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Measuring the Contribution of Mobile Money Services to Financial Inclusion: The Case of Hormuud's Evc-Plus in Somalia

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Abstract

The purpose of this study is to measure the contribution of the mobile money services to the financial inclusion; case in EVC-PLUS services. This study applied Unified Theory of Acceptance and the Use of Technology (UTAUT) to examine the user behavior of the mobile money. Financial inclusion was measured to access the financial services, quality of the financial products, usage of the financial services and the welfare of the financial products. A sample of 245 respondents were contacted and the data is analyzed using both descriptive and inferential statistics to estimate the model parameters. The strength of the model is tested as we found that the model is strong enough to correctly estimate the model parameters. Structural equation model is used to examine the interrelationship between mobile money, components of the financial inclusion and the financial inclusion as a dependent variable.

This study found that mobile money has a positive and direct contribution to the financial inclusion in Somalia. The welfare of the financial product is the key factor that contributes to the financial inclusion, usage of the financial services, quality of the financial products and the access to the financial service all have a positive and significant relationship with financial inclusion. Mobile money is also positively linked to the components of the financial inclusion as it prompts the usability of the financial products as well as their welfare benefits. We found that the gap between the genders is very minimal and that women have the same privilege as men in the context of the financial inclusion.

Keywords: Access to financial service, Quality of the Financial Products, Usage of the financial Serviceand the Welfare of the Financial products

1. Introduction

Financial inclusion is an absolute universal goal with amplified attention of the policy makers and the international development agents in the quest to improve the lives of the poor and the disadvantaged communities. The access to the financial service advances the living standard by increasing income through business investment, saving and cash flow management which those in turn assist poor people in Africa to escape from the poverty (Zins, and Weill (2016). The financial sector in Sub-Saharan countries are incapable or unwilling to reach the poorest portions of the population, henceforth, lack of

the access to the financial service catalyze to the poverty reduction initiatives in Africa (David and Deng, 2017).

Mobile money exhibits to be an apparatus to access financial service and it allows the users to make payments and save money with the minimum transaction cost (Jack & Suri, 2014; Hughes & Lonie, 2007). Mobile money service has reduced the dependence to the banking system and facilitated the objectives of the financial inclusion (Maëlle, 2017). Moreover, it protracted financial services to the rural areas where there is no formal financial system (Munyegera & Matsumoto, 2016).

In Somalia, mobile money plays crucial role in the development of the financial sector as mobile money services is used to transfer and save money. A study of the world bank highlighted that 63% of mobile money users save their funds to their mobile phones and receive remittance money through their mobile accounts (World Bank, 2017). Hormuud Telecom's EVC-PLUS is by far the most used mobile money service in Somalia with a penetration rate of 73 percent and 92 percent of user satisfaction rate. EVC-PLUS is used as a means to settle the transaction and store money along with its safety and abundant availability. It also grants access of the financial services to many unbanked populations in Somalia. According to the world bank data, only 15.5 percent of Somalis total population have a bank account and get access to the banking service.

The novel innovations of the mobile technology have great potential to enhance the financial inclusion of poor communities in Somalia. Mobile money services have emerged to consolidate the fragile banking system in Somalia and it prompted a scalable means to extend financial services to the remote non-urban areas. Despite the importance of the mobile money to the whole economy of Somalia, there is very little empirical evidence of the contribution of mobile money to the financial inclusion in Somalia. Such evidence is severely needed to develop a policy environment that embraces mobile money services as an instrument to promote financial inclusion in Somalia. The purpose of this study is to measure the contribution of mobile money to financial inclusion in Somalia. This study specifically examines how these factors; access to the financial services, quality of the financial product, usage of the financial services and the welfare of the financial products are linked to the financial inclusion, it will also measure how the mobile is linked to each of these factors. The rest of this study is structured as follows; the second section reviews related literature, the third section develops methodology and the model of this study, the fourth section presents results and the discussion, the fifth section is conclusion and the recommendations of this study.

