

## **EFFECT OF AGENCY BANKING ON THE PERFORMANCE OF SMALL SCALE MANUFACTURING ENTERPRISES IN KISUMU COUNTY, KENYA**

<sup>1\*</sup> **Caleb Odumbe Olango**  
[olangocaleb@gmail.com](mailto:olangocaleb@gmail.com)

<sup>2\*\*</sup> **Elijah Museve**  
[elijahmuseve74@gmail.com](mailto:elijahmuseve74@gmail.com)

<sup>3\*\*\*</sup> **Joanes Ofwa Wu'Adongo**  
[ofwawuadongo@gmail.com](mailto:ofwawuadongo@gmail.com)

<sup>1, 2, 3</sup> *Jaramogi Oginga Odinga University of Science and Technology, Kenya*

**Abstract:** *Financial access has been identified as significant for the growth and performance of small -scale business enterprises. However, in Kenya, majority of Small scale manufacturing enterprises are unable to operate to their full potential due to lack of financing, yet the Government of Kenya recognizes the role of Small scale manufacturing enterprises towards the achievement of the Big 4 Agenda and Vision 2030. This study analysed the effects of financial inclusion on the performance of small scale manufacturing enterprises in Kisumu County with a specific objective to analyze the effects of agent banking on the performance of small-scale manufacturing enterprises in Kisumu County. The targeted population consisted of SSMEs operating in Kisumu County that have been in operation for at least five years. A sample size of 384 was selected for the study as determined by Cochran, (1977) formula, and distributed proportionately according to the type of manufacturing enterprises; oil, chemicals, and plastics, electronics and computers, welding fabrications, textile and garments, sheet metal fabrication, food and baking processing, building and construction, and food, leather and paper. Primary data was collected using questionnaires, business records, and interview schedules. Academically, this study is expected to contribute to knowledge expansion in the field of financial inclusion and performance of Small scale enterprises. The study revealed that all the respondents used agency banking. They mostly used agency banking to pay for utilities, deposit and withdrawal, and bank statements. They used more than one agency banking service. The overall (Mean=3.73, SD=0.84), implied that agency banking contributes to financial inclusion of SSMEs in Kisumu. Correlation analysis showed that Agent Banking and performance of SSMEs had an insignificant positive relationship. The hypotheses result indicated that there was statistically significant relationship between agency banking and the performance of small scale manufacturing enterprises in Kisumu County.*

**Keywords:** *Agency Banking, Financial Inclusion, Small Scale Manufacturing Enterprises*

### **1. Introduction**

The role small-scale manufacturing enterprises (SSMEs) play in the economies of many countries have made their performance and critical success factors attractive for research (Ankrah & Mensah, 2015). SSMEs which are categorized under the Micro- Small and Medium Enterprises (MSMEs), play a significant role in employment generation, poverty reduction, and economic development (Ojokuku & Sajuyigbe, 2014). They are also recognized as drivers for economic growth and development globally (Ojokuku & Sajuyigbe, 2014). Although they drive economic growth, most of these small scale business enterprises operate in the informal sector and are financially excluded (Terzi, 2015). Small Scale Manufacturing Enterprises (SSMEs) play a significant contribution to the economies of most countries, especially in developing countries. Majority of

businesses world over, are SSMEs and they significantly contribute to employment and economic development (World Bank, 2019). However, financial inclusion is a major challenge they have to contend with.

In India for instance, the Small Scale Enterprises (SSBEs) contributes to 40% of the exports and creates millions of jobs every year, however, the performance of SSMEs in India is challenged by inadequate finance for capital and credit due to financial exclusion (Qrius, 2018). A study in Peru by Centre for Financial Inclusion (CFI) found that SSBEs in rural, remote, and poor regions, were financially excluded because of high cost of providing financial service in those regions. Other reasons given were lack of trust in financial institutions, level of income, and geographical distance (Clamara, Pena, & Tuesta, 2014). The financial inclusion is considered to be a major factor contributing to the successful performance of such small scale business enterprises (Terzi, 2015). He contends that financial inclusion of SSMEs can contribute positively to their success which in turn can ultimately improve the financial stability of a country (Terzi, 2015).

Globally, financial inclusion has been given increased prominence which has led to reduction in the number of financially excluded adults. According to the World Bank's Global Findex Report, 2017, in the last 10 years, the number of financially excluded adults has decreased from approximately 2.5 billion to 1.7 billion. Although the BRIC (Brazil, Russia, India, and China) have made significant improvement in financial inclusion between 2011 and 2014, with 700 million adults holding accounts, still 2 billion adults remained unbanked (Demirgüç, Klapper, Singer, & Van Oudheusden, 2016).

World Savings and Retail Banking Institute report indicate that 100% financial inclusion have been achieved in countries like Denmark and Finland. Countries like Sweden, Netherlands and Germany are nearing the 100% financial inclusion, while other like Romania, Bulgaria, Slovakia Hungary and Poland have majority of their populations financially included (Ozili, 2021). Financial inclusion in the European Countries has been supported by highly advanced financial technologies that have made it possible to reach everyone, including where physical banks cannot reach. Another reason, is the collaboration or partnership between financial institutions and Fintech firms. Financial institutions are therefore, able to offer basic financial services to even the remotest areas where physical banks do not have presence (Ozili, 2021).

In many developing and emerging countries, financial inclusion is one of the major policy objectives targeted at SSBEs, in order to include them into the formal financial sector so that they can benefit from formal financial products and services (Allen, Demirguc-Kunt, Klapper, & Martinez, 2016). From 2010, over 60 countries have developed a national strategy for financial inclusion in their respective countries (The World Bank, 2018). In South Africa for instance, the government has introduced policy of greater financial inclusion, especially that of low-income earners, SSBEs, and improving the communities in which they operate (National Treasury Republic of South Africa, 2019).

