# The Effect of Transaction Costs of Mobile Credit on the Financial Prosperity of Micro and Small Entrepreneurs in Nairobi County, Kenya

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#### **Abstract**

The purpose of this paper is to establish the effect of transaction costs of mobile credit on financial prosperity of MSEs. Financial prosperity looks at constructs of profitability, the leverage and liquidity. The study adopted a descriptive research design. The target population was 271,365 licensed MSEs as per the Nairobi City County Licensing Database as of  $16^{th}$  November 2020. The sample size was 400 MSEs. The results showed a negative and significant (P-value = 0.005) influence of transaction costs of mobile credit on financial prosperity of micro entrepreneurs. Thus, an increase in transaction cost of mobile credit leads to a decline in financial prosperity for the MSEs.

Keywords: Transaction Costs, Financial Prosperity, Mobile Credit; Micro and Small Entrepreneurs

#### Introduction

The definition of the micro and small entrepreneuris given by MSE Act of 2012 (GOK), which determines the sizes based on either the number of employees, the turnover or the capital employed. Thus, the definition characterizes them into micro (1-9 employees), small (10-49 employees) and medium (50-99 employees) sized establishments. It follows that the Small and Micro entrepreneur who is the owner of the business was the target market is either a sole trader or a businessperson who may be licensed with up to 49 employees in his service. However, if the entrepreneur had over 50 employees but satisfies the other parameters such as of the revenue between Kenya Shillings (Kshs) 500,000 to 5,000,000 (five hundred and five million) and capital of up to Kshs 20,000,000 (twenty million), they would still qualify to be in our population selection.

Mobile credit, as an innovative financial inclusion tool, is said to have potential to provide financial services to two billion unbanked populations globally, as well as to about 200 million formal and informal micro small and medium enterprises and entrepreneurs in the developing economies that lack access to affordable financial services (IEG World bank Group, 2015). Being unbanked or indeed financially excluded is strongly linked to poverty (Demirguc-Kunt et al., 2015).

Singh (2017) researched on which financial product attributes, that are offered by financial institutions, Ugandan enterprises value the most. Micro, Small and Medium Enterprises (MSME) owners were requested to provide their suggestions on what attributes of financial

products and services can better meet the needs of MSMEs. The top five suggestions werelower interest rates at 51% of respondents, efficient loan application processes at 50% of respondents, convenient access to business at 42% of respondents, courteous friendly staff at 36% of respondents and lastly, confidentially of data at 31%. The research also showed that 93% of the enterprises surveyed had bank accounts with formal financial institutions and that about 3% of the respondents used semiformal institutions such as SACCOs and MFIs to save money and borrow. Most of the businesses that used semi-formal financial institutions were micro enterprises. They expressed higher comfort levels in dealing with semi-formal institutions, some among which are mobile finance institutions. Only about 4% of the sample population had never used banks or any other formal/semi-formal institution for any financial purpose, however despite that, nearly 70% of the respondents had unfulfilled financial needs, showing the expectation gap in access to financial products and services (Singh, 2017).

As part of the solution, the study provided that, innovation through technology-enabled cost-effective delivery channels, would enhance accessibility of services, as well as ensure operational efficiency with delivery and costs optimization, the financial institutions must look at non-traditional delivery channels and distribution arrangements such as relationship management, agent, electronic and mobile banking. As the entrepreneurs are willing to pay for such services, introducing these will certainly help in providing a competitive edge to the financial institutions (Singh, 2017). The objective of the study was to determine the effect of transaction costs of mobile credit on financial prosperity among micro and small entrepreneurs in Nairobi. The constructs that formed financial prosperity were profitability, leverage and liquidity. The hypothesis thus derived from the objective above is: Ho: To determine the effect of transaction costs of mobile credit on the financial prosperity of micro and small entrepreneurs in Nairobi.

#### Literature

#### Theoretical Review

The transaction cost innovation theory was pioneered by Hicks and Niemans (1983). In their view, the dominant factor for financial innovation is the reduction of transaction cost. They advocated that financial innovation is as a result of the advance in technology which causes transaction costs to reduce. The reduction in transaction cost can stimulate financial innovation and improve financial service and consequently, earn the supplier more profits (Hicks & Niemans, 1983). According to Olatokun and Igbinedion (2009), the transaction cost theory has proven an essential framework for decision making on the vertical boundaries of a firm.