2. Reviews of the Literature

There is a bulk of empirical literature that suggest the potentiality of the mobile money to steer financial inclusion and the economic growth in Africa and the other parts of the world. Such studies include Gosavi (2017), who stated that mobile money established mobile based financial means that can transfer money rapidly and in a safely manner in the rural areas of Uganda. Duncombe (2009) revealed that mobile money provided a quick financial tool that assisted money payment and transfers in the banked and the unbanked communities. Ndiwalana, Morawczynski, and Popov (2010) found that mobile money has boosted the financial inclusion especially in the poor household and low-income community.

According to Upadhyay and Jahanyan (2015), they indicated that the launch of mobile money by telecom companies, provided basic financial services such as withdrawal and deposits, and consequently boosted the financial inclusion among the low-income class in Sub-Saharan African countries. Jonathan & Camilo (2008) observed that a considerable number of lives in rural areas were transformed by mobile money which increased their access to financial services and the financial inclusion as well. Kumar, Martin, and O'Neill (2011) argued that mobile money provided means to make payment to a person and business without relying on the bank accounts, so that mobile money amplified financial inclusion of the poor. Aker and Mbiti (2010) suggest that mobile money enabled

people who migrated from rural areas to transfer money to rural locations through mobile technology so that financial inclusion of rural population would get promoted.

Mobile money is the bank to the unbanked population, according to Kasekende (2013) who presented that mobile is the engine that drives economic development and financial inclusion in Sub-Sahara Africa, it contributes equally to both the banked and unbanked community.

Maurer (2012) found that mobile money offers access of financial service to the unbanked people in emerging and the developing economies that have less banking infrastructure. Camner and Sjöblom (2009) revealed that mobile money has reduced financial exclusion enabling access to the financial service of the poor individuals. Lawack (2013) found that mobile money helped consumers to stay connected to the banks and the other financial actors. Donovan (2012) stated that mobile money helped the efforts against the banking exclusion by finding the solution to the problems related to banking prices and the banking infrastructure. McKay and Pickens (2010) indicated that mobile money network providers counterbalanced the price of the banking and made financial services easily available.

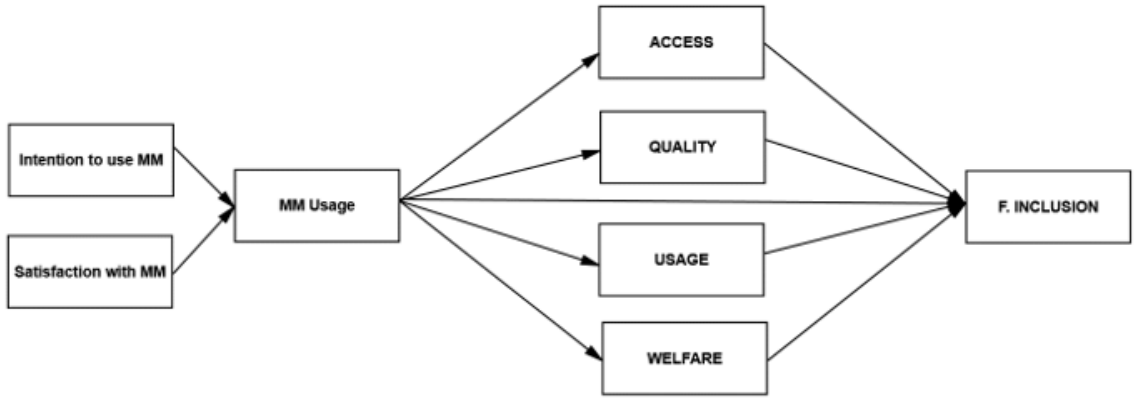
Camner and Sjöblom (2010) concluded that mobile money decreased banking exclusion and accelerated financial inclusion to the individuals in remote areas that were disconnected from the financial system. Lenka, and Barik (2018) found that there is a positive and significant relationship between the expansion of the mobile phone and the growth of the financial inclusion in SAARC countries. Mago and Chitokwindo (2014) found that poor and economically disadvantaged people tend to adopt mobile banking due to its accessibility and the security. Ouma et al. (2017) argues that mobile financial services have increased saving of the low-income individuals and enhanced financial inclusion in sub-Saharan Africa. Mas & Radcliffe (2010) found that digitalization of the financial service through mobile money lowered the costs associated with financial service delivery and increased financial inclusion. Kikulwe, Fischer, and Qaim (2014) found that mobile money has helped access the financial service of the small holding farmers and increased welfare and financial inclusion.

