and less viable economically by lenders.

However, governments across the world are refocusing on MSMEs as endeavors to improve economic growth via large industries have failed. Many developed countries have heightened the credit guarantee schemes for their MSMEs. For instance, in 2014, France eased the lending rules for MSMEs such that the loan guarantee schemes covered up to 90% of the risks pertaining to loans, the UK guaranteed up to 75%, Japan 80% and South Korea 100% of the MSMEs. Other countries such as Belgium and Sweden lend directly to the MSMEs through their public institutions or state-owned banks (Etemesi, 2017).

The success stories of many industrially advanced nations that recognize the place of MSMEs in their economic development have persuaded the African Nations to acknowledge and support the emergence and sustenance of the MSMEs in their national development plans, albeit with slow success. For instance, in South Africa SMEs hardly operate beyond their fifth years due to lack of financial acumen among others (Ndede,2015), while in Uganda collateral is up to 150% of loan advanced, repayment period is only up to 24 months and interest rates are between 23% to 30% per month (Etemesi,2017).

Inaccessibility to credit by the MSME sector in Zambia was a major hindrance in doing business which impacted on their growth extensively (Deressa, 2014). This view found support in Ethiopia, where Alemu (2017) found that inaccessibility to finance interfered with the growth and efficacy of the MSMEs. Financial institutions in Ghana also considered MSMEs a risky industry hence offered them credit at high interest rates (Avevor, 2016). These studies may however not fully explain the extent of access to credit following monetary interventions in Kenya.

Related literature however point to the sector's importance in employment creation and economic growth. The MSME sector in Kenya is still facing challenges relating to credit access such as lack of collateral, financial illiteracy, high interest rates and lack of information (Ndede, 2015). Arora (2010) notes that some dimensions of access to finance such as easy physical access, flexibility, reliability, ease to undertake transactions, cost dimension, and access by the less privileged and financially illiterate. The current study investigated some of these dimensions of the dependent variable MSMEs access to credit to test the hypothesized moderating role of financial innovations. The current study focused on MSMEs operating in Kisumu County, Kenya.

Kisumu County is one of the devolved counties in Kenya and is divided into seven sub-counties of Kisumu East, Kisumu West, Kisumu Central, Seme, Nyando, Muhoroni and Nyakach. It has a population of 968,909 on a land area of 2085.9 sq. km. Kisumu city, as the administrative hub of the County was considered a suitable study location since it is a leading commercial, trading, fishing and industrial hub in Lake Victoria basin (CIDP Kisumu, 2019). It has a rich mix of MSMEs involved in trade, transport, service, agriculture, hotel, health, education and industry.

Surprisingly, while it may be expected that involvement of MSMEs can alleviate poverty and reduce unemployment, the reverse appears to be the case (KCIDP, 2018).According to its recent County integrated development plan (2018/2022) lack of access to credit remained a major impediment faced by MSMEs in the County. In is not surprising to note that the intervention by the County Government of Kisumu is yet to translate into enhanced contribution by MSMEs to poverty reduction and economic growth (Indimuli, Mukami, Lambart and Mwangi, 2015). These initiatives include central and county governments' intervention schemes such as Youth and Women Enterprise Funds, Poverty Eradication Funds and the Kisumu County Traders' Fund. Despite these efforts, recent studies cite financial shortage as a major challenge faced by the MSMEs in Kisumu (Orinda, 2014). The current study investigated the moderating role of financial innovations in enhancing the effectiveness of monetary interventions on MSMEs' access to credit.

This study was pegged on the Keynesian liquidity preference theory attributed to economist J. M. Keynes of 1936. It states that rates of interest are determined by the intersection of the supply schedule of and the demand schedule for money. Keynes further noted that the key variable determining interest rate (IR) is the way in which the command over future consumption is reserved, that is, one may wish to hold cash in liquid form or may be ready to part with the control of cash for a specified period of time, termed as its liquidity preference. Liquidity preference is also a tendency which fixes the quantity of money which the public will hold when the rate of interest is given (Appelt, 2016).

Statement of the Problem

The current study examines the problem of lack of access to credit faced by MSMEs. This problem curtails their ability to contribute to solving the problem of unemployment and poverty. To address this challenge Governments around the world have introduced monetary interventions aimed at increasing the supply of credit to MSMEs. In Kenya the challenge seems to persist as studies point to lack of access as a major impediment for MSMEs. This suggests the need for a wider conceptualization of the problem of lack of access to credit by MSMEs. In particular, it is important to rethink the moderating role of financial innovations in efforts by the monetary authorities to address the problem of credit access by MSMEs in Kenya. These innovations may provide an answer if they entail the creation of more MSME friendly products and services, processes and organizations. The current study hypothesizes that financial innovations play a moderating role in the relationship between monetary interventions and access to credit.

Kenya is the third most developed in the Sub Saharan, after Nigeria and South Africa, and boasts of a vibrant financial services sector, with innovations such as M-PESA and mobile phones credit. It is therefore likely that financial innovations can improve access to credit to MSMEs. The government, at county and national level has set up funds to provide the MSME sector. These include the Fund for the Inclusion of Informal Sector (FIIS) to allow MSMEs to access credit facilities expand their businesses and increase their savings. The fund also aims to help informal enterprises transition to formal sector enterprises, through access to formal providers of financial services. FIIS is a revolving fund through which the government enters into credit

facility agreements with selected banks for lending to micro-and small-enterprises through branches, authorized banking agents and other channels, particularly mobile banking. At County Government levels MSMEs have benefited from funds such as Youth Enterprise Fund, Women Enterprise Fund, Uwezo Fund and Kisumu Traders' Fund among others (KCIDP, 2018).

