The effect of ease of access on 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 the ease of access to mobile credit on the financial prosperity of MSEs. The ease of access describes the simplicity and easy way of enabling the provision of credit to a mobile money subscriber. Mobile credit means the credit offered through mobile phones whether from mobile phone operators in conjunction with banks or non-bank financial institutions or stand-alone mobile finance companies as per AFI - Global (2020) definition. This study tries to analyze whether there is a relationship between ease of access and the financial prosperity of an entrepreneur. Financial prosperity on the other hand is the economic well-being of a person or institution. The study adopted a descriptive research design. 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 16th November 2020. The sampling design employed a stratified sampling design to achieve a representative sample of the respondents. The sample size was 400 MSEs from each MSE, and the owner or key member was picked to participate. Overall, it was found that ease of access to mobile credit had a positive influence on financial prosperity. This implies that improved access to mobile credit leads to improved financial prosperity. An increase in Ease of access has a significant positive relationship (1.741432) with the financial prosperity composite. An increase in ease of access by one unit leads to an increase in financial prosperity by 1.741 units. Based on the study findings, it is recommended that mobile lenders should offer mobile credit with affordable terms. The mobile credit lenders should maintain a short period of the mobile money application process and approval to enhance the profitability and leverage of businesses. With good use of mobile credit, increased liquidity would increase financial prosperity for micro and small entrepreneurs.

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Introduction

The definition of the micro and small entrepreneur is given by (KNBS, 2016), 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 which was the target market is either a sole trader or a businessperson who may be licenced or un-/licenced with upto 49 employees in his service. If, however the entrepreneur, had over 50 employees but satisfies the other parameters such as revenue of between Kenya Shillings (Kshs) 500,000 to 5,000,000 (five hundred and five million) and capital of upto Kshs 20,000,000 (twenty million) they would still qualify to be in our population selection MSE Act of 2012 (GOK, 2012).

Ease of access to mobile credit on the other hand can be defined as the manner in which access to credit offered on Mobile money is enabled. Finaccess (2019) study in Kenya showed that there is widespread access to mobile credit by low-income persons, however the access to the funding has brought about a situation where 1 in 2 are in default and have to either borrow more, sell assets, or even remove children from school at the household level in order to pay the loan. Moreover, mobile credit borrowers have the highest rate of defaulting even once amongst formal and informal borrowers at the household level (Finaccess, 2019).
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).

Many studies have been conducted on the effects of the mobile credit on the micro small and medium entrepreneurs in Kenya to identify the research or knowledge gap on the effect of mobile credit on prosperity, but none have been done specifically for Nairobi County. This looked at the effect of mobile credit on financial prosperity of micro entrepreneurs in Nairobi County as representatives of the Kenyan market.

The objective of the study was to determine the effect of ease of access 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 derived from the objective above is: Ho: To determine the effect of ease of access of mobile credit on the financial prosperity of micro and small entrepreneurs in Nairobi.

**Literature Review**

**Constraint Induced Financial Innovation Theory**

American economist Silber (1983) advanced constraint-induced financial innovation theory. This theory pointed out that the purpose of profit maximization of financial institution is the key reason of financial innovation. Silber (1983) mentioned that there are some restrictions (including external handicaps such as policy and internal handicaps like organizational management) in the process of pursuing profit maximization. These restrictions may however not be the only ones guaranteeing the stability of management, they reduce the efficiency of financial institution, so financial institutions strive toward casting them off. Li & Zeng (2010) argued that the theory emphasized on “innovation in adversity” which is representative of the development of mobile credit revolution. The theory has also been used by Agufa (2016) in her study on the effect of mobile finance in the banking industry in Kenya, where she looked at mobile credit circumventing the challenge of lack of collateral and addressing the speed of evaluation through algorithms. This theory guided the independent variable of the ease of access of mobile credit services.

**Empirical Review**

Mobile credit finance has been instrumental in granting formal credit in ways that were not conceivable ten years ago (FSD Kenya, 2019). It has provided individuals with working capital for small enterprises and the tools to manage their day-to-day needs. Survey data reveals that over six million Kenyans representing 27% of all Kenyan adults have borrowed at least one Mobile loan by 2018 (FSD Kenya, 2019).