In Ethiopia, the National Council for Financial Inclusion (NCFI) has been set up by the government to initiate financial inclusion initiatives (National Bank of Ethiopia, 2017). The initiative is aimed expanding financial inclusion in Ethiopia, which at the moment is not fully developed and mainly found in major cities and towns (Dinku, 2019). As in many African countries, financial inclusion in Ethiopia is restricted to the cities, while rural areas are largely neglected (Dinku, 2019). The major reasons given for this state of affairs are lack of funds, distance, religious beliefs and minimal trust in financial institutions (Efina, 2016). The same in Tanzania, financial inclusion has improved through institutions and non-governmental organizations (NGOs) to reach out and include the under-served and excluded individuals and businesses (National Council for

Financial Inclusion, 2014). Financial system that is inclusive provides opportunities for small scale business enterprises to get and transfer funds, build capital, and reduce risk (Ozili., 2017).

In Kenya, access to formal financial services by small scale manufacturing enterprises is still low despite the government through Vision 2030, championing the need to increase financial inclusion to a wider section of Kenyans, including the micro-, small- and medium- scale enterprises (MSMEs).

Financial inclusion means making all members of the population to easily get basic financial services (Ozili, 2018). It is also defined as taking affordable banking services to bigger sections of the deprived groups (Dev, 2005). Basically, it means extending financial services to bigger sections of the population that were previously excluded or were not getting adequate financial services through the formal financial sector. Therefore, it is the mechanism used to target these disadvantaged individuals and business enterprises (National Treasury Republic of South Africa, 2019). Financial inclusion is considered as an important factor that can influence success of SSMEs (Terzi, 2015). The financially excluded are individuals who have no transactional or savings accounts, not getting credit from formal credit providers, and do not subscribe to insurance of any type (Demirguc-Kunt, Hess, Klapper, Singer, & Ansar, 2018).

Financial inclusion is vital in promoting economic growth (Kim, Yu, & Hassan, 2018), reducing income inequality (Neaime & Gaysset, 2018), and enhancing employment, consumption, and production (Dupas & Robinson, 2013). It is also significant in the promotion of sustainable economic growth and reducing poverty by empowering the small scale business enterprises (Quaye, Abrokwhah, Sarbah, & Osei, 2014). On the other hand, lack of financial inclusion can affect equity and efficiency since it reduces access to loan, which is important for entrepreneurship and personal development (Council of Economic Advisers, 2016). Financial inclusion also helps in savings and helping households in covering unexpected or occasional expenses (Ruiz Ortega, 2013). In the study financial inclusion for SSMEs is conceptualized by access to basic financial services including, agency banking, digital financing, and financial literacy (Ozili, 2018). These factors are considered to make significant contribution to the performance small scale manufacturing enterprises.

Guided by Pecking Order theory, Theory of Asymmetric Information, Technology Acceptance theory, Relationship Lending theory, and Financial Intermediation theory, the research examines the extent to which financial inclusion affects the performance of small scale manufacturing enterprises. Pecking Order theory highlights how in order to maintain control of the business, SSBEs prefer debt over equity as well as short-term debt over long-term debt. They will consider taking loan before considering equity, following this order; personal and retained earnings, debt, then new equity. The pecking order theory is applicable to SSBEs because they borrow for investment needs rather than attempting to achieve an optimal capital structure (Daskalakis & Psillaki, 2008). Theory of Asymmetric Information demonstrates the effect of asymmetrical information between the financial institutions lending to SSMEs. Since the lending institutions have incomplete information with regard to small firms are managed, they are compelled to take precaution when dealing with SSMEs (Stiglitz, 1981). The SSMEs are considered as risky lenders, hence, the banks and other lending institutions take precaution by giving out loan at a higher interest rate, require a strict collateral, or rejecting the loan application (Bester, 1987; Stiglitz, 1981). Consequently, these actions will affect financial inclusion of SSMEs.

Agency banking refers to branchless banking which gives the customer the benefits of risk management, product availability, improving financial inclusion and ensuring a wider customer base (CrowdForce, 2018). Agency banking and mobile phone applications have enabled financial institutions to reach SSBEs in remote

areas in a secure and cost-effective manner (World Bank, 2014). The participants in agency banking include; agent banking service providers, banks, financial institutions, banking agents, and mobile banking operators. A study by Kithuka (2018), on factors influencing growth of agency banking in Uganda, revealed that agency banking is driven by convenience by use of technology, accessibility and cost. The same is supported by the study of Afande and Mbugua (2015), who found that agency banking regulations, low transaction cost, accessibility by customers, positively affected the financial performance of banks. Chemutai (2017) highlighted how agency banking has improved financial inclusion by extending services through retail outlets like supermarkets, gas stations, pharmacies among others.

Digital financing refers to means of applying digital technologies in the delivery of financial services. It involves the application of digital technologies such as mobile money and online lending (IBRD, 2018). Digital financial services (DFSs), through fintech (technological innovation in the financial sector), enables individuals and businesses to access traditional financial services and overcome the challenges of such cost, geographical coverage, and information asymmetry (Khera, Ng, Ogawa, & Sahay, 2021). In China, digital financial inclusion enables SSBEs to access loans at cheaper rate compared to traditional banking institutions (Yang & Zhang, 2020). The study draws on aspects of Technology Acceptance Model (TAM), which is used to study the behavioral intentions of individuals to use technology, such as digital financing (Davis, 1986). According to the TAM model, behavioral attitudes are influenced by perceived usefulness and perceived ease of use, which affect the adoption of new technology (Venkatesh & Bala, 2010). TAM is widely adopted model in research associated with information technology adoption (Zhang, Lu, & Kizildag, 2018). TAM is relevant in financial inclusion research because agency banking and digital financing apply information technology in their operations.

Financial literacy has been found to be significant for survival of SSMEs, since limited financial knowledge by manager/owner of a business can lead to many mistakes (Wise, 2013). Financially educated manager is likely to be a good financial manager, which a factor in sustainable growth of the business (Ye & Kulathunga, 2019). Agung, Sholeha, and Ahmad (2020) contends that for a business to be successful and perform well, small scale businesses should be financially literate. They argue that financial exclusion for SMEs is due to inability to prepare good and accurate financial reports that is a prerequisite for getting funding for their businesses. Mutegi and Phelister (2015) posit that financial literacy enables firms to make decision about paying bills at the right time, keep accounting books proper, improve their budgeting skills, which boost business management. The study uses the Relationship Lending theory to highlight the significance of financial literacy to SSBEs.