The paradox is that despite monetary interventions, MSMEs seem to be having problems accessing credit. This problem has been attributed to increased costs of credit, repercussions of interest rate cap and also lack of collateral (Etemesi, 2019; Ndede, 2018). In particular, the interest rate cap which was set with the hope that credit would be more affordable has aggravated the problem of accessibility to credit by the MSME sector. Olaka (2017) reiterates that interest rate caps have only served to divert lending to larger businesses.

Moreover, from the theoretical and empirical literature reviews the knowledge gaps identified included the conceptual, the contextual, the empirical and the theoretical gaps. Many studies focused on financial innovations and performance of financial institutions (Muthinja, 2016; Mwangi, 2013), factors and challenges affecting access to finance by SMEs (Thuku, 2017; Bandar, 2016; Ndede, 2016) and interest rate caps on financial performance (Ng'ang'a, 2017; Nyakio, 2017; Okwany, 2017; Nduati, 2013). There are a few studies on interest rate caps vis-à-vis access to credit by the MSMEs (Kiseu, 2017; Awino, 2013; Miller, 2013) and no study on the moderating role of financial innovations on the effect of interest rate cap on credit access by MSMEs in Kenya if not in Kisumu County (Putunoi, 2015; Gichuki et al., 2012). This alludes to conceptual gaps.

The studies on monetary interventions are skewed to other regions and are not similar to studies that have been conducted in Kisumu County leading to a contextual gap (Mwangi, 2016; Njiru, 2016; Omoregie, 2013; Gray, 2011). In addition there are conflicting findings in some of the related studies giving rise to empirical gaps. For instance, Kiseu (2017) found that interest rate cap did not significantly affect how commercial banks issued their loans. Awino (2013) also found that high interest rate does not necessarily affect demand for credit and that high interest rates are not a major concern for the SMEs. However most of the findings alluded to the fact that both high interest rates and interest rate caps are a major concern for the SMEs in the sense that they hinder access to credit to some extent (Etemesi, 2017; Mutiria, 2017; Avevor, 2016; Bandar, 2016). Juan, et. al. (2018) on the contrary stated that interest rate cap enhanced access to credit by entrepreneurs.

Studies point to the fact that as much as interest rate caps are meant to increase access to finance by protecting the weaker sectors, those in remote areas and the poor were ignored by the MFIs. Banks also preferred lending to the government and reduced lending to the private sector, and the MSMEs and low income borrowers (Maimbo and Gallegos, 2014; Olaka, 2017). This is an indication of a theoretical gap.

It is against this backdrop that this study seeks to assess the moderating influence of financial innovations on the effect of interest rate cap on access to credit by the MSMEs in Kisumu County with an aim of bridging these gaps. The study seeks to answer the question: Do financial innovations moderate the effect of monetary interventions on access to credit in Kenya?

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RESEARCH DESIGN AND METHODOLOGY

This study adopted a descriptive research design which focused on formulation of objectives, designing methods of data collection, selecting the sample, collecting the data, processing and analyzing the data and reporting the findings (Kothari, 2004; Micheal ,2000; Gathi, Wamukuru, Karanje, Muriithi and Maina, 2019). The study area was Kisumu County with a target population of 1472 MSMEs and a sample of 420 finance managers obtained at a 95% confidence level using Yamane's formula (KCIDP, 2013; Singh and Masuku, 2014). Purposive sampling was done to include two sub-counties. Stratified random sampling was then done, followed by a simple random sampling to obtain the individual businesses (Kimberlin and Winterstein, 2008; Saunders et. al., 2003). Primary data was collected using a five point likert scale questionnaire which was coded and keyed into an SPSS. Data was then analyzed using both descriptive and inferential statistics where frequencies, percentages and averages were obtained and presented in frequency distribution tables. Both simple and multiple linear regression analyses were done to test for the direct and the indirect relationships of the variables. Correlation analysis and regression analysis were conducted to find relationships and correlations. F-test (ANOVA) was conducted to assess the overall robustness and significance of the regression model. T-test on the other hand was conducted to determine the individual significance of the relationships. Hypothesis testing was carried out after correlation analyses and simple linear regression analysis for each hypothesis was done. The regression analyses provided equations which were used to estimate the magnitude of the dependent variable and the predictor variables. The simple linear regression model used to establish the direct relationship was: $y = \beta_0 + \beta_1 x_1 + \varepsilon$ and the multiple linear regression model used to test the moderation effect was: $y = \beta_0 + \beta_1 x_1 z + \varepsilon$ (Fairchild and Mackinnon, 2009).

RESULTS AND DISCUSSION

Response Rate

Questionnaires were administered to 420 respondents drawn from the population of 1472 MSMEs' finance managers. The researcher and trained assistants delivered the questionnaires to the finance managers of the 420 MSMEs. The response rate is presented in Table 1.