According to Gubbins and Totolo (2017), getting an ordinary loan from a Kenyan bank would have required one to travel about nine kilometres to the nearest bank branch, speaking to a loan officer, putting together documents for submission of a loan application and hoping for the best outcome. This process, plus the often-unattainable loan security requirements, was costly for the average borrower, and took an average of eleven (11) days to secure, furthermore it required paying for out-of-pocket costs such as transportation (Gubbins & Totolo, 2017). On the supplier side, Gubbins & Totolo (2017) state that it required having staff who could screen an applicant and collate information and the collateral to make judgement about the creditworthiness of the borrower, Mobile loans have transformed the process for both borrowers and lenders in significant ways. Ease of access would mean that the barriers such as physical distance, challenge of technology, and requirements for credit provision have been made easier to the businessperson who needs to access the facilities.

Munyengerwa & Matsumoto (2015) explored the role of mobile phone transfer services in shaping the financial behaviour of rural households in Uganda using a randomly selected sample of 820 households. The authors provided empirical evidence that mobile money leverages the financial access constraint of rural households and stimulates their uptake of financial services. Accounting for possible selection bias, endogeneity of mobile money adoption at the household level and the influence of local economic conditions at the village level, Munyengerwa & Matsumoto (2015) were able to provide robust evidence that the amounts of remittances, credit and savings made by mobile money users is significantly higher than that of non-users. Their results therefore feed into existing literature in two ways; first, by profiling the potential of mobile money to drive remittance flow and second, by illustrating that reducing service cost and distance to service points thereby improving the saving behaviour of rural households. This paper uniquely contributes to the literature by extending the analysis of the potential of mobile money beyond the traditional peer-to-peer remittances to credit. Thus, providing the access for possible study for credit access.

Kalio (2013) studied the impact of mobile banking credit and performance of micro entrepreneurs in Tanzania’s Morogoro Municipal involving 100 respondents using interviewing technique. The results showed that through credit obtained from mobile banking, micro entrepreneurs have been enabled to improve businesses in terms of increased business profit, increased employees, increased sales turnover, increased business diversification, increased business capital and assets as well as overall reduction of poverty among customers surveyed. Kalio (2013) concluded that mobile banking loans plays a very crucial role to promote financial prosperity. This study however may be criticised in that it did not examine whether the researcher had demonstrated if all the loans provided were
mobile loans or perhaps some loans may have been from traditional sources. It also may not have looked at the factor of multiple borrowing, further studies on the same population would have enabled a more robust conclusion on the ease of access leading to success.

Totolo (2018) in whose research sought to answer the questions of exactly how big is the market? Who is using digital credit? And what impact is it having on low-income customers? Found through literature review of the FSD-Kenya (2017) study, in partnership with the Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS) and the CGAP, a nationally representative phone survey with over 3,100 Kenyans, presented mixed results. The findings suggest that digital credit has become a leading source of credit in Kenya and that it is mostly used to finance working capital and day-to-day consumption needs. But it also suggests many borrowers are struggling to repay, some key results were as follows: More than one in four Kenyans had taken a digital loan or 27% of Kenyan adults had taken at least one digital loan (a total of 6 million borrowers). Most had taken a loan in the past 90 days, suggesting a large number of active borrowers. Still, most Kenyans have never used digital credit. When asked why, most respondents cited an aversion to debt, with 34 percent mentioning their “fear” of taking loans. Many stated that they do not need a loan (29 percent) or lacked awareness about existing digital credit solutions (21 percent). Only 13 percent stated that they do not borrow because they do not qualify, the results when compared to traditional lending processes show that most persons who actually applied received the loans applied for at 87%. The result shows a clear case of relative ease of access to loans compared to traditional lending processes (Totolo, 2018).

Secondly, the most common reasons for digital borrowing among Kenyan adults are business and day-to-day needs. The use patterns do not differ much between men and women, but income sources seem to play an important role. The findings presented those casual workers, dependent and formal employee borrow mostly for day-to-day needs. Customers who run their own company or farming operation mostly borrow for business purposes. Entrepreneurs borrowing for working capital needs. The business purpose is the single most common use case for digital credit, demonstrating a positive effect of mobile loans on the economy when the loan is used for business (Totolo, 2018).