Berger and Udell (1995) associated relationship lending theory with the collection of “soft” information over time through relationships with the firm, the owner, and the local community. This theory is relevant to the study because SSBEs have the challenge of lack of collateral and are also considered to be risky when they apply for credit from lending institutions. The lending institutions therefore relies on “soft” information that they collect over longtime relationship with the firm.

Although financial inclusion has got many benefits, its full potential cannot be derived due to certain barriers such as the initial cost of opening a bank account, that includes account opening fee, requirement to maintain minimum balance in the account, and tedious documentation and proof of identity when opening a bank account (Nava, Karlan, & Yin, 2000). Also the effect of informational asymmetry is significant for smaller firms because they are informationally opaque compared to larger firms. Establishing their creditworthiness is

difficult because they lack quantitative data to prove their creditworthiness hence they resort to informal lending technologies in order to get loans for new investments.

Financial intermediation theory postulates how intermediaries such as banks are privileged to get information that is not available in the market and use it to operate savings and borrowing. Banks acquire and use information for screening and defining businesses to whom it extends financial services including loans (Nissanke & Stein, 2003). The costs of intermediation influence financial inclusion and extent of providing financial services. When the cost is high it can be a hindrance to financial inclusion of SSMEs that can be discouraged from getting loans from the formal lending institutions. The theory is applicable for agent banking and digital financing.

## **2. Financial inclusion and performance of small scale manufacturing enterprises in Kenya**

According to the Kenya Micro and Small enterprises bill, 2006, micro and small enterprises are defined as enterprises in both formal and informal sector, classified in farm and non- farm categories, employing not more than fifty employees and have a turnover not more than four million shillings. In Kenya SMEs has been based on the number of employees and the company's annual turnover (MSMEs Act, 2012). Small enterprises are defined as those that employ between 10 and 49 workers with annual turnovers between KES 500,000 and KES 5 million and capital formation between KES 5 million and KES 50 million for enterprises doing manufacturing (KMSE ACT 2012, 2012)

Small and medium enterprises in Kenya contribute between 18-25% to the country's Gross Domestic Product (GDP) and employ over about 17% of the total labour force in Kenya, (CBS, ACEG and KREP Holdings, 1999). Most small business enterprises are self-financed or financed by loans from family or other informal sources, it is imperative therefore to study the effects of financial inclusion on the performance of small scale business enterprises in Kisumu County.

Performance of small scale business enterprises can be measured by growth in sales, increased capital, labour, market growth and profit growth (Hudson, Smart, & Bourne, 2001; Alimusa, 2019; Ndesaulwa, 2016). According to Terzi (2015), financial inclusion of is one of the factors that can influence the performance of SSMEs since access to loans and other financial services are essential to the performance of a business. In the study performance was measured based on sales volume, profitability, and service provision.

Kenya's Small Scale Business Enterprises contribute about 40 percent of the GDP, most of them are under the informal sector, and they also contribute to 50% of new jobs in Kenya (Wakiaga, 2020 ). In Kenya, licensed small scale manufacturing enterprises account for almost 11% of growth and performance of SSBs (Riwayati, Makie, & Indrawat, 2020). However, this can be improved through financial inclusion as it is essential in promoting economic growth and reduction of poverty (Riwayati et al., 2020). The same is supported by Kira (2013) and Katua (2014), who ported that financing small scale business enterprises is essential for the promotion of sustainable economic growth and poverty reduction. Therefore, there is need for government intervention through policies and programs to enhance financial inclusion of SSMEs. The study focuses on financial inclusion of the SSMEs in Kisumu County with the view to provide recommendations.

## **3. Agent Banking and Performance**

Rahman (2016) determined the impact of agency-banking on the development of SME sector of Bangladesh. The study focused on SME clients who are unable to get banking services by creating banking accounts and

agents and applying appropriate tools. The study adopted both primary and secondary data. Questionnaire and face to face interview were used to collect primary data, while websites and articles were used for secondary data. Respondents were selected from 70 SMEs clients and 70 agency banking providers. The findings revealed that there was significant relationship between the independent variables and the dependent variable, hence the null hypotheses were rejected. The gaps were contextual and conceptual as only agency banking factors were considered in Bangladesh context. Study gap to be filled by adding more concepts and study conducted in Kisumu County context

Lotto (2016) in his study to assess the leverage provided by agency banking in promoting the financial inclusion in Tanzania, found that agency banking has made banking easy and convenient, cash shortage and security problems are minimal, and banking services costs are lower. Agency banking significantly promotes financial inclusion. The study was descriptive and collected primary data using questionnaires from bank agents' outlets in Dar es Salaam. The study recommends enhancement of risk management, increase coverage by increasing number of agencies, and reduce operation cost, increase the number of outlets providing bank agency services so as to achieve a greater geographical coverage. Apart from that all commercial banks offering agency banking services should reduce operational costs. The gaps were contextual and conceptual. To be filled by adding more concept and study conducted in Kenyan context.

Muthengi and Musau (2021) conducted a study to establish the effect of financial technology and financial inclusion of SMEs in Kabati market Kitui county. The study found that despite increased services offered by financial technology and financial institutions, access to formal financial services like Agency banking, M-Pesa services, online banking and Google play store services (Loan Apps) in SMEs is still low. The study also established that financial technology has significant effect on financial inclusion of SMEs. The study recommended that the government should increase Agency banking, M-pesa services, online banking and Money Lending Apps. The gaps were contextual and conceptual. To be filled by adding more concepts and study conducted in Kisumu

Afande and Mbugua (2015) in a study on the role of agent banking services and promotion of financial inclusion in Nyeri, found that customers were willing to forego the extra charge to procure banking services through agent banking outlets. Regression analysis indicated that the four factors (availability of liquidity, geographical coverage, costs and security of agent banking services) have a positive significant relationship to financial inclusion. The study concluded that greater geographical coverage brought about by agent banking is the strongest predictor of financial inclusion. The gaps were contextual and conceptual as only agency banking factors were considered. Study gap to be filled by adding more concepts and study conducted in Kisumu County context.