2.2. Theoretical Framework

The framework that this study adopts is Unified Theory of Acceptance and the Use of Technology (UTAUT). The theory is stipulated by Venkatesh, Morris, Davis, and Davis (2002) to explain user's intentions to use the information systems and the subsequent user behavior. The theory uses four constructs; user intentions is measured to performance expectations, expected efforts and social influence while user behavior is measured to facilitating condition. Mobile money usage that promotes financial inclusion is measured to intent the use of mobile money and the user satisfaction with the mobile money. Several previous studies; Mas and Morawczynski (2009), Martín and Herrero (2012), George et.al (2018), used this theory to measure user intentions to adopt the technology.

The concept of the financial inclusion is affected by multiple components some of which varies from the country to another. However, financial inclusion is defined as the availability and the access of the financial service to the large number of the poor population at low cost (De Koker and Jentzsch, 2012; Evan, 2017). This study uses four common measures of financial inclusion those are; access to financial services, quality of the financial products, usage of the financial services and the welfare of the financial products. Several previous studies; Čihák, Demirgüç- Kunt, Erik, and Levine (2012); Claessens (2006); Kempson (2006); Beck, Demirguc-Kunt and Martinez Peria (2008); used these factors to measure the financial inclusion. The below figure portrays mobile money, financial inclusion and the factors that measures it.

Figure 1: Framework for Mobile Money Usage and Financial Inclusion an



The framework presented in this study depicts that the adoption of the mobile money services results from; the intent to use it and the user satisfaction of the mobile money services. Mobile money service reduces the barriers of opening bank accounts and improves the physical proximity of the financial services and promotes the affordability of the financial services. Mobile money services also facilitate the development of the financial products with attributes needed by the customers. Mobile money service also effects the regularity, frequency and the length of the time required to attain financial services. Mobile money is also linked to the livelihood of the user in terms of business and personal use. The combination of these components leads to financial inclusion of the households. Several previous studies; Čihák, Demirgüç-Kunt, Erik, and Levine (2012); Claessens (2006); Kempson (2006); Beck, Demirguc-Kunt., and Martinez Peria (2008); used these constructs to measure financial inclusion.

2.3. Hypothesis Development

H1: There is no significant relationship between financial inclusion and the access to the financial servicein Somalia.

H2: There is no significant relationship between financial inclusion and the access to the financialservicein Somalia.

H3: There is no significant relationship between financial inclusion and the quality of the financialproducts.

H4: There is no significant relationship between financial inclusion and the welfare of the financialproducts in Somalia.

H5: There is no significant relationship between financial inclusion and the mobile money usagein Somalia.

3. Research Methods and Model Specification

This study employs a conclusive research design, especially casual research design to test the hypothesis specified in the previous section and to measure the relationship between mobile money and the financial inclusion in Somalia. This design is opted to deal with a large sample which is required to be representative. Quantitative method is used to collect and analyze the data from the large group of population dispersed in Somalia. The target population of this study are all those people in Somalia that own mobile phones and use mobile money services.

Given the nature of this study, the research population is infinite so proportions method is used to determine the sample size. This method is required to decide the level of precision, the level of the confidence and the z-value associated with confidence level, then the sample size is calculated using standard error formula. A sample of 245 respondents resulted from this approach and convenience

sampling method is applied to reach these respondents. Structured and self-administered questionnaire scaled to Likert -scale is used as the instrument to collect the data from the respondents.

Descriptive and inferential statistics is used to analyze cross-sectional primary data. Descriptive analysis, mean and the standard deviation of each item is calculated. Regression analysis is used to determine the coefficient of the variables and to test the hypothesis of this study. Financial inclusion is measured to the access, quality, usage and the welfare of the financial products and services. Access was measured to five items; number of the financial institutions, number of the financial services, account maintenance fee, number of the documents required, and the equality of the financial service provision.

Quality is measured to five items; suitability of the saving product, suitability of the loan product, user satisfaction of the saving product, user satisfaction of the loan product, and the usefulness of the financial products. Usage is also measured to five items; cost to trip financial institution, service level of the financial institutions, regularity of the financial services, convenience of the financial services and the easiness of the financial services process. Welfare is measured to five items; the improvement of the living standard, increment of the household consumption, access to health care, improvement of the housing conditions and the access to the utilities. The mobile money is measured by the intention to use mobile money and the satisfaction with mobile money.