Transaction costs are described by Ronald Coarse (1937) in "The Nature of the Firm" as an unavoidable cost of doing business. According to Olatokun and Igbinedion (2009), the transaction cost theory has proven an essential framework for decision making on the vertical boundaries of a firm. Transaction costs are those costs which relate to division of work when a good or service is transferred across technologically separable interfaces (such as with the mobile phone). One stage of activity terminates and another one begins. Some of the variables that describe a transaction among others are, the specificity, the uncertainty and the frequency of the transaction whether an asset or service is only or much more valuable in the context of specific transaction (Hunter Kaufman, & Pomerleano, 2005).

### Empirical Review

The transaction costs of sending money through the mobile payment technology is presumed to be lower than those of banks and money transfer companies (Omwansa, 2013). The cost of a payment transaction has a direct effect on consumer adoption if the cost is passed on to customers (Mallat, Rossi, & Tuunainen, 2007). Transaction costs should be low to make the total cost of the transaction competitive. The cost of the mobile payments should be affordable to most of the micro business operators and far below what the banks normally charge for their bank transactions.

The overall cost of Mobile money payments and transfers are the basis on which mobile credit solutions would either thrive or fold as explained by a study that was carried out by Soutter, Ferguson and Neubert (2019). According to Soutteret al. (2019), new FinTech companies, business models and customer solutions are entering the sub-Saharan market at increasingly high rates (EY Global, 2019). With 46 countries in sub-Sahara Africa each with their own framework of regulations and conditions, it has been a mixed bag of successes, as well as false starts (Burns, 2018). The failures typically are pinned on shortcomings such as corruption, infrastructure, regulation, skill shortage (all elements of costs of transactions), as well as over-expectation of the emerging middle class (Christensen, Ojomo & Dillon, 2019; Simanis & Duke, 2014).

This study was following in the recommendations of a similar study from Gomber et al., (2017), who stated that FinTech innovations are based on easy usage and lower costs from customer perspective and regulations and technological innovations and called for further verification and extension of their findings in other jurisdictions and industries. Approximately 60% of adults in sub-Saharan Africa are unbanked (Demirguc-Kunt et al., 2018). These are non-consumers of formal financial services and deal mainly in cash despite academics, development organisations and governments urging for their participation in the formal economy because financial inclusion is foundational for poverty reduction and economic growth (Demirguc-Kunt et al., 2018). Christensen et al. (2019) states that in sub-Saharan Africa, there are great opportunities for businesses that truly understand and enable nonconsumers at low costs and margins.

According to the study by Soutter et al. (2019), the main driving force for financial inclusion in sub-Saharan Africa is mobile money (Demirguc-Kunt et al., 2018). Where it has been successful, the market has grown rapidly, for example, increasing from 75 million accounts in 2012 to almost 340 million in 2017 (GSMA, 2018). This success no doubt has been enabled by the flattening of costs for access when looking at the barriers that have been removed. Sy et al. (2019) posits that FinTechs not only help in improving financial inclusion but also serve as a catalyst for the emergence of innovations in other sectors, such as agriculture and infrastructure, which promote economic growth and development, thus increasing prosperity for micro-entrepreneurs. Chironga et al., (2017) identified five business models'archetypes for African mobile money providers and the segments of the value chain they cover. These are, MNO- dominant in which the mobile network operator (MNO), is responsible for most steps in the value chain. Secondly, MNO-led partnership in which a banking partner supports the MNO with products beyond payments, thirdly, bank led partnerships in which a banking partner supports the MNO with products beyond payments, fourth, bank models in which the bank provides the digital services and lastly, the FinTech solutions (Chironga et. al., 2017).