Otieno (2010) conducted study was premised on how agency banking is used to extend financial inclusion to unbanked population at affordable costs. The study sought to determine factors influencing the adoption of agency banking by KCB Bank Kenya Limited. This was qualitative case study design. The study found a positive relationship between cost reduction, expansion strategy, diversification and ICT and adoption of agency banking at KCB. The study target population comprising of 6 staffs of the bank selected from various departments. The study gaps identified included a small number of participants, use of case study, participants were only employees of the bank, and the concept of agency banking and adoption of agency banking. The gaps were therefore contextual, conceptual and methodological. The study attempted to fill the gaps by adding more concepts, using more participants and adopting correlational research to statistically determine the relationship between dependent and independent.

#### **4. Statement of the Problem**

The Government of Kenya recognizes the role of SSMEs towards the achievement of the Big 4 Agenda and Vision 2030 as it creates employment and contributes to the country's GDP, however, financial inclusion is still a challenge to SSMEs in Kisumu County. For instance, although a report by Kenya Institute for Public Policy Research and Analysis (KIPPRA) indicated that financial inclusion in Kenya improved from 26.7% to 82.9% between 2010 to 2020. The report also indicated that 17% of those financially excluded were mostly from the rural regions (CGTN, 2020).

In Kisumu County, as is the case of other developing counties, the performance of SSMEs is challenged by inadequate finance for capital and credit due to financial exclusion (Qrius, 2018). This has affected the performance of SSMEs in Kisumu County, which has led to shut down. The problem is more pronounced in the in rural and remote areas of Kisumu County because of high cost of providing financial services in those regions.

#### **5. Hypotheses of the Study**

The following null hypothesis was tested to address the study objective:

$H_{01}$ . There is no statistically significant Effect of Agency Banking on the Performance of Small Scale Manufacturing Enterprises in Kisumu County.

#### **6. Scope of the Study**

The study sought to analyze the effects of financial inclusion on performance of small scale manufacturing enterprises in Kisumu County, Kenya. The SSMEs are in the sectors of oil, chemicals, and plastics, electronics and computers, welding fabrications, textile and garments, sheet metal fabrication, food and baking processing, building and construction, and food, leather and paper. The study was conducted between 2020 – 2022. Financial inclusion is conceptualized as agency banking, while performance indicators are sales volume, profitability, and service provision as suggested by (Carter & Jones, 2012).

#### **7. Research Methodology**

The research was undertaken in Kisumu County among the SSMEs. Participants in the study were drawn from all the sub counties of Kisumu County i.e counties are Kisumu East, Kisumu West, Seme, Nyakach, Muhoroni, and Nyando. Kisumu County lies at Latitude: 0° 14' 60.00" N and Longitude: 34° 54' 59.99 E. The research study design was a correlational survey as it sought to determine the relationship between financial inclusion and performance of SSMEs in Kisumu County. It involved collecting quantitative data which were analyzed to explain the relationship between the two variables (Asamoah, 2014). The SSMEs targeted are those employing between 10-50 persons and also venturing in any of the following: Oil, chemicals, and plastics, Electronics and computers, Welding fabrications, Textile and garments, Sheet metal fabrication, Food and baking processing, Building and Construction, and Wood, leather and paper. Their annual turnovers should be between KES 500,000 and KES 5 million and capital formation between KES 5 million and KES 50 million. The unit of analyses was SSMEs operating within Kisumu County and have been in existence for the last 5 years. A sample size of 422 respondents was selected for the study.

## 8. Research Findings and Discussion

The study objective sought to analyze the effects of agency banking on the performance of small scale manufacturing enterprises in Kisumu County. The first question was whether they used agent banking services. All the respondents (100%), used agency banking.

The respondents also indicated which agent banking services they used. As shown in table 1, the most used agency banking service was “Payments for utilities” indicated by 196 (81.7%) respondents. In the following order; “Deposit and withdrawal” as indicated by 183 (76.2%) respondents, “Get bank statements” by 150 (62.5%) respondents, “Transfer funds” 123 (51.2%) respondents, “Get credit/loan” 86 (35.8%), “Payments for good/services” 83 (34.6%), and lastly, “Balance enquiries” 28 (11.7%). From the responses it can be implied that the respondents used more than one agency banking service.

*Table 1: Agency services used by respondents*

	Non-response		Yes	
	F	%	F	%
Deposit and withdrawal	57	23.8%	183	76.2%
Balance enquiries	212	88.3%	28	11.7%
Transfer funds	117	48.8%	123	51.2%
Payments for utilities	44	18.3%	196	81.7%
Payments for good/services	157	65.4%	83	34.6%
Get bank statements	90	37.5%	150	62.5%
Get credit/loan	154	64.2%	86	35.8%

The respondents gave reasons for using agent banking services. As show in table 2.

The respondents agreed that they used agent banking because of availability of liquidity (Mean=3.56, SD=1.104), It is cheaper to use (Mean=3.67, SD=0.926), It is secure (Mean=3.90, SD= 0.745), they can borrow small sums (Mean=3.90, SD=0.740), it is safe to borrow (Mean=3.92, SD=0.654), low interest payment (Mean=3.91, SD=0.644), and it is also convenient (Mean=3.28, SD=1.087). The overall (Mean=3.73, SD=0.84), implied that agency banking contributes to financial inclusion of SSMEs in Kisumu.

The findings support those of (Lotto, 2016; Afande & Mbugua 2015), who found that agency banking has enabled banking to be easy and convenient, low cases cash deficiency and security problems, and lesser banking services costs. Therefore, it suggests that agency banking significantly promotes financial inclusion for SSMEs.