3.2. Model Specification

This study employs cross-sectional data collected once in the period time. Linear regression method, Ordinary Least Square (OLS) is used to specify the model applied in this method. Based on the assumption built on it, OLS is one of subtlest methods in regression. The model of this study is presented in the following equation;

$$InFIC_i = \beta_0 + \beta_{ACC} \ln ACC_i + \beta_{QY} \ln QY_i + \beta_{USG} \ln USG_i + \beta_{WLF} \ln WLF_i + \beta_{MM} \ln MM_i \ \theta_{GGP} GGP_i + u_i$$

Where; FIC is financial inclusion, ACC is the access to the financial service, QY is the quality of the financial products, USG is usage of the financial services, WLF is welfare of the financial products, MM is mobile money, GGP is gender gap, i is number of observations and u is error term.

3.3. Model Diagnostics

The strength of the model is examined by checking the existence of the problems that leads the model to be biased. The normality of the data is tested using Jarque-Bera method. The null hypothesis (H_0: $Data\ is\ not\ nmaly\ distributed$) is tested by using Chi-square method. If we reject the null it means the data of this study is normally distributed. Stability of the model is examined through recursive estimates, CUSUM test.

OLS method requires data to be homoscedastic so the problem of the heteroscedasticity is checked through this hypothesis ($H_0 : {\sigma^2}_1 = {\sigma^2}_2 \dots \dots .. {\sigma^2}_k = 0$). If we reject the null hypothesis, then we conclude that the model has a problem of the heteroscedasticity and will correct to match the ideal assumption of the ordinary least square method. he existence of the multicollinearity will also be examined using Variance Inflation Vector (VIF). The model has a perfect collinearity problem if it gets a VIF coefficient greater than 10 number.

Structural Equation Method (SEM) will be used to estimate the correlation between mobile money and the components of the financial inclusion. Maximum likelihood method with the intercept and mean is used to calculate the correlation coefficients of the mobile money and the categories of the financial inclusion.

4. Results and Discussion

This study measures the contribution of the mobile money to financial inclusion in Somalia. A Sample of 245 respondents was contacted and subsequently, 234 responses were returned making the response rate about 96% percent. The missing values of the data was analyzed using Missing at completely random (MCAR) method. The hypothesis of MCAR was done through Chi-square and we rejected the null at the significance level of 5%, revealing that the value are not missing at completely random. The existence of the outliers was examined by boxplot and only one outlier was identified in the age groups of the respondents.

Demographic characteristics of the respondents was collected. Gender, age, education, income and the household size of the respondents were collected and the result is presented in the table (1).

Table 1: demographic characteristics of the respondents

Factors	Percentage
Gender	
Male	72
Female	28
Age	
18-24	40
25-34	51
35-44	7
45-54	2
55 or more	0
Educational background	
Secondary Level	5
Bachelor degree	64
Master degree	35
PhD	1
Monthly Income	
$100-300	43.1
$301-600	20.2
$601-900	17
9001 or More	19.7
Household Size	
5 or less	15.9
6-10	29.3
10 or More	25.8

The data in table (1) represents demographic characteristics of the of the respondents. Both male and female participants responded to this study. About (91) percent of the of our respondents were in 18-34 group referring to the fact that majority of the Somalis population is young and are more inclined to use mobile technology and deal with financial institutions. Literacy is an important factor in mobile money usage thus, most of our respondents were at bachelor degree and a significant number of our respondents were in a postgraduate level.

The data of the monthly income shows that both the wealth and the low-income classes subscribe mobiles and use mobile money to access the financial services. This result supports that mobile money contributes to the financial inclusion and sharply supports to the low income and poor population. Household size in Somalis is very substantial and the data shows that a typical house in Somalia is lived in by more than five people.

4.1. Descriptive Statistics of the Categories Financial Inclusion and Mobile Money Usage

Financial inclusion was categorized to four categories, those are; access to financial services, quality of the financial products, usage of the financial service and the welfare of the financial products. Five

items were measured to each one of these categories. The mean and standard deviation of the items are calculated and the result is presented in the below table (2).