According to Chironga et al. (2017), the MNOs have dominated the mobile money industry in Africa for the past 10 years. They attribute their success to three key factors; a large customer base with strong market concentration (i.e., mobile phone penetration compared to banking penetration), a superior client experience and the ubiquity of the MNO's local agent distribution networks (e.g., compared to ATMs). The cash distribution agents who provide cash in and cash out services register accounts and for mobile phone providers, top up prepaid phone accounts; the primary way to convert money to digital asset. These are the keys to growth of the mobile money industry and its innovations such as the mobile credit (Juma & Wasunna, 2018).

The study concluded that Sub-Sahara Africa being largely non consumers of formal financial services are much more suited to consumption of new technology and generating demand for the technology driven by the numbers of consumers ready to consume financial products at an overall lower cost of doing business (Soutter et al., 2019). To create this success, the markets will need to stimulate awareness and educate customers in varying degrees of the different markets. Innovations such as mobile money payment solutions which support mobile credit services will lower the costs and the risk of money transfers, however the particulars of the technology are much less important than the cost and usability of the innovation (Leigh Soutter, 2019).

However, in contrast to the assertion by Soutter et al. (2019), Wamalwa, Rugiri and Lauler (2019) posit that the cost to the user of mobile money when compared in terms of APR, is much higher than conventional lending (this understanding does not consider the overall cost of doing business and between those without access to conventional financial services and those with options). The risks associated with unsecured digital lending necessitate lenders to reduce their risk exposure by charging fees and interest rates that are relatively high as compared to conventional loan products. A survey of digital credit products in Kenya shows that monthly percentage interest rates range from 2.1% to 43.4%, while monthly interest rate conventional loans average 1.3%. Wamalwa et al. (2019) posit that on average, the monthly percentage interest rate on digital loans exceeds the lending rate for conventional loans, while some digital credit providers have a variable interest rate on loans. This indicates that digital credit, despite being easily accessible and enables borrowers to meet financial needs, is more expensive than conventional credit. The high fees and the interest rate on digital credit can reduce household income over time, particularly if borrowers are taking loans for nonproductive purposes and thus the returns on investments financed by digital loans may be insufficient to cover loan obligations when they fall due (Wamalwa et al., 2019).

A study done by Osabuohien and Karakara (2018) on ICT usage, mobile money and financial access of women in Ghana explains the need to regulate the cost for access. Women constitute 53% of the Ghanaian labor force, account for 44% of the gross domestic product (GDP) and comprise 70% of Ghana's Small and Medium Enterprises (SMEs), with many of them engaged in sales and marketing of petty products, significant and sizeable statistics that cannot be ignored by the government. However, the women at the time had limited access to formal financial services, such as: owning bank account, savings, mobile payment methods and insurance. Statistics show that 4 out of 5 Ghanaian women lacked access to an account at a formal financial institution, compared to about 1 man out of 4 (InterMedia-CGAP, 2015).

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The women had advantages in small transactions (loans, deposits, savings programs, insurance and other financial services, moneylenders or borrowing from family members, where formal credit is not available). As most women are engaged in petty trading and as market salespersons, they lack the financial capacity and collateral to go for large volumes of transactions in the financial sector. Many women have access to mobile phones, hence to get women to be financially included and this results in their prosperity. Mobile money serves the following purposes: payment of utility bills, buying goods and services, direct payments for loans/savings, buying of airtime and data bundles, sending and receiving of money and depositing and withdrawing of money from a bank account (Osabuohien & Karakara, 2018).

The study used two datasets from the Ghanaian Demographic and Health survey and the World Bank of 2014 to investigate how the households had access to ICT and finance. Descriptive statistics of financial access and ICT were used to present gender differences and in addition, the authors estimated a binary variable and six different forms of finance as explanatory variables. The results indicated marginal effects, a representative value (MER) where dummy explanatory variables are at their discrete values and continuous variables are their means. The summary discussion showed that women with access to mobile phones would transact more and thus lead to greater success. The environment of small charges and cost has to be right to enable this to take place. The study therefore looks at the positive effect of transaction cost on financial inclusion through mobile loans to micro-entrepreneurs and hence, their perceived prosperity (Osabuohien & Karakara, 2018).