Third, the rise of the digital credit market has raised concerns about the risk of excessive borrowing and over-indebtedness among lower-income households. Mobile loans are easy to obtain, short-term, carry a high interest rate and are available from numerous bank and nonbank institutions. The survey found that 14 percent of digital borrowers were repaying multiple loans from more than one provider at the time of the survey. This means over 800,000 Kenyans were juggling multiple digital loans. Although having multiple loans is not necessarily an indicator of debt distress, it is important to closely monitor the market going forward and detect possible risks and thus presenting a negative effect from the ease of access of mobile loans (Totolo, 2018).

Fourth, at the time of the survey in 2017, digital credit was the most used source of credit among phone owners at 19 percent. Yet the results showed that use of informal loans is similar among digital borrowers and nondigital borrowers, indicating that digital credit complements, rather than replaces, informal sources. The same goes for formal sources. In fact, digital borrowers are considerably more likely to use bank credit and SACCO loans. This means that the ease of access from Mobile loans was not necessarily demonstrated (Totolo, 2018).

Finally, Despite the growth of the market, the study demonstrated that mobile credit was not reaching everyone. It remains ill-suited for most of the population, such as farmers and casual workers, whose livelihoods are characterized by irregular cash flows. Reaching these segments would require deeper understanding of their financial lives, the key risks that they face and day-to-day liquidity needs (Totolo, 2018).

A study carried out in rural Pakistan by Maryam, Noor, Ayesha, Maryem, Libna and Richard (2019) examines the use of technology to enable ease of financial services. The study looked into mobile money credit access to women micro entrepreneurs in different cities in Pakistan and the challenges they face, it showed that mobile money was not tuned to the problems they faced and their financial needs but it nonetheless afforded them better access to financial services than formal financial services (Maryam, 2019). The study was carried out in a country with deep patriarchal, resource constrained communities. It looked at the financial life cycles of 20 women and how technology was influencing the women’s businesses and personal lives. The finding presented alternate solutions for meeting their needs.

Pakistan is one of the seven countries that in economic terms constitute half of the world’s unbanked population around the world (Demirguc-Kunt et al., 2017). More specifically, by itself, Pakistan constitutes about 5% of the total global population with no access to financial services. Less than 5% of the women are included in the formal financial sector compared to South Asia’s average of 37% by 2017 (Inter Media, 2018). Financial inclusion is key to closing this gap where lack of access to financial services reduces a woman’s ability to engage in productive economic activity and increases their likelihood of getting out of poverty. The study showed that access to mobile phones by rural women was 13% lower than that of men at 84% in 2017, furthermore, the study looked at access and not ownership which was at a much lower level (Maryam et al., 2019). The study sought to understand the reasons behind this population that scores amongst the worst on the gender gap and financial inclusion index. It also looked at designs for reducing this gap that were based on technology design that is grounded in the local context and understanding of the current use and access to technology in low resource communities.
The above study was done through a qualitative, empirical study to explore the financial lifecycles of low-income micro-entrepreneur women and map the landscape against which any technology design could happen. Twenty unstructured, in-depth interviews and participant observations of low-income micro-entrepreneur women were carried out in rural and peri-urban areas in Lahore (7 interviews), Faisalabad (6 interviews) and Gujranwala (7 interviews). Women between the age group of 25-50 are interviewed, with an average age of 35 years. Respondents with an income bracket ranging from PKR 15,000- 50,000 (USD 121 - 405) are chosen given that ninety percent female owners of micro, medium and small enterprises lie within this bracket. This range is indicative of the revenue and not profit, which may vary significantly across the sample size. The focus was on women with varied education levels, no respondent had more than 12 years of education to understand the needs of low literate population (Maryam et al., 2019).

The choice of the sample was influenced by a previous study done by Ibtaasam et al. (2018) which represented a mapping of DFS readiness women entrepreneurs across Pakistan. Their findings reveal that women micro-entrepreneurs who run small businesses like beauty parlours, embroidery shops and in-home tailoring businesses fulfilled the pre-requisites for mobile money adoption; they had greater access to phones and mobility. Based on this, the study limited the participants to microentrepreneur women in order to determine if, once these barriers are overcome, they adopt digital financial services. Participants were approached through microfinance institutions (10 women, MFI) and through snowball sampling (10 women) to eliminate plausible bias of approaching participant, through a micro-finance institution only. Two rounds of interviews were carried out. The first round was to gather initial data and get a sense of the financial set up of the women. The second round consisted of observations and follow up questions (Maryam et al., 2019).