Table 2: Descriptive Statistics of Financial Inclusion Categories

Code	Statement	Mean	STD
Access to Financial Services			
ACC1	My location has sufficiently many financial institution branches	1.445	0.682
ACC2	There is a lot of financial service delivery channels near my place	1.743	0.779
ACC3	Financial institution charges an affordable account maintenance fee	2.255	0.437
ACC4	To open account is simple and only few documents are required by financial institution	1.668	0.760
ACC5	Financial institutions in my location do not discriminate any one during service provision.	1.647	0.787
ACC	**Grand Mean**	**1.754**	**0.385**
Qaulaity of the Financial Product			
QY1	The saving products provided by the financial institution fit to our needs	1.466	0.697
QY2	The loan products provided by the financial institution fit to our needs	1.927	0.751
QY3	We are satisfied by the saving products provided by the financial institutions	1.644	0.733
Qy4	We are satisfied by the loan products provided by the financial institutions	1.923	0.789
QY5	Financial institutions provide saving products that are useful to us.	1.529	0.691
QY	**Grand Mean**	**1.697**	**0.472**
Usage of the Financial Services			
USG1	The trip to the financial inclusion is minimal and affordable	1.752	0.811
USG2	The financial institutions offer very good service level	1.643	0.704
USG3	The financial institutions provide a constant and regular service to us	1.635	0.722
USG4	The financial institutions provide financial services at convenient hours	1.675	0.729
USG5	We go through a simple process to get financial services from the financial inclusion	1.729	0.812
USG	**Grand Mean**	**1.687**	**0.475**
Welfare of the financial products			
WLF1	Financial institutions provide financial services that improve our living standard	1.477	0.686
WLF2	Our households' consumption has increased in respect of the financial services provided by the financial inclusion	1.576	0.710
WLF3	Financial institutions provide products and services that upgraded our access to the health services	1.663	0.727
WLF4	Our housing condition has improved due the financial products and the service we get from the financial institutions	1.728	0.710
WLF5	Financial institution provides financial products and the service that improve our access to the utility	1.564	0.704
WLF	**Grand Mean**	**1.602**	**0.478**

Table (2) presents mean and the standard deviation of the financial inclusion categories. Respondents state that there are many branches for the financial institution and that customers are not discriminated in service provision. Respondents indicated that a few documents are required to open an account and the maintenance fees charged by the financial institutions is fair. Grand mean of the access to the financial inclusion turn to be (1.754) and the standard deviation is (385). The result reveals that access to the financial institutions in Somalia is fairly good and uplifts financial inclusion in Somalia. Access to the financial inclusion is prudently promoted by the availability of the mobile money service.

The quality of the financial inclusion was scrutinized and the respondent agreed that saving services that financial institutes provide is good and suite to their need. Respondents also expressed that loan products provided by financial institutions is satisfactory. Grand mean of the quality of the financial products is (1.697) and standard deviation (0.472). Respondents are more satisfied with saving services offered by the financial inclusion than the loan products provided by the financial institutions. Mobile money services facilitated the saving and the customers can deposit to their bank account without visiting the financial institution branches.

Usability of the financial service is a key factor to the financial inclusion of the community. This study finds that the cost of making a trip to financial institutions is inexpensive and the financial services are available in regular bases in convenient hours. Respondents agreed that the process of

getting financial service is considerably easy and straightforward. The grand mean of the usage of the financial service is (1.687) and standard deviation is (0.475). The results presents that financial products are usable and friendly. The application of the mobile money in Somalia, EVC-PLUS service apparently reduced the cost making trip to the financial institutions and the consistence of the financial service.

The welfare of the financial products is another measure of the financial inclusion. The result of this study points out that financial products have improved the living standard of the society and improves the access to social services such as health service. Financial products enhance the consumption and improves the housing condition in Somalia as some of it is used to pay for utilities and the basic needs of life. Welfare of the financial products got a mean of (1.602) and standard deviation (0.478). Mobile money service played a prominent role in developing the welfare of the financial products in Somalia where people do every transaction just by using the mobile money services.