Table 1: Questionnaire return rate

Sample size	Number	Percent
Returned questionnaire	381	90.7
Not returned questionnaire	39	9.3
Non usable questionnaire	10	2.4
Usable questionnaire	371	88.3

Source: Field data (2021)

In Table 1, out of the four hundred and twenty (420) total questionnaires administered, 381 were filled and returned representing 90.7% of the total questionnaires administered. This implies that 39 questionnaires were not returned and this represented 9.3% of the sample. However, of the 381 questionnaires returned, 10 questionnaires representing 2.4% were incomplete and could not

be used for further analysis. Therefore, 371 questionnaires were legible for further analysis. This gave a response rate of 88.3%. The overall response rate of 90.7% is above the minimum recommended for analysis and reporting (Mugenda and Mugenda, 2004). A return rate of 50% is adequate for analysis (Babbie, 2003).

Demographic Characteristics of Respondents

The researcher presumed that respondents' bio-data had some relationship with the role of financial innovations in the effect of monetary interventions on access to credit. The major background characteristics included: Age bracket, gender, level of education, length of stay in business, professional qualifications and the respondents' position in the organization.

Age of Respondents

The respondents were asked to indicate their age bracket. The distribution of the age brackets for the sampled MSMEs is presented in Table 2.

Table 2: Age of Respondents

Age (YRS)	Frequency	Percent
< 20	8	2.2
20-39	262	70.6
40-59	101	27.2
>60	0	0
Total	**371**	**100.0**

The data in Table 2 indicate that 70.6% of the respondents were between 20YRS and 39YRS. Respondents whose ages lay between ages 20 and 59 accounted for over 97.8% of the data. A possible explanation for this is that the owners of MSMEs in the study area are majorly youths and adults who are within the age of those who should be in active employment. They have thus resorted to business as a source of income. The policy implication is that the regulators need to implement selective monetary policies targeting this group.

The data in Table 2 also depicts that the respondents below 20yrs were least represented. This may be attributable to the fact the population at this age are mostly actively in school. The findings in Table 2 suggest that policies geared towards enhancing access to credit can have more impact if they target the MSMEs above 20yrs of age. There were no respondents of age above 60.

Gender of Respondents

The respondents were asked to indicate the brackets in which their ages belonged. The age distribution is presented Table 3

Table 3: Gender of Respondents

Gender	Frequency	Percent
Male	196	52.8
Female	175	47.2
Total	**371**	**100.0**

Source: Field Data (2021)

The data in Table 3 indicate that a majority of the enterprises (52.8%) are either run or owned by males. The females run or own 47.2% of the MSMEs. Perhaps this implies that more males than females are able to access asset-based credit to enable them start and maintain their businesses. This may therefore require policy makers to establish policies that may encourage more females to venture more in business by being able to access credit. Females may also benefit from new forms of credit heralded by financial innovations that have fewer restrictions on borrowing.

Level of Education of Respondents

Data on the level of education of the respondents was collected and presented in Table 4.

Table 4: Level of Education of Respondents

Level	Frequency	Percent
Secondary	89	24.0
Diploma	145	39.1
Bachelor	111	29.9
Post graduate	8	2.1
Others	18	4.9
Total	**371**	**100.0**

Source: Field Data (2021)

From Table 4 it is evident that a majority of the respondents have attained higher education and possess both diplomas and degrees (69%). This is an indication that many college graduates resort to doing businesses perhaps because of lack of jobs. Policy makers may therefore consider empowering college graduates through mentorship and provision of startup capital to enable them establish secure sources of income and employment. Table 4 on the other hand establishes that very few postgraduates (2.1%) from the sample size used pursued MSM enterprises. This is probably due to the fact that they are preferred by employers in job opportunities. However, 24% of the secondary school graduates engaged in business. This may be due to the fact that they may not be in a position to pursue further studies but choose to seek for a source of income. Policy makers and implementers should target this group by empowering them to ensure stability.

Length of Stay in Business

Respondents were asked to state the period they have been in business and the data in Table 5 presents the findings.

Table 5: Length of Stay in Business

Length (yrs)	Frequency	Percent
<1	45	12.1
1-5	203	54.7
5-9	77	20.8
>9	46	12.4
Total	**371**	**100.0**

Source: Field Data (2021)

The data in Table 5 shows that 54.7% of the enterprises have been in business for a period of 1 to 5 yrs. The data also shows that over 75% of the businesses have been into operation for between 1 and 9 yrs. The enterprises that have operated for less than 1yr and more than 9yrs account for 12.4% respectively. The findings in Table 5 can be interpreted that most of the businesses have not operated for long and may not be stable financially. Policy makers should therefore formulate and implement policies that would enhance credit access for this category of entrepreneurs.

Positions of Respondents in the Organization

Data on the positions occupied by the respondents in their organizations was collected. The results are presented in Table 6

Table 6: Positions of Respondents in the Organization

	Frequency	Percent
Top level manager	186	50.1
Middle level manager/ supervisor	95	25.6
General staff	90	24.3
Total	**371**	**100.0**

Source: Field Data (2021)

Results in Table 6 indicate that a majority (50.1%) of the respondents, were top level managers, 25.6% supervisors and 24.3% were general staff. Most of them are owners of their businesses.

Descriptive Statistics

Interest Rate Cap and Access to Credit

The first objective was to assess the effect of interest rate cap on access to credit by micro, small and medium enterprises. Respondents were asked to indicate their level of agreement with statements on a five point Likert scale, where 1= Not at all (NA); 2= To a small extent (SE); 3=To a moderate extent (ME); 4=To a large extent (LE) and 5 = To a very large extent (VLE). The mean and standard deviation for the opinion of respondents to each statement are presented in Table 7.