The findings of this study were unusual to the expectation of the researcher’s expectation which had hypothesized that ease of access to digital financial services would have a definite impact to the low-income earners and enable greater financial inclusion and thus greater prosperity. This assertion was strengthened by previous work by Ibtaasam et al., (2018), which had theorised that if certain socio-cultural limitations like mobility, agency and access to technology are removed, women in low resource communities would be more included to adopt mobile money services. They had hypothesised that there is scope for using mobile financial services as a solution to financial inclusion in countries like Pakistan. However, as the study demonstrated, for the group of women that were studied, who none the less had financial autonomy, are mobile and have access to technology, they were not using mobile wallets and Digital Financial Services as would be expected. Their use was limited to over-the-counter transactions. The existing ecosystem revealed that there was no inherent need for mobile money applications in their current form as the women operated in a cash-based environment and all the vendors, suppliers, MFIs, Utility bills, School bills were all cash based. The study revealed that conventional banking system and current infrastructure do not necessarily cater to the needs of low-income, low literate women in patriarchal and religious societies like Pakistan. It proposed specific guidelines to design meaningful digital interventions for women working within their limitation and tapping to their current mechanisms of shared access and the need for secrecy in savings and credit transactions which mobile credit services cannot afford. For these women ease of access was not necessarily an enabler for business prosperity (Maryam et al., 2019).

To demonstrate the ease of access benefiting financial institutions as a result of facilitating ease of access to credit is demonstrated through a study done by Kinyanzui (2018) on the effect of Mobile credit on the performance of Commercial Banks in Kenya. This study sought to investigate, evaluate and analyse the effect of mobile credit on the performance of commercial banks in Kenya. The objectives for the study were: to determine the effect of mobile credit on each of performance measures that is; financial performance, operational efficiency, customer satisfaction and organization effectiveness and also investigate the moderating effect of government policy towards mobile credit and its effect on commercial banks performance. The population was obtained from the 5 banks that had employed Mobile credit services in its offerings and from each of the banks, 2 managers and 100 customers were selected in total 10 managers and 500 customers formed the sample population. The study looked at primary as well as secondary data. The primary data collection tool used was a questionnaire with both open and closed questions. The research procedures employed demonstrated that Primary data was collected on customer satisfaction, customer numbers, reliability of the system, cost of accessing the service and ease of accessing the service (Kinyanzui, 2018). Data collected was analysed using multiple linear regression analysis at 95% confidence interval.

The findings reflected that overall, the net profit increased significantly after the introduction of mobile credit, also total assets and return on assets increased significantly. Liquidity ratio also increased significantly. Net profit average for the period was 11.49, return on assets average was 0.0417, liquidity was 37.29, and earnings per share were 5.00 for the entire period. These were good indicators of growth over the period indicating that the customers receiving their credit from the mobile phone had facilitated better experience for them and conversely improving the bank’s performance.

A negative relationship was established between the earnings per share and the introduction of mobile credit with a coefficient of -0.147 which was not significant at 0.05 significance levels. This negative relationship was apparent because of the higher shares from increased market value and therefore creating an inverse relationship with the earnings of the banks. Descriptive statistics show that over 70% of the customers in the study were satisfied with the provision of mobile credit in commercial banks. Regression analysis showed that mobile phone attributes that significant influenced customer satisfaction was the ease of borrowing using mobile phones which had a positive relationship (0.316) that was significant at 0.05 significance levels, absence of errors in the mobile phone loans (0.153), the costs of borrowing using mobile phones (0.619) and the customer loyalty levels brought about by mobile phone loans (-0.110) (Kinyanzui, 2018).
The study also showed that, the security levels embedded on mobile phone loans (0.000), the repayment periods (-0.005) had a positive and negative relationship respectively, but this relationship was not significant at 0.05 significance levels. According to this study with a coefficient of 0.596 which was significant, the use of mobile credit enhanced brand image building in the bank. Similarly, the use of mobile credit reduced the adaptability of the bank to market changes and needs since the relationship was -1.263 significant at 0.05 significance levels. The relationship between organization effectiveness and the reliability of the information technology system was 1.737 which was significant at 0.05 significance levels.