Figure 1: Categories of the financial inclusion

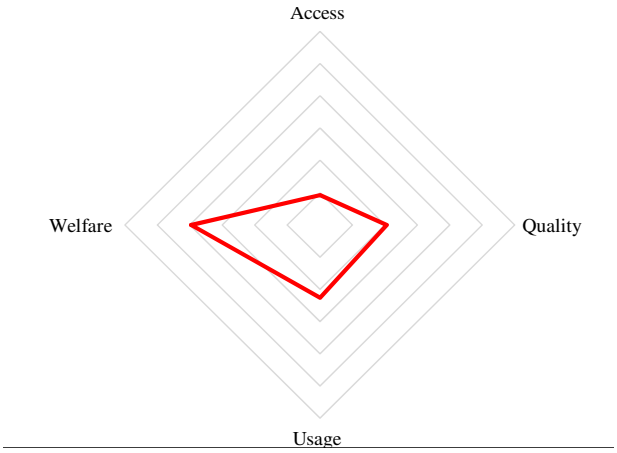


Figure (1) shows that the dominant category of the financial inclusion is the welfare of the financial products. Respondents stated that financial products promoted living standard, increased consumption, improved health services. With use of the mobile money, financial products are used to make the payments of essential services such as utility and education. Usage of the financial services is the second most important attribute of the financial inclusion in Somalia. Access and the quality of the financial products are also great drives of the financial inclusion in Somalia .

4.2. Descriptive Statistics of the Adoption of Mobile Money Service

Mobile Money adoption is measured by the intentions to use mobile money and the user satisfaction of the mobile. Five items were measured to each factor; The continuance of their usage, complaints and their attitude towards the services were all taken into account. The result of the mobile money adoption is presented in table (2).

Table 2: Descriptive Statistics of the Adoption of Mobile Money Adoption

Intention to Use Mobile Money			
INT1	I intend to continue using mobile service in the upcoming months	1.423	0.656
INT2	I intend to extend my usage of mobile service beyond the money transfer	1.377	0.634
INT3	I intend to keep using mobile money services in future coming years	1.483	0.720
INT4	I have a strong positive opinion towards the use of mobile money services	1.453	0.700
INT5	I always have a positive attitude towards the use of mobile money services	1.511	0.707
INT	**Grand Mean**	**1.450**	**0.435**
User satisfaction of Mobile Money			
US1	I am satisfied with mobile money services in my transactions	1.339	0.625
US2	My mobile services perfectly meet my financial needs	1.279	0.449
US3	My mobile money meets my expectations towards financial services	1.612	0.714
US4	Usually, I don't have complaints about financial services of mobile money	1.697	0.768
US5	Service of the mobile money is constant and the reliable	1.515	0.7253
US	**Grand Mean**	**1.489**	**0.451**

Mobile money adoption in Somalia is supported by the high penetration of the mobile usage in Somalia. Result in the table shows that people intend to continue using of the mobile money with all of its services. Mean of the intention to use mobile money is (1.450) and standard deviation (0.435). The result indicates that users have a positive perception to the mobile money services which they will continue using up to the coming years. This study also measured the user satisfaction of the mobile money services. Respondents expressed that they are satisfied with financial transactions provided by mobile money and that it meets with their expectations and satisfied their needs. Mean of user satisfaction of mobile money is (1.489) and standard deviation is (0451). Respondents revealed they have no much complaints and that Hormuud's mobile money service is reliable and trustworthy.

4.3. Estimation of the Model Parameters

Relationship between financial inclusion with its component and mobile money was estimated using regression method, ordinary least square (OLS). The model is specified in the methodology section and the result of the model parameters is presented in the table (3) .

Table 3: Estimation of The Model Parameters

Variable	Coefficient	Std. robust Error	t-Statistic	Prob.
FINC	0.034020	0.009145	3.957198	0.0001***
ACC	0.221659	0.014099	16.67918	0.0000***
QY	0.200863	0.010631	19.55371	0.0000***
USG	0.196028	0.009210	18.49340	0.0000***
WLF	0.222482	0.012214	22.19437	0.0000***
MM	0.114527	0.009201	12.03408	0.0000***
GENDER GAP	-0.003443	0.005192	-0.663156	0.5080