Table 7: Interest rate cap and access to credit

	N	Minimum	Maximum	Mean	Std. Deviation
Lending rates on loans to MSMEs were affected by interest rate cap	371	1.00	5.00	3.704	1.155
Interest on deposit by MSMEs were affected by interest rate cap	371	1.00	5.00	3.262	1.345
Non-performing loans by MSMEs increased due to interest rate cap	371	1.00	5.00	3.722	1.116
Loan books of commercial banks shrunk due to interest rate caps	371	1.00	5.00	3.464	1.202
Micro-finance institutions' loaning ability to MSMEs was affected by the interest rate cap	371	1.00	5.00	3.706	1.187
Ratification of loans to MSMEs delayed due to interest rate cap	371	1.00	5.00	3.264	1.348
Loan quantities to MSMEs were affected by interest rate cap	371	1.00	5.00	3.725	1.167
The repayment period of loans to MSMEs were affected by interest rate cap	371	1.00	5.00	3.612	1.299
GRANDMEAN SCORE				**3.557**	

Source: Field Data (2021)

The findings presented in Table 7 established that most respondents did agree to a large extent, that interest rate cap affected the lending rates on loans to MSMEs accessing credit (Mean = 3.7035, SD = 1.148). Further, respondents also agreed to a moderate extent that interests on deposits by MSMEs were influenced by interest rate cap (Mean = 3.2615, SD = 1.3453). Also, most respondents agreed to a large extent that non-performing loans by MSMEs increased due to interest rate cap (Mean = 3.722, SD = 1.116). A majority of respondents also were in agreement that loan books of commercial banks shrunk to a moderate extent due to interest rate cap (Mean = 3.464, SD = 1.202. Many of the respondents also agreed to a large extent that microfinance institutions' loaning ability to MSMEs was affected by the interest rate cap (Mean=3.706, SD=1.187). There was an agreement to a moderate extent by the respondents that ratification of loans to MSMEs delayed due to interest rate caps (Mean=3.264, SD=1.348). The respondents also did agree to a large extent that loan quantities to MSMEs were affected by interest rate caps (Mean=3.725, SD=1.167). There was an agreement to a large extent by the respondents that the repayment periods of loans to MSMEs were affected by interest rate cap.The

results in Table 4.7 reveal a grand mean score of 3.557. The mean of 3.557 indicates that respondents agree with the statements that interest rate caps affected access to credit by micro, small and medium enterprises, to a large extent.

Financial Innovations

The study analyzed the descriptive statistics for financial innovations using mean and standard deviation. The respondents were asked to agree to statements with regard to financial innovations. The results are presented in Table 8.

Table 8: Financial Innovations

	N	Minimum	Maximum	Mean	Std.Deviation
The invention of ATMs was Influenced by financial innovation	371	1.00	5.00	4.2183	1.12384
The invention of credit cards was due to financial innovations	371	1.00	5.00	4.0566	1.00514
The creation of mobile money came as a result of financial innovation	371	1.00	5.00	4.2722	.92049
The invention of mobile phones was as a result of financial innovation	371	1.00	5.00	2.7278	1.46445
The introduction of mobile banking was due to financial innovations	371	1.00	5.00	4.3046	.91027
The ability to process loans through mobile phones has been made easy by financial innovation	371	1.00	5.00	4.3774	.82063
The introduction of internet banking came as a result of financial innovations	371	1.00	5.00	4.1806	1.01462
The ability to deposit money through Mobile phones has been enhanced by financial innovation	371	1.00	5.00	4.4016	.91409

Source: Field Data (2021)

The findings presented in Table 8 established that most respondents did agree to a large extent that the invention of ATM was influenced by financial service innovation (Mean = 4.218, SD = 1.124). However, most respondents did agree to a small extent that invention of mobile phones was as a result of financial organization innovation (Mean = 2.728, SD = 1.464). Majority of the respondents however, to a large extent did agree that invention of credit cards was due to

financial process innovation (Mean = 4.051, SD = 1.005). Most respondents concurred to a large extent that creation of mobile money came as a result of financial product innovation (Mean = 4.272, SD = .9205). Also, a majority of the respondents largely agreed that the introduction of internet banking came as a result of financial organization innovation (Mean = 4.181, SD = 1.015). The data also reveal that the introduction of mobile banking was to a large extent as a result of financial organization innovation (Mean =4.305, SD = .9103). The respondents did largely agree that the ability to process loans through mobile phones has been made easy by financial process innovation (Mean = 4.377, SD = .8206). The result reveal that a majority of the respondents also largely agreed that the ability to deposit money through mobile phones has been enhanced by financial service innovation (Mean = 4.402, SD = .9141). The results in Table 8 reveal a grand mean score of 4.067. The mean of 4.067 indicates that respondents agreed with the statements that financial innovations influenced access to credit to a large extent.

Access to Credit

The study also analyzed the descriptive statistics for access to credit using, mean and standard deviation. Table 9 highlights the findings on access to credit.