*Table 2: Usage of agent banking services*

	N	Mean	Std. Deviation
Availability of liquidity	240	3.56	1.104
It is cheaper to use	240	3.67	.926
It is secure	240	3.90	.745
Being able to borrow small sums.	240	3.90	.740
Safe to borrow	240	3.92	.654
Low interest payment	240	3.91	.644
It is convenient	240	3.28	1.087
Overall mean score		<b>3.73</b>	<b>0.84</b>



The respondents were asked to rate to what extent agent banking affected the performance of their businesses. The figure 1, shows that majority of the respondents, 134 (55.8%), were of the opinion that agent banking affected their businesses to a considerable extent, followed by 53 (22.5%) who indicated to great extent, 38 (15.8%) who indicated to moderate extent, and lastly, 14 (5.8%) who indicated to some extent. The overall mean of 3.95 (SD= 0.785) implies that most SSMEs in Kisumu County were affected by agent banking to a considerable extent. Figure 1 illustrate the extent to which agent banking affected SSMEs.

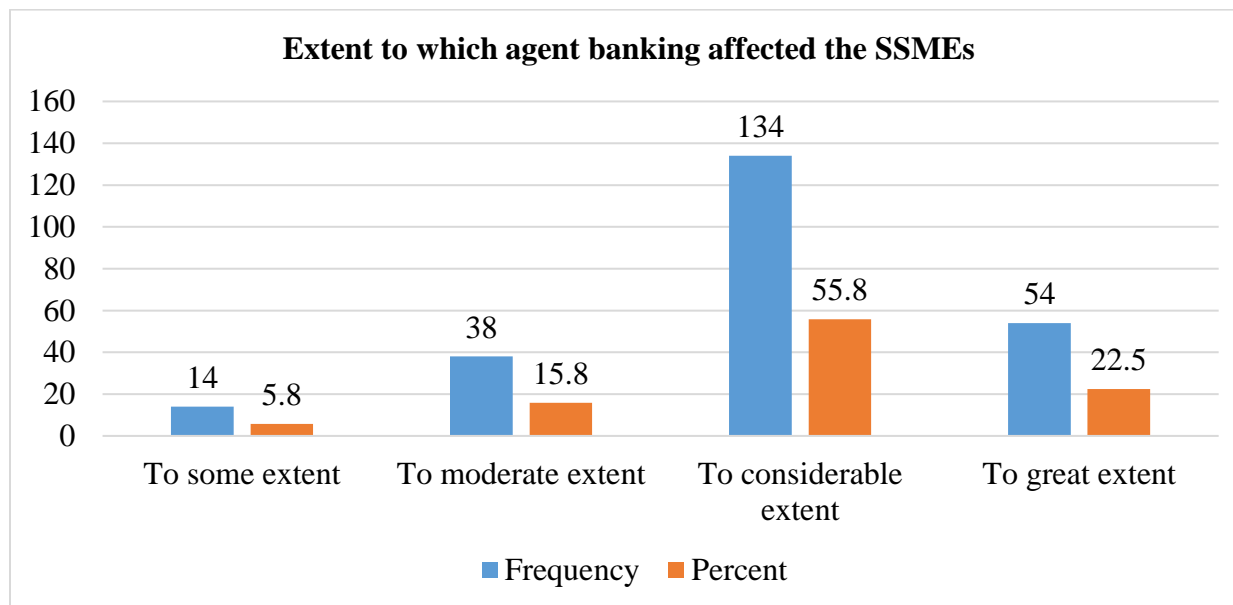


Figure 1: Extent to which agent banking had affected performance of SSMEs

The reasons for using agent banking services as reported by the interviewees included availability of liquidity, secure to use, convenient, and urgent need of money to pay for utilities.

*“I use agent banking because it is convenient, cheaper to use, and I can easily borrow money when I need it urgently”.* [Interviewee 09, 010]

*“Agent banking has affected my business to a large extent, as it saves me time to go to bank and its also convenient”* [Interviewee 01,05]. The responses have corroborated the responses from the questionnaire.

## 9. Performance of SSMEs

The respondents rated the what extent to which financial inclusion had affected the performance of their business in terms of sales volume, profitability, and operations efficiency. The ratings were on a Likert scale ranging from 1= To no extent to 5= To great extent. From table 3 it can be seen that majority 158 (65.8%), were of the opinion that there had been improvement in sales volume to a considerable extent, followed by 36 (15.0%) who indicated to some extent, then 29 (12.1%) to moderate extent, 15 (6.2%) to a great extent, and lastly 2 (0.8%) to no extent (Mean = 3.62, SD= 0.845). Improvement in profitability was considered to have been to a considerable extent by 108 (45.0%), to moderate extent by 52 (21.7%) respondents, to some extent 38 (15.8%) respondents, to great extent 25 (10.4%) respondents, and lastly to no extent 17 (7.1%) respondents (Mean=3.36, SD=1.089). Lastly, the respondents gave their opinion regarding if there has been improvement in service provision; most of the respondents 70 (29.2%) indicated to some extent, followed by 68 (28.3%) to moderate extent, 60 (25.0%) indicating to no extent, and 42 (17.5%) respondents who indicated to considerable

extent ( $M=2.38$ ,  $SD=1.044$ ). Overall means of 3.12, suggests that most respondents were inclined to the opinion that financial inclusion had affected the performance of their business to moderate extent. Table 3 presets the results.

*Table 3: How financial inclusion had affected performance of SSMEs*

	To no extent		To some extent		To moderate extent		To considerable extent		To great extent		M	SD
	F	%	F	%	F	%	F	%	F	%		
There has been improvement in sales volume	2	0.8%	36	15.0%	29	12.1%	158	65.8%	15	6.2%	3.62	0.845
There has been improvement in profitability	17	7.1%	38	15.8%	52	21.7%	108	45.0%	25	10.4%	3.36	1.089
There has been improvement in service provision	60	25.0%	70	29.2%	68	28.3%	42	17.5%	0	0.0%	2.38	1.044

Lastly, the respondents rated the performance of their business at the time of conducting the study. At the time of conducting the study, majority 134 (55.8%) indicated that their businesses were performing above average, followed by 47 (19.6%) who indicated below average, then 25 (10.4%) indicated excellent, 20 (8.3%) indicated very poor, and 14 (5.8%) indicated average. The mean of 3.40 ( $SD$ , 1.160) show that the respondents were inclined towards suggesting that the performance was average. The responses are shown in figure 2.