Another study in this area was done by Giang et al. (2019) who found that improving the financial accessibility directly enhances firm productivity and that Firms having easy access to credit of any sort significantly improves their productivity by approximately 8.6% annually. Even though in this study, the subject was about a bank loan the principal of access to facilities. The study by Gian et al (2019) found that in Vietnam like in many other developing countries, obtaining financial services at an affordable rate and fair terms is a significant challenge for small and medium enterprises. The SMEs in Vietnam account for about 95% of the total enterprises, and the financial market of the country has not been well developed. The study investigated the causal effects of access to finance on productivity of SMES in the manufacturing sector in particular. The study looked at among other things the access to credit. The empirical results indicated that improving financial accessibility could directly enhance firm productivity which invariably leads to prosperity.

In conclusion in the last two studies demonstrated because of the ease of access that the banks had provided their users there was less default, there was greater repayment and thus the banks were able to benefit by providing greater ease of access to their customers. This study will look at the perceived ease of access as a lead to financial prosperity as a variable that will be operationalised by looking at the time it takes to access the credit and frequency of times applied and successful.

**Methodology**

This study adopted an explanatory research design. In an explanatory research design, the researcher sought to establish a causal relationship between variables. 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 variables 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 16th November 2020. The sampling design employed a stratified design to achieve representative sample from the respondents. From each MSE, the owner or key member was picked to participate. Primary data was collected using a structured questionnaire. A structured questionnaire was deployed, which had six parts. The first part collected demographic data whereas the second to sixth part addressed addressed the objectives. 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 ease of access’ 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 (H0) stated that the residuals were normally distributed.** If the probability value (Chi²) 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.

**Trend Analysis and Findings**

**Trend analysis**

Ease of Access variable was represented by three trends, time in hours for credit application outcome, trend of successful mobile applications and trend of total mobile credit applications. The five-year trend for time it takes in hours for credit application outcome was presented fit in figure 1 below.
Trend analysis for Time in hours it takes for credit application outcome

Figure 1: Trend analysis for Time it takes for credit application outcome; Source: Survey data (2021)

The figure 1 shows the trend in time between the credit application to receipt of an outcome. The value 1 represented “less than one hour for the outcome”; 2 represented “between 1 hour and 24 hours”; 3 represented “24 hours and 1 week”; 4 represented “between 1 week and 4 weeks: and 5 represented “more than 4 weeks”. The starting mean score of 2.31 represents therefore an average time outcome of ‘between 24 hours and 1 week’ It also shows that the timing taken gradually declined between the years of 2015 to 2019 to a mean score of 1.95.

Trend analysis for Number of Successful mobile credit Application (in reality per year)

Figure 2: Trend of Number of Successful Mobile credit Applications; Source: Survey data (2021)

The results of the research show that the average number of successful mobile credit Applications, (only those resulting in successful disbursements) made in a year had steadily risen in the period between 2015 and 2019. The value 1 represented ‘No successful credit applications in a year’; 2 represented ‘between 0 – 5 successful loan applications in the year’; 3 represented ‘5 to 10 successful loan applications’; 4 represented ‘10 to 20 loan applications’ and 5 represented ‘more than 20 successful loan applications. The graph above shows a steady upward trend from 2.61 in the first year, to 3.04. The trend demonstrated that as time passed between 2015 and 2019, the number of successful Mobile credit applications increased.
Trends analysis for Total Number of Mobile credit Application (in reality per year)

Figure 3: Trend for total number of Total Mobile credit Applications; Source: Survey Data (2021)

The trend above shows that on average the total number of mobile credit applications increased steadily. The average value of 1 represented ‘No credit applications’; 2 represented ‘0-5 credit applications’; 3 represented between ‘5 to 10 credit applications’; 4 represented ‘between 10 to 20 credit applications’; and 5 represents ‘more than 20 credit applications. The average started at 2.80 and has gradually increased to 3.32. This trend demonstrated that more and more entrepreneurs were making credit applications.

Trend analysis for Ease of Access Composite

Figure 4: Trend on the overall of Ease of Access Composite; Source: Survey Data (2021)

The above Figure demonstrates that the overall ease of accessing Mobile credit had become better especially between the years of 2015 and 2019. On average the representation shows a positive increment in access for mobile credit amount the tested sample population between the two years.