Another study by Agyekum et al., (2017) examined the relationship between increasing accessibility to mobile (Digital) financial services (DFS) and access to finance in lower income countries (LICs). It emerged that in the comparison between banks and non-bank organisations that used DFS, the non-bank based DFS emerged as the most efficient means of delivering cost effective financial services to previously unbanked persons. Agyekum et al. (2017) posited that mobile phone penetration and internet usage were mutually inclusive means through which mobile financial services were able to foster better financial access and prosperity. The study was done in Ghana using ordinary least square and logistic regression models. The results in difference in methods confirm the positive significant trend of mobile money usage as a result of efficiencies or less costs (Agyekum et al., 2017). Highlights of the study noted that increase in mobile subscription rates of 1% leads to 1.19% increase in credit to private sector as a result, and that delivering mobile financial services extends financial inclusion to previously excluded persons from financial access and possible financial prosperity.

An MBA study carried out in Kenya by Mutio (2019) showed that mobile banking services, including the provision of mobile credit, positively influenced the prosperity of microentrepreneurs in part because of the perceived low costs of transactions in obtaining and repaying the loans. The general objective of this study was to examine the influence of mobile banking services on performance of micro businesses in the informal sector in Kenya. To achieve the general objective, the study focused on three specific objectives; to find out the effect of mobile banking cash management on the performance of micro businesses, to determine the impact of mobile banking credit accessibility on performance of micro businesses and to determine whether mobile banking convenience influences performance of micro businesses in the informal sector (Mutio, 2019).

The study applied a cross sectional study design. The population of the study was the microentrepreneurs based in Nairobi's Gikomba market, in Kamukunji Sub County, who were 1850 in total. Mutio (2019) came up with 100 participants as the sample of the population. Primary data was collected using questionnaires, while secondary data was gathered from publications, government records, non-profit organisations records and media articles. Chi square ( $\chi$ 2) and Pearson's correlation analyses were applied in this study to establish the effect of mobile banking services on performance of micro businesses in the informal sector.

From the sample of 100, five were unresponsive and thus 95 participants sampled, all were present and 95 questionnaires were administered. All the questionnaires were returned of which 68 were complete and usable which accounted to 72% response rate, which according to Baruch and Haltom (2008), is reasonable. All the participants had used mobile financial services in their business transactions. The findings of the study showed that mobile banking services enhanced micro businesses by minimizing cost of sending money compared to use of traditional means which is tedious and involves logistical costs. More than half of the respondents stated that mobile banking helped them in sending money, saving/depositing money, withdrawing money from mobile bank account, receiving money, checking account balance with the bank and paying bills. All these functions are necessary in lending transactions and therefore, one can conclude that the cost of doing business with a mobile credit loan is thus reduced significantly.

Out of the respondents, 83.83% had used a mobile credit loan in their business from a variety of providers, showing the strong knowledge and ability among micro-entrepreneurs to access the mobile loans. Eightyeightpoint two four percent (88.24%) gave reason for using the service as the implied low cost of credit and ease of access. This was consistent with a study by Bourke (2014) who posited that accessing low interest credit is considered an important factor in increasing the performance of micro businesses.

The conclusions of the study by Mutio (2019) showed that most of the respondents are either diploma or certificate holders and half of the respondents in the study area had been entrepreneurs for a period of between 6 and 10 years. It was also discovered that more than half of the participants in the target populace have used the M-banking services for a period between 3 and 5 years, which goes to mean that majority of the micro enterprise owners in the target populace are familiar with the benefits of using M-banking services in their business undertakings. The use of mobile banking services had an overall positive linear correlation in the performance of the micro businesses in informal sector. The constructs to determine the transaction costs variable would be the Annual Percentage Rate or APR, the operational cost for the loan and the penalty costs incurred.

# Methodology

This study adopted an explanatory research design. In an explanatory research design, the researcher sought to establish a causal relationship between the transaction cost variable and the dependent variable of financial prosperity. It involved the analysis of a situation or a problem in order to establish relationships between variables (Blumberg et al., 2014).