Tables (3) shows constant, coefficients, standard deviation, t-test and the p-value of the model. All of the variables of the model are statistically different from zero and significant at level of 1%. We reject (H1, H2, H3, H4, H4 and H6), as all of the independent variables have positive and significant relationship with the dependent variable. Only gender gap which is a dummy variable is insignificant. The model is fit to estimate the parameter. R-square is 95 percent showing that 95 percent of the dependent variable variation is explained by the independent variables. F-statistics is significant at the level of 1% evidencing the joint significance of the variables. The normality of the data was checked through Jarque-Bera methods and the null hypothesis was rejected at the significance level of 5% showing that data is from normal distribution. The heteroscedasticity test is done to ensure the consistency of the variance. We found that heteroscedasticity is significant, so standard robust error was used instead of the standard deviation. The multicollinearity between the independent variables

was examined using variance inflation vector (VIF) and all variables have a five or less VIF. The stability of the model is analyzed using CUSUM test and we found that the model is stable. The access to financial service has a direct contribution to the financial inclusion. A one percent rise of the access to the financial services causes financial inclusion to increase about (0.221) percent. The quality of the financial products contributes positively to the financial inclusion. One percent improvement of the quality of the financial products cause financial inclusion to increase about (0.200) percent. Usability of the financial products also has a proportional relationship to the financial inclusion and a one percent enhancement of it leads financial inclusion to enhance about (0.196) percent. Welfare attribute of the financial products has a positive contribution to the financial inclusion. One percent improvement of the welfare of the financial improvement leads financial inclusion to increase about (0.222) percent. The mobile money service has a positive contribution to the financial inclusion. One percent increase of the mobile subscriptions leads financial inclusion to increase about (0.1145) percent. Mobile money is linked to all components of the financial inclusion. We examined the direction and the extent of such a relation, so we developed structural equation model. Maximum likelihood method with means and the intercept is utilized. The result of the model is portrayed in the below figure.

Figure 2: Path Analysis of Mobile Money and the Components of the financial Inclusion in Somalia

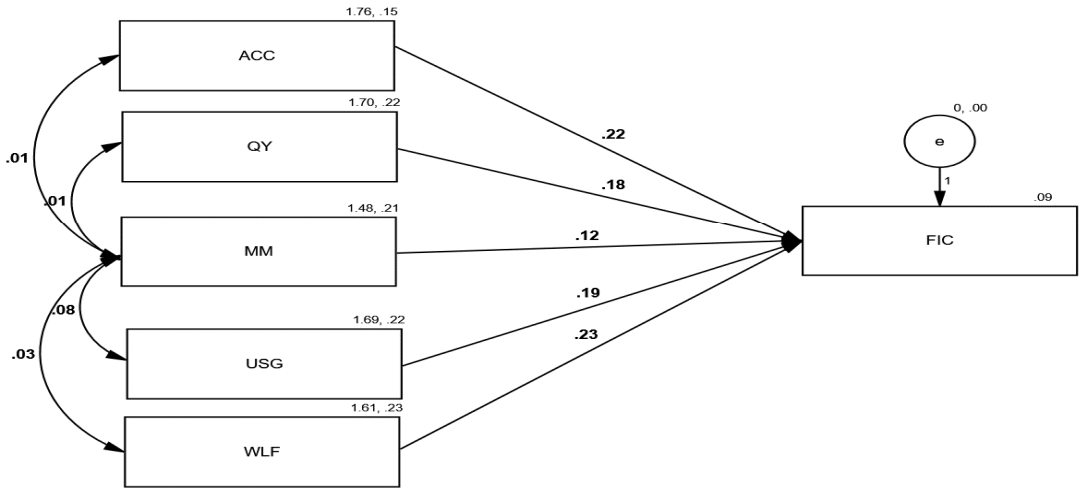


Figure (2) presents that mobile money has a direct relationship with categories of the financial inclusion. One percent increase of the mobile money usage, leads the usability of the financial service to increase about (8) percent and the welfare of the financial products to increase about (3) percent. Mobile money gives easy access to the bank accounts and improves the quality of the financial products, namely saving mechanism and the loan availability as well. EVC-PLUS also assisted the usability of the financial service by enabling its users to get the banking services in regular bases and in convenient hours. EVC-PLUS has condensed the cost of the trip to the banks since people can deposit and withdraw from the bank via that service. Mobile money enhanced the welfare of the financial products and established an easy and safe means to payment of money, attain the consumption and the transaction of housing activities. Welfare of the financial products and the usability of the financial services are key areas where EVC-PLUS consolidated to the financial inclusion in Somalia.