Table 9: Access to Credit

	N	Minimum	Maximum	Mean	Std. Deviation
Many MSMEs are accessing loan facilities due to improved access to credit	371	1	5	3.968	1.122
The amount of loan to MSMEs has increased due to enhanced access to credit	371	1	5	3.811	1.128
The cost of credit borrowed by MSMEs is favorable as a result of enhanced access to credit	371	1	5	3.571	1.166
The repayment period of loans to MSMEs is reasonable due to improved access to credit	371	1	5	3.499	1.306
GRANDMEAN SCORE				**3.712**	

Source: Field Data (2021)

Basing on the findings the respondents agreed to a large extent that many MSMEs are accessing loan facilities due to improved access to credit (Mean = 3.968, SD = 1.122). Also, the findings allude to the fact that the amount of loan to MSMEs has largely increased due to enhanced access to credit (Mean = 3.811, SD = 1.128). Further, the results indicate that the cost of credit borrowed by MSMEs is largely favorable as a result of enhanced access to credit (Mean = 3.571, SD = 1.166). In addition, the respondents moderately agreed that the repayment period of loans to

MSMEs is reasonable due to improved access to credit (Mean = 3.499, SD = 1.306). Overall, the items on access to credit summed up to a mean of 3.712 implying that the aforementioned factors on average would improve access to credit largely.

Correlation Analysis

Correlation provided a basis for further analysis using regression models. Correlation analysis was used to establish and explore the associative relationship between the study variables. Correlation coefficient is the measure to quantify such degree of relationship of the variables. The first test of correlation was formulated by Karl Pearson in 1896. Pearson's Product Moment Correlation Coefficient (*r*) is a scale to measure the strength of linear association between variables.

The coefficient of correlation R will range between -1 and +1, i.e., $-1 \leq R \leq +1$. Correlation coefficient explores the type (positive, negative or none) and, degree of association (magnitude of closeness) between two variables. The current study sought to establish the effect of monetary intervention measures that may be adopted by monetary authorities on access to credit. Correlation analysis provided useful information on the degree of association between the primary independent and dependent variables. The correlations among the variables are shown in Table 9.

Table 9: Correlations Matrix

		Interest rate cap	Access to credit
Interest rate cap	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	371	
Access to credit	Pearson Correlation	.360**	1
	Sig. (2-tailed)	.000	
	N	371	371

Source Data: **Field Data *(2021).***

The findings in Table 9 show that the relationship between interest rate caps and access to credit was weak but positive and statistically significant (r=.360**, p<.01). The results in Table13 imply that interest rate caps play a positive role in access to credit by MSMEs in Kisumu County. The data in Table 9 shows that the variables considered in the study were correlated hence it was possible to carry out regression analysis.

Regression Analysis

This study was based on the premise that there is a relationship between monetary interventions and access to credit but this relationship is moderated by financial innovations. To test the hypotheses, linear regressions were carried out. First access to credit was regressed against interest rate cap. Next, credit access was then regressed on the interaction of each interest rate cap and financial innovation as a necessary step in testing for the moderating role of financial

innovations in the relationship between interest rate cap and access to credit. The results of the tests, performed at the 95% confidence level.

Interest Rate Cap and Access to Credit

The first objective of the study was to assess the effect of interest rate cap on access to credit by micro, small and medium enterprises. A simple linear regression was performed to assess the ability of interest rate cap to predict access to credit by MSMEs. To assess the influence of interest rate cap on access to credit, the following hypothesis was tested.

$H0_1$: Interest rate cap has no statistically significant effect on access to credit by micro, small and medium enterprises

Access to credit was regressed on interest rate cap in order to determine the relationship. The relevant results are presented in Table 10a, 10b and 10c.

Table 10a: Model Summary of Regression of Credit Access on Interest Rate Cap

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.360[a]	.130	.127	.77567

a. Predictors: (Constant), IRR

Source: Field Data (2021)

The results in Table10a show that R^2=.130. The R-squared value is the variance in the dependent variable that can be explained by the independent variable. This implies that interest rate cap predicts 13% variation in credit access among MSMEs in Kisumu County (R^2=.130).

To test for the fitness of the model, the F test was done and presented in Table 10b below.

Table 10b: ANOVA for Regression of Credit Access on Interest Rate Cap

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	33.085	1	33.085	54.989	.000[b]
	Residual	222.012	369	.602		
	Total	255.097	370			

a. Dependent Variable: CA

b. Predictors: (Constant), IRR

Source: Field Data (2021)

The ANOVA model showed that the model fitness for interest rate cap was statistically significant (F = 54.89, p<.05). Thus, the model was fit to predict access to credit using interest rate cap.

A test for linear dependence of interest rate cap on access to credit was conducted and presented in table 10c.

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Table10c: Coefficients for Regression of Credit Access on Interest Rate Cap

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.266	.199		11.383	.000
	Interest rate cap	.406	.055	.360	7.415	.000

a. Dependent Variable: CA

Source: Field Data (2021)

According to hypothesis (H01) interest rate cap has no statistically significant effect on access to credit by micro, small and medium enterprises. The results indicate a linear dependence of access to credit by MSMEs on interest rate cap, (β=.360, p<0.05) implying that a unit change in interest rate cap would lead to a change in access to credit by 0.360. Thus we reject the null hypothesis and accept the alternative one that there is a statistically significant effect of interest rate cap on access to credit by MSMEs.