The study used both a correlational analysis in finding out the strength of correlation between independent variable and the dependent variable. The target population for this study was 271,365 licensed small and micro entrepreneurs in Nairobi County as per the Nairobi City

County Licensing Database as of 16<sup>th</sup>November 2020. The sampling design employed a stratified design to achieve representative sample of 400 MSE. From each MSE, its owner, who is the entrepreneur responded. Primary data was collected using a structured questionnaire. Collected data was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keying into bot STATA version 14 and statistical package for social sciences (SPSS) version 20. Both descriptive and inferential statistics were used.

The hypothesis for 'the transaction costs' variable was tested at the bivariate level using ANOVA. If the reported F statistic in the ANOVA results was larger than the critical F statistic, then the null hypothesis was rejected. The associated calculated p value should also be smaller than the critical p value of 0.05.

This test was conducted to ensure that data is normally distributed, without outliers. The initial step before further analysis was to investigate whether the variables follow the normal distribution. In this study, normality was diagnosed using a histogram of regression standardized residuals along with their summary statistics for the variables and the Jargue-Berra test, where a null hypothesis of normality was tested against the alternative hypothesis of non-normal distribution. The null hypothesis ( $\mathbf{H_0}$ ) stated that the residuals were normally distributed. If the probability value ( $\mathbf{Chi^2}$ ) is greater than 0.05, then the data is normally distributed. A bell-shaped histogram also indicates that the data is normally distributed and has no outliers.

The results were presented through trend analysis, descriptive and inferential statistical manner with tables and figures. The chapter then presented the tests of the relationships between each independent variable with the dependent variable, as well as the moderating variable and analysed the resulting hypothesis of each objective.

#### **Findings**

The total number of questionnaires sent out was 400 to registered MSMEs operating businesses in Nairobi under the County Council Licenses. From these, we had a response rate of 384 over a period slightly over one month of collection from the 28th June 2021 to 2nd August 2021. The total response rate was 384 filled questionnaires which represents 96% response rate. Before the study was carried out, various tests were carried out to test reliability, validity of instruments, as well as diagnostic tools to determine normality, homoscedasticity, multicollinearity and autocorrelation for the panel data analysis to be successful.

Trend analysis carried out was represented by four trends testing various aspects of transaction costs for mobile credit use. These are trend analysis for application cost rates, the trend analysis for loan interest, the trend analysis for penalty costs and trend analysis for transaction cost for mobile credit composite. The first one is the trend analysis for the application cost rate.

2018

2019

# application cost rate 2.84 2.85 verage of application cost rate 2.80 2.76 2.75 2.71

Trend Analysis for Application Cost Rate for Mobile Credit Loans

2016

Figure 1: Trend for the Application Cost Rate for Mobile Credit Loans over the Period 2015 to 2019

years

2017

Source: Survey Data (2021)

Figure 1 shows the trend for the average application cost rate for mobile credit loans. The application rate represents the cost as a percentage of the loan amount. The value of 1 represented 'no costs,' 2 represented 'between 0%-5% of the loan value as the cost for application,' 3 represented 'between 5%-10% of the loan value as the cost for application,' 4 represented 'between 10%-15%,' 5 represented 'more than 15% of the loan cost.' The trend though showing both increased rates and reduced rates over the 5-year period, shows an overall upward trend on the cost of application for mobile loan.

# Trend Analysis for Loan Interest

2.70

2.65

2015

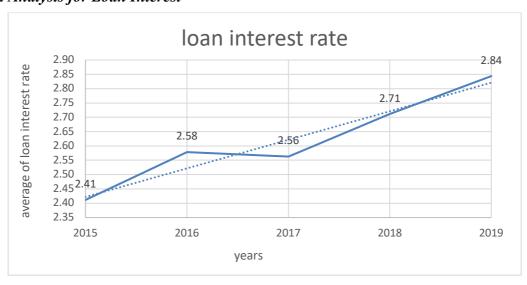


Figure 2: Trend on Loan Interest Rate for Mobile Credit Loans between 2015 and 2019

Source: Survey Data (2021)

Figure 2 shows the trend for the mobile loan interest rate between 2015 to 2019. The value 1 represented 'zero interest rate,' 2 represented 'interest rate between 0%-15% p.a,' 3 represented by 'interest rate between 15%-30% p.a,' 4 represented 'interest rate between 30% to 45% p.a' and 5 represented 'interest rate above 45%.' The graph represented an increase from 2.41 to 2.84 in 2019.