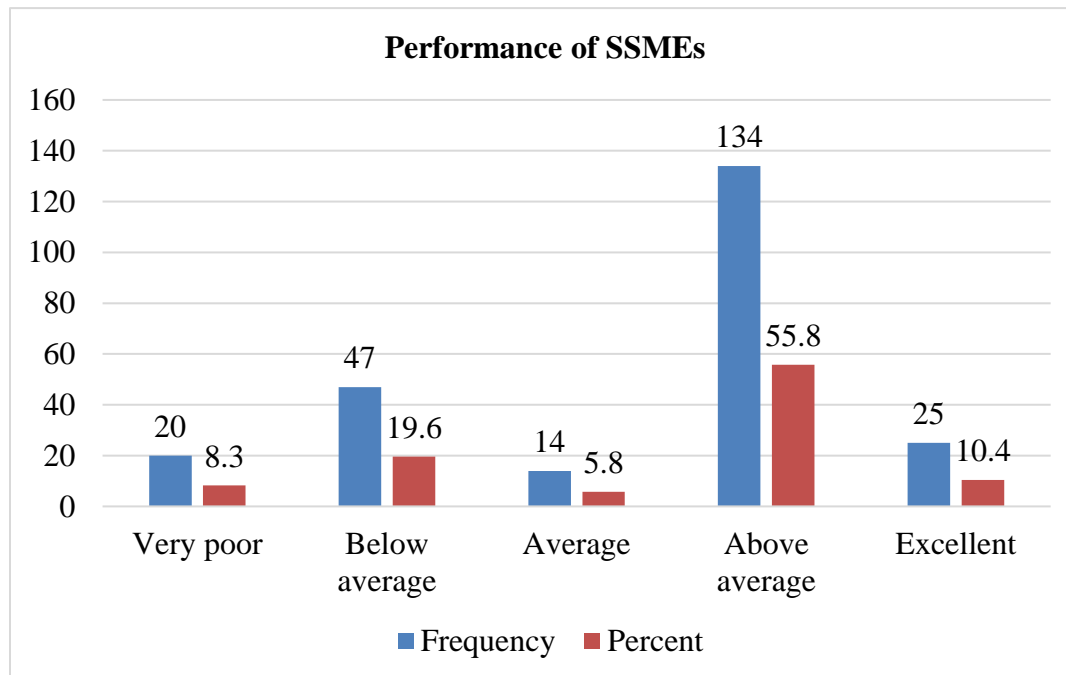


Figure 2: Performance of SSMEs

## 10. Correlation analysis

The inferential statistics consists of correlation and regression analysis as presented in the following tables. Table 4 illustrates the following results; Agent Banking and performance of SSMEs had an insignificant positive relationship, [ $r(240) = 0.028$ ,  $p = .142^*$ ].

Table 4: Correlation analysis

		Performance of SSMEs	Agent Banking
Performance of SSMEs	Pearson Correlation	1	.142 <sup>*</sup>
	Sig. (2-tailed)		.028
	N	240	240
Agent Banking	Pearson Correlation	.142 <sup>*</sup>	1
	Sig. (2-tailed)	.028	
	N	240	240

## 11. Regression analyses

Regression analyses were conducted to determine the direction and significance of the linear relationships between variables. Tables 5, 6, and 7 summarizes the results.

The findings as shown in table 5, the  $R^2 = 0.020$ , implying that 2% of the variation in performance of SSMEs is explained by the variations in agent banking, while 98% is explained by other factors not covered in the study. Table 5 presents model summary of agent banking and performance of SSMEs.

Table 5: Model summary for agent banking

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
1	.142 <sup>a</sup>	.020	.016	1.151
a. Predictors: (Constant), Agent Banking				

Results of an ANOVA analysis between agent banking and performance of SSMEs at 95% confidence level, indicate the F value = 4.892,  $p = 0.005 < 0.5$ . This means that agent banking has significant influence on performance of SSMEs in Kisumu County. The findings support the findings by Rahman (2016), who examined the impact of agency-banking on the development of SME sector of Bangladesh. The study revealed that there was significant relationship between the agency banking and development of SMEs in Bangladesh. The findings are also consistent to the theory of Asymmetric Information that suggest that in financial market the borrower is better informed about the market condition than the lender, which results in an imperfect market setting. This affects the SSMEs in their utilization of agent banking since it hinders financial inclusion of the small scale business enterprises. The findings are also consistent with the Theory of Relationship Lending which indicates lack of collateral hinder SSMEs from optimally accessing agent banking services. The financial intermediation theory also suggests that if the costs of intermediation by banks are high, this may cause hindrance to financial inclusion of SSMEs, which can discourage them from getting loans from the formal lending institutions. This can also explain why agent banking has insignificant but positive effect on performance of SSMEs.

The implication of the findings to management is that, for agent banking to be utilized by SSMEs, there is need to empower the SSMEs by providing them access to correct information about the market condition. In that way, they will be able to make the right decisions in regards to agent banking. Management of banks that offer agent banking services can increase adoption of agent banking services by SSMEs by reducing or removing need for expensive collateral which hinder SSMEs from optimally accessing agent banking services. The costs of intermediation by banks may also be lowered so that there is more financial inclusion of SSMEs, which will encourage them to get loans from the formal lending institutions.

*Table 6: ANOVA for agent banking and performance of SSMEs*

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	6.481	1	6.481	4.892	.028 <sup>b</sup>
Residual	315.315	238	1.325		
Total	321.796	239			

a. Dependent Variable: Performance of SSMEs

b. Predictors: (Constant), Agent Banking

Table 7 indicates the regression coefficients for performance of SSMEs in relation to agent banking are significant since the p value was  $< 0.1$  and the Beta value of 0.142 shows that every increase in agent banking would increase performance by 14.1%.