Previous studies support the findings of positive relationship between interest rate caps and access to credit. For instance Juan, *et. al.*, (2018) study on the effects of interest rate cap on financial inclusion established that the policy encouraged and facilitated financial access by entrepreneurs. Also, the results in Table 10c support findings by Awino (2013) that interest rate caps do not particularly affect demand for credit since high interest rates were minor concerns for SMEs. The hypothesis that interest rate cap had a statistically significantly influence on access to credit by MSMEs is supported by the current study. The regression equation of the results is:

$Y=\beta_0+\beta_1 X_1+\varepsilon$

$Y= 2.266 +0.406X_1$

The Moderating Role of Financial Innovation

The test for moderation of the effect of financial innovations (FI) on the relationship between monetary interventions (MI) and credit access (CA), was conducted using hierarchical multiple regression analysis as is prescribed by (Fairchild & MacKinnon, 2009).
The moderating role of financial innovations on the relationship between monetary interventions and access to credit was examined by testing the following hypotheses.

H_O5a: Financial innovations have no statistically significant* moderating *effect on the relationship between interest rate cap and access to credit by micro, small and medium enterprises

Table11 presents the regression results.

Table11a: Model Summary of Moderation of Interest Rate Cap on Credit Access

Table

Model	R	Square	Adjusted R Square	Std Error of the Estimate	Change Statistics				
					R Square Change	Change	df1	df2	Sig. F Change
1	.360[a]	.130	.127	.77567	.130	54.989	1 1	27 369	. 000
2	.461[b]	.212	.208	.73887	.082	38.664	1 1	368	. 000

a. Predictors: (Constant), IRR
b. Predictors: (Constant), IRR, Z
c. Dependent variable CA

Source: Field Data (2021)

In model 1 that constitutes only the interest rate cap as the predictor an R square of 0.130 was achieved indicating that 13.0% of the variation in the access to credit was a result of the interest rate cap. In model 2 with the interaction of interest rate cap and financial innovation as predictors, a coefficient of determination of 0.212 was achieved indicating that 21.2% of the variation in the access to credit was as a result of interest rate cap and financial innovation jointly. The (R^2 Change = .082), means that financial innovation moderates the relationship between interest rate cap and access to credit by 8.2 percent. The additional variance was also found to be statistically significant at 5% level of significance since F change = 38.664 and $p < 0.05$.

The one-way ANOVA was undertaken with a view of examining on whether model 1 and 2 were good predictors of the access to credit. The results were presented in Table11b below.

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Table 11b: ANOVA for Moderation of Interest Rate Cap on Credit Access

Model	Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33. 33.085	1	33.085	54.989	.000	
	Residual	222.012	369	.602			
	Total	255.097	370				
2	Regression	54.193	2	27.096	49.633	.000[c]	
	Residual	200.904	368	.546			
	Total	255.097	370				

a. Dependent Variable: CA
b. Predictors: (Constant), IRR
a. Predictors: (Constant), IRR, Z
Source (Field data, 2021)

With respect to model 1 the f ratio results achieved were $F_{0.05}(1,369) = 54.989$, sig =0.000 which indicated that the regression model was good fit for data since $p < 0.05$. Similarly, model 2 the f ratio results that were achieved were $F_{0.05}(2,368) = 49.633$, sig = 0.000 which also led to the conclusion that the model was good fit for data since $p < 0.05$. The study thus concluded that both models were a good fit for data and thus the t tests were undertaken in order to examine whether the independent variables in the model had statistically significant influence on the access to credit.

Table 11c: Coefficients for Moderation of Interest Rate Cap on Credit Access

Model		Unst andardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
(1	(Constant)	2.226	.199	11.383	11.	.000
	IRR	.406	.055	.360	7.415	.000
2 2	(Constant)	2.506	…194		1 12.949	.000
	IRR	- .106	.098	-.094	- 1.089	- .277
	Z	.109	.017	.539	6.218	.000

a. Dependent Variable: CA
Source: Field Data (2021)

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The results for model 1 in which interest rate cap was regressed on access to credit indicated were β = .360, t =7.415, sig =0.000 for the standardized coefficients beta. This indicates that there was a statistically significant positive influence of interest rate cap on access to credit by MSMEs at 5% level of significance (0.05) since p < 0.05 while the standardized beta coefficient β =.360 which was positive in nature. On the other hand, the second model shows that an increase in open market operations moderated by financial innovation increased credit access by 0.539 units β = .539, t =6.218, sig =0.000 for the standardized coefficients beta. This indicated that the interest rate cap together with financial innovation had a statistically significant positive influence on the access to credit by MSMEs. It is clear from Table15c above that β changed from .360 in model1 to .539 in model2. It is thus critical to note that interest rate did not have a statistically significant influence on the access to credit (β = -.094, t =-1.089, sig =0.277) after introducing the interaction term Z. This denotes that the effect of interest rate cap is reduced with moderation. The study thus fully supported the moderation of financial innovation on the relationship between interest rate cap and access to credit. Thus the hypothesis: **H_{05}:** Financial innovations have no statistically significant moderating effect on the relationship between Interest rate cap and access to credit by Kenyan medium, small and micro enterprises in Kisumu County, was rejected. The study therefore concludes that there was a moderating influence of the financial innovation on the relationship between interest rate and access to credit by Kenyan micro, small and medium enterprises in Kisumu County. The regression equation for this result is: $y = 2.506 - 0.106X1 + 0.109Z$.

Summary of Research Objectives, Hypotheses and Findings

The summary of research objectives, hypotheses and conclusions is presented in Table12 below.