The trend shows that the interest charged on the loans as a percentage of the loan size on average increased with every increasing year except for the period between the year 2016 and 2017, in which time the interest as a percentage appeared to decline slightly, the following year from 2017 to 2019 showed an increased upward trend. The overall trend line demonstrates an inclining slope demonstrating increase in the interest costs as percentage of mobile credit loan amount.

# penalty costs rate 3.10 3.05 average of penalty costs rate 3.05 2.99 3.00 2.96 2.95 2.90 2.85 2.80 2.75 2016 2017 2018 2019 2015 years

Trend Analysis for Mobile Loan Penalty Costs over the Five-Year Period

Figure 3: Trend Analysis on the Mobile Credit Penalty Costs (for Default) over the Five-Year Period

Source: Survey Data (2021)

Figure 3 above shows an increasing penalty cost rate. Value 1 represented 'zero penalty costs,' 2 represented '0%-5% of the Mobile Credit Value in penalty costs,' 3 represents '5%-10% of the loan value in penalty costs,' 4 represents '10%-15% of the Mobile Credit Value,' 5 represented 'over 15% of the loan value in penalty costs.' The average rate from increased 2.80 to 3.05 a general increasing rate over the 5-year period between 2015 to 2019.



# Trend Analysis for Transaction Cost of Mobile Credit Composite

Figure 4: Trend Analysis for the Mobile Credit Transactions Cost Composite

Source: Survey Data (2021)

Figure 4 is a representation of an upward mobile credit transaction cost trend. The three cost areas are application costs, the interest rate costs and the penalty costs, overall, there is an upward transaction costs trend. The graph demonstrates that the average transactions costs were higher each progressive year between 2015 and 2019.

# Relationship between Transaction Cost of Mobile Credit and Financial Prosperity

Table 1: Relationship between Transaction Cost of Mobile Credit and Financial Prosperity

| Model                   | Model 1<br>(profitability) | Model 2<br>(Leverage) | Model 3<br>(Liquidity) | Model 4 (Financial<br>Prosperity<br>Composite) |
|-------------------------|----------------------------|-----------------------|------------------------|------------------------------------------------|
| Transaction cost of     |                            |                       |                        |                                                |
| mobile credit composite | -0.372                     | 0.330                 | -2.50                  | -0.292                                         |
| Cons                    | 1.824                      | 1.394                 | 1.495                  | 4.713                                          |
| Number of obs           | 1920                       | 1920                  | 1920                   | 1920                                           |
| F                       | 76.705                     | 35.478                | 26.662                 | 7.773                                          |
| Prob > F                | 0.000                      | 0.000                 | 0.000                  | 0.005                                          |
| R-squared               | 0.038                      | 0.018                 | 0.014                  | 0.004                                          |
| T                       | 8.758                      | 5.956                 | 5.164                  | 2.781                                          |
| Degrees of Freedom      | 1, 1918                    | 1, 1918               | 1, 1918                | 1, 1918                                        |

Source: Pilot Survey Data (2021)

Y1 (Profitability) = 1.824 + -.372 (transaction cost of mobile credit)

Transaction costs indicator has a significant negative relationship (-.372) with profitability. An increase in transaction costs by one unit leads to a decrease in profitability by 0.372 units.

Y2 (Leverage) = 1.824 + .330 (transaction cost of mobile credit)

Transaction costs indicator has a positive relationship (.330) with leverage. An increase in transaction costs by one unit leads to an increase in leverage by 0.330 units.

Y3 (Liquidity) = 1.495 -0.250 (transaction cost of mobile credit)

Transaction costs indicator has a significant negative relationship (-.250) with liquidity. An increase in transaction costs by one unit leads to a decrease in liquidity by 0.250 units.