The study also conducted a regression analysis to establish the relationship between ease of access composite and financial prosperity indicators. A total of four models, the first being on financial prosperity indicator of profitability, the second being leverage, the third being liquidity, and the fourth being the financial prosperity composite. The results were presented in table 1 below.
Table 1: Relationship between ease of access and financial prosperity

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 1(Profitability)</th>
<th>Model 2(Leverage)</th>
<th>Model 3(Liquidity)</th>
<th>Model 4(Financial Prosperity Composite)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of Access composite</td>
<td>.4300236</td>
<td>.8453638</td>
<td>.4660449</td>
<td>1.741432</td>
</tr>
<tr>
<td>_Cons</td>
<td>-.0793777</td>
<td>-.3673063</td>
<td>-.2978713</td>
<td>-.7445554</td>
</tr>
<tr>
<td>Number of OBS</td>
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<tr>
<td>F</td>
<td>119.440</td>
<td>654.600</td>
<td>130.650</td>
<td>488.010</td>
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<tr>
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<td>T</td>
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<td>10.723</td>
<td>20.803</td>
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<td>Degrees of Freedom</td>
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<td>1,1915</td>
<td>1,1915</td>
<td>1,1915</td>
</tr>
</tbody>
</table>

Source: Survey Data (2021)

\[
Y_1 (Profitability) = -0.0793777 + 0.4300236 (Ease of Access)
\]

Ease of access has a significant positive relationship (0.4300236) with profitability. An increase in ease of access by one unit leads to an increase in profitability by 0.430 units.

\[
Y_2 (Leverage) = -0.3673063 + 0.8453638 (Ease of Access)
\]

Ease of access has a significant positive relationship (0.8453638) with leverage. An increase in ease of access by one unit leads to an increase in leverage by 0.845 units.

\[
Y_3 (Liquidity) = -0.2978713 + 0.4660449 (Ease of Access)
\]

Ease of access has a significant positive relationship (0.4660449) with liquidity. An increase in ease of access by one unit leads to an increase in liquidity by 0.466 units.

\[
Y_4 (Financial Prosperity) = -0.7445554 + 1.741432 (Ease of Access)
\]

Ease of access has a significant positive relationship (1.741432) with financial prosperity composite. An increase in ease of access by one unit leads to an increase in financial prosperity by 1.741 units.

The null hypothesis was that there is no significant relationship between the ease of access and financial prosperity. The null hypothesis was rejected indicating a significant relationship between ease of Access and financial prosperity of micro entrepreneurs in Nairobi. This was because the calculated F value was 119.440 with a corresponding p value of 0.000 which is less than 0.05. Additionally, the calculated t statistic (13.776) is greater than the critical t statistic (1.96). The result model was as follows.

\[
Y_4 (Financial Prosperity) = -0.7445554 + 1.741432 (Ease of Access)
\]

Discussions

The objective of the study was to determine the effect of ease of access of Mobile credit on the Financial Prosperity of small and micro entrepreneurs in Nairobi. Ease of Access was represented by time in hours for credit application outcome, trend of successful mobile applications and trend of total mobile credit applications. The trend analysis results for time it takes for credit application outcome showed a declining trend from 2015 to 2019, while the trend of number of successful mobile credit applications showed a steady upward trend. On the other hand, the total number of mobile credit applications increased steadily across the five years. On average the ease of accessing credit showed a positive increment which had become better especially between the years of 2015 and 2017 but there was some slight decline noted between 2017 and 2018 which was reversed by an increase in 2019.

Regression analysis was conducted to establish the relationship between ease of access composite and financial prosperity indicators. A total of four models were used, the first being on financial prosperity indicator of profitability, the second being leverage, the third being liquidity, and the fourth being the financial prosperity composite. The findings revealed that ease of access had a significant influence on profitability. This finding was supported by the coefficient of determination which showed that some variations in profitability was explained by ease of credit access. This finding was in line with that of Kalio, (2013) whose results showed that through credit obtained from mobile banking, small and micro entrepreneurs have been enabled to improve businesses in terms of increased business profit, increased employees, increased sales turnover, increased business diversification, increased business capital and assets as well as overall reduction of poverty among customers surveyed. The findings further agree with that of Kinyanzui (2018) who found that mobile phone attribute that significantly influenced customer satisfaction was the ease of borrowing using mobile phones which had a positive relationship with customer satisfaction and eventually lead to improved bank performance. Kinyanzui also found that the use of mobile credit enhanced brand image building in the bank, reduced the adaptability of the bank to market changes and needs leading to increased revenue. The findings further agree with Giang et al. (2019) who found that
improving the financial accessibility directly enhances firm productivity and that firms having easy access to a bank loan significantly improves their productivity by approximately 8.6% annually.