Table 12: Summary of Research Objectives, Hypotheses and Findings

Objective	Hypothesis	R^2	Sig	Findings
1. Assess the influence of interest rate cap on access to credit.	H_{01}:Interest rate cap has no statistically significant influence on access to credit	.130	.000	$H_{01}$is not supported
2. Examine the moderating effect of financial innovations on the relationship between interest rate cap and access	H_{05a} Financial innovations have no statistically significant moderating effect on the relationship between interest rate caps and access to credit.	.212	.000	H_{05a} is not supported

Source: Field Data (2021)

Table 12 provides a summary of the direct and indirect effect of monetary interventions on access to credit by MSMEs. From the results of hypothesis test in Table 12 it can be concluded that there is a statistically significant relationship between interest rate cap and access to credit. Further, financial innovation moderated in the relationship between interest rate cap and access to credit. From the results in Table12 it may be concluded that the direct relationship between

interest rate caps and access to credit, was moderated by financial innovations. It was hypothesized that there is a statistically significant relationship between interest rate caps and access to credit. Further, it was hypothesized that financial innovations is a statistically significant moderator of the relationship.

Summary of findings

The overall objective was to assess the moderating role of financial innovations on the effect of monetary interventions on access to credit by micro, small and medium enterprises in Kisumu County, Kenya. This chapter will provide a summary of findings of each of the hypothesis.
Two hypotheses were developed to evaluate the moderating role of financial innovations on the effect of monetary interventions on access to credit by micro, small and medium enterprises. Simple and multiple linear regression analysis were conducted to establish findings of these hypotheses.

The Effect of Monetary Interventions on Access to Credit

The Effect of Interest Rate cap on Access to Credit.

The first hypothesis (H_{01}) stated that; Interest rate caps have no statistically significant effect on access to credit by micro, small and medium enterprises. The simple linear regression analysis revealed that interest rate cap has a positive statistical significant effect on access to credit. The findings are consistent with a study carried out in Colombia that revealed that this policy facilitated credit access (Cubillos-Rocha et al., 2021). It however contradicts a study in Kenya (Nairobi County) which revealed that interest rate caps reduced credit accessibility and welfare of entrepreneurs despite making credit more affordable (Mokaya, 2018).

The Moderating Role of Financial Innovations on Monetary Interventions and Credit Access

The final hypothesis (H_{05}) stated that financial innovations have no statistically significant moderating role on the effect of monetary interventions on credit accessibility. This hypothesis had a sub- hypothesis. This study set out to test the assertion that financial innovations moderated the effect of interest rate cap on access to credit. To test the hypothesis the approach by (Fairchild & MacKinnon, 2009) was used. First, the direct relationship was assessed by regressing access to credit on the predictor variable to establish its statistical significance. To test the moderating effect of financial innovations (FI) on the relationship between interest rate cap (IR) and credit access (CA), a hierarchical multiple regression analysis was conducted. The first step involved regressing credit access on the independent variable (IR). The second step involved regressing access to credit on the interaction term. The interaction assess whether the relationship account for additional variance in the dependent variable beyond that explained by the independent variable on its own. The moderator effect was present if the interaction term explains a statistically significant higher or lower amount of variance in the dependent variable.

The Moderating Role of Financial Innovations in the Relationship Between Interest Rate Cap and Access to Credit by MSMEs

The moderation hypothesis, H_{05a}, asserted that financial innovations have no statistically significant moderating role on the effect between interest rate caps and access to credit by micro, small and medium enterprises. The hypothesis was tested using (Fairchild & MacKinnon, 2009) approach. First, the significance of the direct relationship was tested by regressing access to credit on interest rate caps. The results of regressing access to credit on interest rate cap showed that there was a positive and significant relationship as $p<0.05$. Next a hierarchical regression was performed by regressing access to credit on the interaction between interest rate cap and financial innovations. Results of the significance test showed that the relationship between interest rate cap and financial innovation was positive and statistically significant, as the $\rho= 0.000$ was lower than ρ of 0.05. Since the β in model2 is higher than the β in model1, it was established that financial innovations moderated the effect of interest rate cap and access to credit. Moreover the variance explained by financial innovations was significant. Since both the moderating variable and independent variable are significant predictors of access to credit, it was established that financial innovations moderates the relationship between interest rate cap and access to credit.

Conclusion

The study set out to investigate the moderating role of financial innovations on the effect of monetary interventions on access to credit among MSMEs. Two major conclusions arise from the findings. First, it can be concluded that interest rate caps have a statistically significant effect on access to credit by micro, small and medium enterprises. Secondly, financial innovations moderate the relationship between interest rate cap and access to credit. It may be concluded that micro, small and medium enterprises' access to credit depends both on the direct and the hierarchical effects of interest rate cap as a monetary interventions.

The current study makes a substantial contribution to the theory and practice of small business finance in two ways. First, it extends finance scholarship to micro, small and medium enterprise context by explaining the role of financial innovations in enhancing the effectiveness of monetary policy. In particular, it provides empirical evidence that the moderating role of financial innovations is significant for interventions targeting interest rate cap.