Y4 (Financial Prosperity) = 4.713 -0.292 (transaction cost of mobile credit)

Transaction costs of mobile credit has a significant negative relationship (-.292) with financial prosperity. An increase in transaction costs by one unit leads to a decrease in financial prosperity by 0.292 units.

## Hypothesis Testing

Y4 (Financial Prosperity) = 4.713 -0.292 (transaction cost of mobile credit)

The null hypothesis was rejected indicating a significant relationship between transaction cost of mobile credit and financial prosperity of micro entrepreneurs in Nairobi. This was because the calculated F value was 7.773 with a corresponding p value of 0.005 which is less than 0.05. Additionally, the calculated t statistic (2.781) is greater than the critical t statistic (1.96).

#### Discussion

The objective of the study was to determine the effect of transaction cost of mobile credit on the financial prosperity of small and micro entrepreneurs in Nairobi. Transaction cost of mobile credit was represented by application cost rates, loan interest and penalty costs, as well as the composite for the variable. The trend analysis results for application cost rates, through showing both increased rates and reduced rates over the 5-year period, showed an overall upward trend on the cost of application for mobile loan. On the other hand, the trend analysis showed that the interest charged on the loans as a percentage of the loan size on average increased with every increasing year except for the period between year 2016 and year 2017 when the interest as a percentage declined slightly, while an upward trend was obtained from 2017 to 2019. The overall trend line revealed an inclining slope demonstrating increase in the interest costs as percentage of mobile credit loan amount. Moreover, the trend analysis for penalty costs showed an increasing trend from 2015 to 2018 and slight drop in 2019. On average, there was an increasing trend of mobile credit transact cost for the five years.

Regression analysis was conducted to establish the relationship between transaction cost composite and financial prosperity indicators which were profitability, leverage and the third being liquidity. Regression analysis was also conducted between transaction cost composite and financial prosperity composite. The findings revealed that transaction cost had a negative and significant influence on firms' financial prosperity. This implies that an increase in transaction costs leads to a decline in profitability. This agrees with Wamalwa et al. (2019) whose study established that on average, the monthly percentage interest rate on digital loans

exceeds the lending rate for conventional loans, while some digital credit providers have a variable interest rate on loans. This indicates that digital credit, despite being easily accessible and enables borrowers to meet financial needs, it is more expensive than conventional credit. The high fees and the interest rate on digital credit reduce business profits over time, particularly if borrowers are taking loans for non-productive purposes and thus, the returns on investments financed by digital loans may be insufficient to cover loan obligations when they fall due. Agyekum et al. (2017) also found positive significant trend of mobile money usage as a result of efficiencies or less costs. The finding also supports that of Mutio (2019) whose study showed that mobile banking services, including the provision of mobile credit, positively influenced the prosperity of small and micro-entrepreneurs in Kenya because of the perceived low costs of transactions in obtaining and repaying the loans. Mobile banking services enhance micro businesses by minimizing cost of sending money compared to use of traditional means which is tedious and involves logistical costs. This finding is also consistent with a study by Bourke (2014) who posited that accessing low interest credit is considered an important factor in increasing the performance of micro businesses. The findings further revealed that transaction cost had a positive influence on firms' leverage. The test for significance showed that the influence was statistically significant. This agrees with Wamalwa et al. (2019) whose research indicated that digital credit increases the probability of debt distress and reduces income by about 16 per cent. This is due to small amount of loans advanced with short maturities and highinterest rates and fees that do not enable households to make long term indivisible investments, which have a dramatic impact on household income and wealth.

# **Summary and Conclusion**

The results of the study showed a negative and significant influence of transaction cost of mobile credit on financial prosperity of micro entrepreneurs. The implication is that an increase in transaction cost of mobile credit leads to a decline in financial prosperity for the small and micro entrepreneurs in terms of profitability, leverage and liquidity. It was therefore concluded that increase in application cost rates, interests on mobile loans and penalty costs leads to low profitability, leverage and low liquidity.

Based on the study findings, it is recommended that the government mobile loan institutions should consider lowering the costs involved in lending the credit. It is recommended that the government should regulate the interest rates and default penalty costs that are imposed to borrowers in order to enhance business profitability, leverage and liquidity.

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