*Table 7: Coefficient for agent banking ad performance of SSMEs*

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.884	.692		2.724	.007
Agent Banking	.058	.026	.142	2.212	.028

a. Dependent Variable: Performance of SSMEs

## 12. Hypothesis testing

The hypothesis was tested by using multiple regression analysis. In order to either accept or reject the null hypothesis, the P value must be either less or greater than 0.5. If  $p < 0.05$  the null hypothesis is rejected, but if it is  $> 0.05$  it is accepted.

$H_{01}$ . There is no statistically significant effect of agency banking on the performance of small scale manufacturing enterprises in Kisumu County.

According to table 8 agent banking had a coefficient of estimate which was significant basing on ( $\beta = 0.126$ ,  $t = 2.261$ ,  $p < 0.05$ ), meaning that the null hypothesis was rejected. Conclusion is drawn that agency banking has statistically significant effect on the performance of small scale manufacturing enterprises in Kisumu County. The findings support the findings by Rahman (2016) that revealed that there was significant relationship between the agency banking and development of SMEs in Bangladesh.

Table 8: Multiple regression analysis

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.845	.681		1.242	.216
Agent Banking	.052	.023	.126	2.261	.025

a. Dependent Variable: Performance of SSMEs

### 13. Summary of Findings

The study objective sought to analyze the effects of agency banking on the performance of small scale manufacturing enterprises in Kisumu County, whereas, the null hypothesis stated that “There is no statistically significant effect of agency banking on the performance of small scale manufacturing enterprises in Kisumu County”. The study revealed that all the respondents used agency banking. They mostly used agency banking to pay for utilities, deposit and withdrawal, and bank statements. They used more than one agency banking service. Respondents used agent banking because of availability of liquidity; it is cheaper to use, it is secure, they can borrow small sums, it is safe to borrow, low interest payment, and it is also convenient. The overall (Mean=3.73, SD=0.84), implied that agency banking contributes to financial inclusion of SSMEs in Kisumu. Correlation analysis showed that Agent Banking and performance of SSMEs had an insignificant positive relationship. The hypotheses result indicated that there was statistically significant relationship between agency banking and the performance of small scale manufacturing enterprises in Kisumu County.

The study concludes that financial inclusion through agent banking affects performance of SSMEs in Kisumu County. Overall, financial inclusion was found to be statistically significant in explaining the performance of SSMEs in Kisumu County.

### REFERENCES

- Afande, F. O., & Mbugua, S. W. (2015). *Role of Agent Banking Services in Promotion of Financial Inclusion in Nyeri Town, Kenya. Research Journal of Finance and Accounting* Vol.6, No.3, 2015.
- Afande, F., & Mbugua, S. (2015). *Role of Agent Banking Services in Promotion of Financial Inclusion in Nyeri Town, Kenya. Research Journal of Finance and Accounting*. 148-173.
- Agung, D. B., Sholeha, A., & Ahmad, G. N. (2020). *The influence of financial literacy on SMEs performance through access to finance and financial risk attitude as mediation variables. Academy of Accounting and Financial Studies Journal* Volume 24, Issue 5, 1-14.
- Alimusa, L. (2019). *Determinant of Muslim Entrepreneurs Decisions on Sharia Bank Financing and Its Effect on Business Performance. IKONOMIKA. Jurnal Ekonomi dan Bisnis Islam*, 4(1), 71-84.
- Ankrah, E., & Mensah, C. C. (2015). *Measuring Performance in Small and Medium Scale Enterprises in the Manufacturing Industry in Ghana. International Journal of Research in business Studies and Management* Volume 2, Issue 12, 34-43.

- Asamoah, M. K. (2014). *Re-examination of the limitations associated with correlational research*. *Journal of Educational Research and Reviews* Vol. 2(4), 45-52.
- Berger, A. N., & Udell, G. F. (1995). *Relationship lending and lines of credit in small firm finance*. *Journal of Business*, 351- 381.
- Bester, H. (1987). *The Role of Collateral in credit markets with imperfect information*,. *European Economic Review*, 31 , 887-889.
- Carter, S., & Jones, E. (2012). *Enterprise and Small Business Principles, Practice and Policy*. . Pearson.
- CGTN. (2020, August 26). *Kenya's financial inclusion close to 83 pct: report*. Retrieved from <http://www.newsaf.cgt.com>
- Chemutai, S. B. (2017). *Effects of Agency Banking On the Financial Performance of Commercial Banks in Kenya*. Nairobi: United States International University.
- Clamara, N., Pena, X., & Tuesta, D. (2014). *Factors that matter for financial inclusion: Evidence from Peru*. BBVA Research Working Paper No. 14/09.
- Council of Economic Advisers. (2016). *Financial Inclusion in the United States*. Issue Brief June 2016.
- CrowdForce. (2018, November 15). *4 major benefits of Agency banking*. Retrieved from <https://medium.com>
- Daskalakis, N., & Psillaki, M. (2008). *Do country of firm factors explain capital structure? Evidence from SMEs in France and Greece*. *Applied Financial Economics*, 18,, 87-97.
- Davis, F. (1986). *A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results*. . Cambridge, MA, USA. : Ph.D. Thesis, Massachusetts Institute of Technology, .
- Demirgüç, K. A., Klapper, L. F., Singer, D., & Van Oudheusden, P. (2016). *The Global Findex Database 2014: measuring financial inclusion around the world*. *World Bank Policy Research Working Paper*, 7, 255.
- Demirguc-Kunt, A., Hess, J., Klapper, L., Singer, D., & Ansar, S. (2018). *Measuring Financial Inclusion and the Fintech Revolution*. Washington, DC: World Bank.
- Dev, S. M. (2005). *Financial inclusion: Issues and challenges*. *Economic and political weekly*,, 310-313.
- Dinku, T. (2019). *Financial inclusion in Ethiopia: Using core set of financial inclusion indicators*. *Journal of Research and Opinion*.
- Dupas, P., & Robinson, J. (2013). *Why don't the poor save more? Evidence from health savings experiments*. *American Economic Review*, 103 (4), 1138-1171.
- Efina, M. (2016). *Financial Inclusion*. Retrieved from <http://www.efina.org.ng/about-us/financial-inclusion/>
- Hudson, M., Smart, A., & Bourne, M. (2001). *Theory and practice in SME performance measurement systems*. *International Journal of Operations & Production Management* 21(8), , 1096-1115.
- Khera, P., Ng, S., Ogawa, S., & Sahay, R. (2021, March). *Measuring Digital Financial Inclusion in Emerging Market and Developing Economies: A New Index*. IMF Working Paper.