A major contribution to knowledge is in explaining the mechanism by which interest rate cap influence access to credit in small firms. Such firms are often unable to access bank credit owing to lack of security and the high cost of credit. Financial innovations enable small firms to access a wider range of financial assets at lower interest rates conveniently from bank and non-bank institutions. In particular, it clarifies the mechanism through which monetary interventions influence access to credit. While findings from the current study improve on our knowledge of how monetary interventions influence access to credit by micro, small and medium enterprises, in particular, financial innovations have a statistically significant moderating effect on the monetary interventions and access to credit.

From the findings, some conclusions can be made. First, MSMEs can have better access to credit if the central bank uses interest rate caps. Second, financial innovations moderate the relationship between interest rate cap and access to credit. These findings have far reaching and practical applications and implications for management of MSMEs, Central banks, banks and non-bank financial institutions. Further, they add substantially to the theory of small business finance, in an emerging economy context.

Recommendations

In line with the study objectives and corresponding findings of this study, a number of recommendations can be made for the theory, policy and practice of small business finance. The empirical nature of the study has made it possible to extend prior research on financial inclusion into the realm of small business finance. In particular, it provides empirical evidence on the direct influence of monetary interventions on financial inclusion of micro, small and medium enterprises.

Recommendations for Practice, Policy and Theory

The findings have several practical applications in the management of finances in the small business sector. First, interest rate capping is a prudent option for central banks in their bid to influence demand and supply of money in the small business sector. Central bank monetary policy managers can enhance financial inclusion of micro, small and medium businesses by focusing on controlling interest rates and cash available for making credit. The current study can make several recommendations from the investigation of the role of financial innovations on the effect of monetary interventions on access to credit. From the findings, a number of recommendations can be made to a central monetary authority.

It is recommended to the MSMEs to take advantage of financial innovations to enable them access credit faster without necessarily going through the long processes in the financial institutions. The MSMEs should also make efforts to save with the commercial banks which have packages for them so that they will be able to access credit made available to them through monetary interventions. With these interventions, their rates of interest may be lower for them as a result of credit guarantee by the government.

Next, policies geared towards improving financial access of micro, small and medium enterprise should focus on controlling interest rates, through placing of a minimum rate on deposits and a maximum rate on loans targeting the sector. The policy makers ought to aim at enhancing access to credit by employing sector specific interventions as opposed to blanket interventions like cushioning MSMEs from high interest rates by providing such funds as funds for inclusion of the informal sector (FIIS) and should also derive policies targeting on improving the process and role of financial innovations in the relationship between interest rate cap and access to credit by MSMEs in Kenya. Further, the central bank can enhance better financial inclusion policies that can target higher interest rates for deposits in micro finance sector and a lower rate for micro, small and medium firm loan facilities. The aim of this monetary intervention ought to be an improvement in their direct effect on financial inclusion of micro, small and medium enterprises. Thus from the study findings, policy makers ought to aim at enhancing access by deploying

sector specific interventions in favor of blanket interventions. In addition to policy implications, findings suggest that access to finance in the micro, small and medium sector can be improved through sector specific monetary interventions. In particular, any policies targeting the sector ought to leverage on the significance of interest rates and ability of banks to create credit from the cash they hold. Further, sector specific interventions ought to focus on enhancing the role of financial innovations on access to credit. In particular, policies can target innovations that will encourage sector specific product, process, service and organizational innovations on access to credit. Thus by enhancing the moderating role of financial innovations, the problem of exclusion from credit can be addressed effectively. Further, by developing monetary policies that are specific to the micro, small, and medium enterprise sector, their contribution to solving unemployment problems can be enhanced.

The study supports and validates the Keynesian liquidity preference theory by positing that despite the fact that interest rate cap positively affect access to credit, interest rates are better controlled by the rise and fall of supply and demand for money and should be allowed to adjust freely. The capping of interest rate could be done as a way of cushioning the MSMEs.

Recommendations for Further Studies

The empirical nature of the study has led to a number of practical applications and implications for monetary policy authorities and banks whose products target finance managers in micro, small and medium enterprises. However, further research may provide answers to some of the questions that are not answered in this study. In particular, the use of qualitative analysis can shed more light on the nature of interventions that mediate the monetary interventions-access to credit link. Also, methods of data analysis can be refined, to include path analysis, in order to have a closer view of the moderating effect of each of the financial innovations on the relationships between each of the monetary interventions on access to credit. The use of PLS-SEM with the application of SmartPLS3 can lead to more specific recommendations to management and regulators.

In addition to recommendations on improvement on the methodology for investigating the problem of financial inclusion in small business finance, unanswered questions require further research. For instance, more studies are required to investigate the most important moderator, of the four financial innovations considered in the current study, in the relationship between monetary interventions and access to credit.

Such studies can incorporate the contextual variables that may influence sectorial demand for credit as moderators. The use of mediation analysis can lead to research that improves our understanding of the effect of interventions and innovations targeting access to credit in the microfinance sector. Thus by refining the conceptual and analytic models used in the study it is possible to improve research targeting sectorial access to credit by micro, small and medium enterprises in Kisumu County, Kenya and beyond.

The current chapter summarized the study findings and provided an analysis of which findings agreed upon or disagreed with previous studies. The conclusions were based on empirical evidence to introduce a broader perspective in this stream of research on effectiveness of

monetary interventions in enhancing financial inclusion of unbanked small businesses in emerging economies, such as Kenya and beyond. Practical applications and implications of findings in the real world were explored in the current chapter. The study further suggested recommendations that were derived from the managerial, policy and theoretical implications of the research findings.

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