The application of the EVC-PLUS has social implications as it demoted the gender gap in the financial inclusion in Somalia. Gender gap in financial inclusion is 0.003443 percent meaning the females are insignificantly less than their male counterparts and are able to use financial services similar to the males. Inclusion of women to the financial service holds a greater promise to the society since a sizeable number of women take a great role in their family and are the provider of the life

amenities. Women in Somalia also start and run small businesses and need financial services for their daily activities. Mobile money helps get banking services, save money and transfer to their families.

The financial inclusion is prevalent to Somalia's financial and social development both in urban and rural areas. Economist and policy makers suggest that financial inclusion is a prominent enabler of the poverty alleviation and increasing the prosperity. According to the world bank data (2017) less the 15% of the adult population in Africa has a bank account. Poor population in Somalia need low cost and reliable means to transfer and receive daily payments. The inability to get such methods will keep the vicious circle of poverty and limits their movements. Failure to access the financial products means to limit ability to credit from the financial institution given that large part of Somalia's population work at informal sectors and placed in remote rural areas.

The enhancement of the financial inclusion helps the poor people to save parts of their income and build up financial resources which elevate their lives in general. Thus, mobile money service in Somalia, EVC-PLUS, is the suitable and efficient method that boosts the financial inclusion and gives banking to the unbanked majority of the Somalia. People in Somalia rely on EVC-PLUS to transfer and receive money, and make payments necessary to their daily lives. Mobile is a strong well-designed instrument to combat the financial exclusion since it gives low cost accessible financial services. Shrewdness of the banking system is yet necessary to guarantee financial inclusion by mobile money services.

Many studies undertaken in Africa emphasized that mobile money services are the stepping stone to the financial inclusion in Africa. According to Donovan (2012) and Kasekende (2013) mobile money continues to be the firm foundation for the banking services and financial inclusion in sub-Sahara Africa. Previous studies confirm the findings of this study; Gosavi (2017), Aker and Mbiti (2010), Upadhyay and Jahanyan (2015), Maurer (2012) that mobile money usage has a positive and significant relationship with financial inclusion in Africa.

5. Conclusion and Recommendation

The purpose of this study was to measure the contribution of the financial inclusion and mobile money usage, case of EVC-PLUS services used in Somalia. This study applied Unified Theory of Acceptance and the Use of Technology (UTAUT) which examined the user behavior of the mobile money. Financial inclusion was measured by the four categories those are; access to the financial services, quality of the financial products, usage of the financial services and the welfare of the financial products. A Sample of 245 respondents were contacted and 234 responses were retained. Both inferential and descriptive statistics were used to analyze the data and estimate the model parameters. The strength of the model was tested, we found that the model is strong enough to correctly estimate the model parameters. Structural equation model was used to examine the interrelationship between mobile, components of the financial inclusion and the financial inclusion.

This study found that mobile money has a positive contribution to the financial inclusion in Somalia. Welfare of the financial product is the key factor that contributes to the financial inclusion, usage of the financial services, quality of the financial products, and the access to the financial service all have positive and significant relationship with financial inclusion. Mobile money is also linked to the components of the financial inclusion and it promoted the usability of the financial products as well as their welfare benefits. We found that the gap between the gender is very minimal and that females have the same privileges as men in the context of the financial inclusion.

6. Recommendations

1) Mobile money proves to be an effectual instrument to promote financial inclusion. Hence financial institutions and the commercial banks should develop financial products those are easily functioning via mobile money platform. Financial institutions should also utilize mobile money services to reach the poor and unbanked rural population and give them saving accounts usable through mobile phones.
2) Microfinance programs should use mobile money services to expand financial inclusion and so as to bring opportunities and resources to the financial sector. It will ultimately benefit the bottom of the economic pyramid, promotes capital markets and enrich business lines. Mobile money technology permits microfinance institutions to reach more people in a various area at low transaction cost.
3) Financial inclusion increases per capita income, upgrades social welfare and the personal investment in education and the health services. Financial inclusion supports to deepen the financial market and nurtures small businesses. Government institutions should establish a supportive policy environment for financial inclusion that upholds mobile money services.

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