- Kim, D., Yu, J., & Hassan, M. (2018). *Financial inclusion and economic growth in OIC countries. Research in International Business and Finance*, 43, 1-14.
- KMSE ACT 2012. (2012). *Kenya Micro and Small Enterprises*.
- Lotto, J. (2016). *The Role of Agency Banking in Promoting Financial Inclusion: Descriptive Analytical Evidence from Tanzania. European Journal of Business and Management Vol.8, No.33, 231-240*.
- Mugenda, O., & Mugenda, A. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Mutegi, K., & Phelister, N. (2015). *Financial literacy and its impact on loan repayment by small and medium entrepreneurs. International journal of economics, commerce and management United Kingdom*.
- Muthengi, A., & Musau, S. M. (2021). *Financial Technology and Financial Inclusion of Small and Medium Enterprises in Kabati Market Kitui County, Kenya. International Journal of Academic Research in Business and Social Sciences*, 11(4), 362-377.
- National Bank of Ethiopia. (2017). *Ethiopia: National Financial Inclusion Strategy*. NBE.
- National Council for Financial Inclusion. (2014). *National Financial Inclusion Framework. A Public-Private Sector Initiative: Tanzania, 2014. Dar es Salaam*.
- National Treasury Republic of South Africa. (2019). *An Inclusive Financial Sector For All: Draft Constitution*.
- Nava, A., Karlan, D., & Yin, W. (2000). "Deposit Collectors,". *Advances in Economic Analysis & Policy* 6:, 1–22.
- Ndesaulwa, A. (2016). *The Impact of innovation on performance of Small and Medium Enterprises (SMEs) in Tanzania: A Review of Empirical Evidence. . Journal of Business and Management Sciences*, 4(1), 1-6.
- Neaime, S., & Gaysset, I. (2018). *Financial inclusion and stability in MENA: Evidence from poverty and inequality. Finance Research Letters*, 24, 230-237.
- Nissanke, M., & Stein, H. (2003). *Financial Globalization and Economic Development Toward an Institutional Foundation. Eastern Economic Journal* 29(2).
- Ojokuku, R. M., & Sajuyigbe, A. (2014). *Effect of Employee Participation in Decision Making on Performance of Selected Small and Medium Scale Enterprises in Lagos, Nigeria. . European Journal of Business and Management*, 6(10), 93-97. .
- Otieno, R. O. (2010). *Factors influencing the adoption of agency banking by KCB Bank Kenya Ltd. Unpublished MBA research project of University of Nairobi*.
- Ozili, P. K. (2018). *Impact of digital finance on financial inclusion and stability. Borsa Istanbul Review*, 18(4), 329-340.
- Ozili, P. K. (2021). *Financial inclusion in Europe: What We Know. Expert White Paper Series, No. 5*.
- Qrius. (2018). *QRIUS. Retrieved from Challenges and opportunities for Indian SMEs in 2018: <https://qrius.com/challenges-opportunities-indian-smes-2018/amp/>*

- Quaye, I., Abrokwah, E., Sarbah, A., & Osei, J. (2014). *Bridging the SME financing gap in Ghana: The Role of Microfinance Institutions*. *Journal of Business and Management*.
- Rahman, B. (2016). *The Impact of Agency Banking to the Development of SME Sector: The Case of Bangladesh*. *World Journal of Social Sciences Vol. 6. No. 3. , 59 – 75*.
- Riwayati, H. S., Makie, G., & Indrawat, N. G. (2020). *Financial Inclusion and Performance to Mediate the Effect of Banking and Tax Regulation on the Success of Small and Medium Enterprises in Indonesia*. *International Journal of Economics and Business Administration Volume VIII, Issue 3,, 517-533*.
- Ruiz Ortega, C. (2013). "From pawn shops to banks: The impact of formal credit on informal households.". *World Bank policy research working paper 6634*.
- Stiglitz, J. (. (1981). *Credit Rationing in Markets with Imperfect Information*. . *The American Economic Review*, 393-410.
- Terzi, N. (2015). *Financial inclusion and Turkey*. *Academic Journal of Interdisciplinary Studies*, 4(1), S2, 269-276.
- The World Bank. (2018, October 2). *Understanding Poverty*. Retrieved from *Financial Inclusion*: <http://www.worldbank.org>
- Venkatesh, V., & Bala, H. (2010). *Technology Acceptance Model 3 and a Research Agenda on Interventions*, 39. *Decis. Sci.*, 273–315.
- Wakiaga, P. (2020, August 12). *The Focus on SMEs is a welcome intervention*. Retrieved from <https://kam.co.ke/the-focus-on-intervention/>
- Wise, S. (2013). *The impact of financial literacy on new venture survival*. . *International Journal of Business Management* 2013, 8, 30.
- World Bank. (2014, April 10). *Digital finance: Empowering the poor via new technologies*. Retrieved from <http://www.worldbank.org/en/news/feature/2014/04/10/digital-finance-empowering-poor-new-technologies>
- World Bank. (2019). *Small and Medium Enterprises (SMES) Finance. Improving SME's access to finance and finding innovative solutions to unlock sources of capital*. Retrieved from <http://www.worldbank.org>
- Yang, L., & Zhang, Y. (2020). *Digital Financial Inclusion and Sustainable Growth Digital Financial Inclusion and Sustainable Growth China's New Third Board Market Listed Companies*. *Sustainability*, 12.
- Ye, J., & Kulathunga, K. (2019). *How does financial literacy promote sustainability in SMEs? A developing country perspective*. . *Sustainability* 11 , 2990.
- Zhang, T., Lu, C., & Kizildag, M. (2018). *Banking "On-the-Go": Examining Consumers' Adoption of Mobile Banking Services*. *International Journal Quality Service Science* 2018, 10, 279–295.