Further, findings revealed that ease of access had a significant influence on leverage. This finding was supported by the coefficient of determination which showed that some variations in leverage was explained by ease of credit access. This finding agreed with Totolo (2018) who established that entrepreneurs borrow for working capital needs. The business purpose is the single most common use case for digital credit, demonstrating a positive effect of mobile loans on the economy when the loan is used for business. The findings also agree with that of Fowowe (2017) whose results using the objective measure showed that firms that are not credit constrained experience faster growth than firms which are credit constrained. These results lend credence to the view that ease of credit access is very important for firm growth, and justifies the many measures and initiatives being put in place to make more finance available for firms. Moreover, the findings rhyme with Bongomin et al. (2017) who noted that lack of access to finance generates persistent income inequality or poverty traps and limits financial performance of small firms, whereby, without inclusive financial systems, small enterprises rely on their personal wealth or internal resources to invest which limits the growth of their business entities.

The results also confirm the study by Maryam et al. (2019) in which women with low access to finance in Pakistan were offered an opportunity to obtain mobile credit for their day-to-day activities. It was noted that those women who used the mobile credit more demonstrated greater prosperity in their quality of livelihood than those who did not interact with mobile financial services and confirming that ease of access did impact their quality of life. Additionally, the findings revealed that ease of access had a significant influence on liquidity. This finding was in line with that of Kinyanzui (2018) who studied the effect of mobile credit on the performance of commercial banks in Kenya and found that the net profit increased significantly after the introduction of mobile credit, also total assets and return on assets increased significantly. The customers receiving their credit from the mobile phone had facilitated better experience for them and conversely improving the bank’s performance. Overall, it was found that ease of mobile credit access had a positive and significant. Overall, it was found that ease of access of mobile credit had a positive influence on financial prosperity. This implies that improved access to mobile credit leads to improved financial prosperity. The test for significance showed that the influence was statistically significant and hence the null hypothesis that, there is no significant relationship between mobile credit access and financial prosperity of micro entrepreneurs in Nairobi, was rejected.

Conclusions

The research conducted on the effect of ease of access of mobile credit on the financial prosperity. There is significant relationship between ease of access of mobile credit and financial prosperity of micro entrepreneurs. The implication is that a high degree of ease of access of mobile credit improves financial prosperity in terms of profitability, leverage and liquidity. It was concluded that access of mobile credit led to increased profitability, better leverage and better liquidity. This is due to the fact that micro entrepreneur’s takes relatively less time in credit application and outcome and the number of successful mobile credit applications is high. Additionally, the number of mobile credit applications is high thus improving business profitability, leverage and liquidity. It was therefore concluded that increase in ease of mobile credit access positively enhances financial prosperity of small and micro entrepreneurs in Nairobi. The study found that there is significant relationship between ease of access of mobile credit and financial prosperity of small and micro entrepreneurs. Based on the study findings, it is recommended that mobile lenders should offer mobile credit with affordable terms. The mobile credit lenders should maintain a short of period of mobile money application and approval to enhance profitability and leverage of businesses. Moreover, it is concluded that mobile money lenders should make it easy for borrowers to obtain loans even without access to internet in order to increase the number of successful applications. This will go a long way in enhancing profitability, leverage and liquidity of business enterprises. Additionally, the mobile credit lending institutions should increase the limit for borrowing and introduce top up loans to loyal business owners to enhance their financial prosperity. Based on the study findings, this study contributes to theory and practice by recommending that mobile lenders should offer mobile credit with affordable terms. The mobile credit lenders should maintain a short of period of mobile money application and approval process to make it quick and easy in order to enhance profitability and leverage of businesses. With good use of mobile credit, there would be resulting increased profitability, liquidity and less default thus increasing financial prosperity for micro and small entrepreneurs.

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References


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