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THE EFFECT OF FINANCIAL TECHNOLOGY IN INCLUSIVE ECONOMIC GROWTH IN SALAAM SOMALI BANK, MOGADISHU, SOMALIA

Author: MAHAMED ABDI MAHAMED

Co-Author: DR: DANIEL TWESGE

Department of Master of Science in finance, University of Kigali, Rwanda

Email: cagwayn8@gmail.com

Department of accounting and finance, University of Kigali, Rwanda

Email:dtwesigye@uok.ac.rw

Abstract

In Africa, Financial technology, or fintech, has gained increasing popularity in Africa as a means of promoting inclusive economic growth. Fintech refers to the use of technology to deliver financial services, and it has the potential to increase access to financial services, reduce costs, and improve the efficiency of financial transactions. That is why this study entitled “the effect of financial technology in inclusive economic growth in salaam Somali bank, Mogadishu, Somalia” is being conducted. The study employed mixed research design which is descriptive and correlation research design in which quantitative data analysis was used to produce richer and more complete information. The sample size was derived from 300 participants of salaam Somali bank in Mogadishu Somalia. They were surveyed using Sloven’s formula at a confidence interval equal 95% and the margin error of 5%. The study, was delve into the research results and findings obtained from a questionnaire administered at Salaam Somali Bank in Mogadishu, Somalia. Our focus was on various aspects of financial technology and its potential effects on inclusive economic growth within the Mogadishu, Somalia context. The Effect of Mobile Money on Inclusive Economic Growth: We examined the impact of mobile money on inclusive economic growth. The results, as presented in Table 4.3.1, reveal that respondents generally agree and the Overall of the average of mean score of 3.7637 suggests that employees at Salaam Somali Bank concur with the study's exploration of the relationship between mobile money and

inclusive economic growth. The Effect of Mobile Banking on Inclusive Economic Growth: This section assessed the influence of mobile banking on inclusive economic growth. Table 4.3.2 indicates that respondents generally agree and the average mean score of 3.7053 suggests that respondents support the study's investigation into the connection between mobile banking and inclusive economic growth. The Effect of Online Remittance on Inclusive Economic Growth: Our analysis examined the impact of online remittance on inclusive economic growth. As detailed in Table 4.3.3, respondents generally agree and the average mean score of 3.6561 indicates that respondents are in alignment with the study's exploration of the relationship between online remittance and inclusive economic growth. The Effect of E-Commerce on Inclusive Economic Growth: This section explored the influence of E-commerce on inclusive economic growth. As depicted in Table 4.3.4, respondents generally and the average mean score of 3.6515 indicates that respondents support the study's investigation into the connection between E-commerce and inclusive economic growth. Correlation Analysis**:** Lastly, we conducted a correlation analysis to explore the relationships between the variables of financial technology and inclusive economic growth. As shown in Table 4.5.1, the analysis indicates the following: Mobile Money has a positive and weak relationship on inclusive economic growth (Pearson Correlation, r=0.220, p=0.004). Mobile Bank has a positive and weak relationship on inclusive economic growth (Pearson Correlation, r=0.240, p=0.002). Online Remittance has a positive and strong relationship on inclusive economic growth (Pearson Correlation, r=0.946, p=0.00). E-Commerce has a positive and weak relationship on inclusive economic growth (Pearson Correlation, r=0.199, p=0.009). The findings suggest that financial technology has a generally positive but varying influence on inclusive economic growth in Mogadishu, Somalia, with online remittance standing out as a significant driver of inclusive economic growth, this study provides insights into the perceptions and relationships between various forms of financial technology and inclusive economic growth within the context of Salaam Somali Bank in Mogadishu, Somalia. The findings align with previous research and underscore the potential benefits of financial technology in fostering economic inclusivity.

Keywords: financial technology, inclusive economic growth, mobile money, mobile bank, online remittance and E-commerce.

Introduction

Financial technology, also known as fintech, refers to the use of technology to improve and streamline financial services. Fintech has been rapidly growing in recent years, and it has the potential to play a significant role in promoting inclusive economic growth. Inclusive economic growth refers to economic growth that benefits all members of society, including those who are traditionally marginalized or excluded. Fintech can encourage entrepreneurship by improving access to financing and financial services for small and medium-sized businesses (International Finance Corporation 2018).

The effect of fintech in promoting inclusive economic growth has been widely recognized by governments and international organizations. In 2015, the United Nations included access to financial services as a key component of its Sustainable Development Goals, with a target to ensure that everyone has access to affordable financial services by 2030 (The United Nations, 2015). Despite the potential benefits of fintech, there are also risks and challenges associated with its use. For example, there is a risk of cyber attacks and data breaches, which could compromise the security of financial transactions. Additionally, there are concerns about the potential displacement of traditional financial institutions and the impact on employment in the financial sector (Kshetri, 2018). In Africa, Financial technology, or fintech, has gained increasing popularity in Africa as a means of promoting inclusive economic growth. Fintech refers to the use of technology to deliver financial services, and it has the potential to increase access to financial services, reduce costs, and improve the efficiency of financial transactions (World Bank, 2018). The use of fintech in Africa can be traced back to the introduction of mobile money platforms, such as M-Pesa in Kenya in 2007. M-Pesa has since expanded to other African countries, and it has enabled millions of people to access financial services and make digital payments (GSMA, 2020).

In Somalia, Somalia has experienced decades of conflict and instability, which have hindered economic development and access to financial services. However, in recent years, the country has seen the emergence of innovative fintech solutions that have the potential to promote inclusive economic growth (World Bank, 2019). One of the most notable fintech innovations in Somalia is mobile money, which has enabled people to make digital payments and access financial services. The most popular mobile money platform in Somalia is Hormuud Telecom's EVC Plus, which has over 3 million subscribers (GSMA, 2021).

Despite recent improvements in the economic landscape of Mogadishu, Somalia, the achievement of inclusive economic growth remains a significant challenge. Limited access to financial services and the absence of a robust financial infrastructure act as barriers to economic participation and hinder the equitable distribution of wealth. Financial technology (fintech) has emerged as a potential solution to address these barriers and promote inclusive economic growth by leveraging digital innovations and mobile platforms (Kamara, Rahman, and Chandio 2019)

Mogadishu, the capital city of Somalia, faces significant challenges in achieving inclusive economic growth and addressing financial inclusion gaps. The limited accessibility to formal financial services, particularly among marginalized communities and residents in underserved areas, hinders their participation in the economy. The emergence of financial technology (fintech) presents a potential solution to overcome these barriers and foster inclusive economic growth in Mogadishu. However, to effectively leverage fintech for inclusive economic growth, it is crucial to understand its impact and identify the factors that drive or hinder its adoption in the local context (Ahmed and Soderlund 2018). While there is anecdotal evidence suggesting the positive impact of fintech, there is a lack of comprehensive research and analysis on its actual influence and effectiveness. Furthermore, the local context of Mogadishu, including unique social, cultural, and economic factors, necessitates a focused examination of fintech's applicability and potential challenges in the city (Kheir-El-Din, H., Dalia, K., & Buheji, M. 2020).

Therefore, the specific effect of fintech in facilitating inclusive economic growth in Mogadishu requires further investigation. this research aims to explore and evaluate the role of financial technology in promoting inclusive economic growth in Mogadishu, Somalia. By examining the current fintech landscape, assessing the adoption and usage patterns among individuals and businesses, and identifying the key challenges and opportunities, this study seeks to provide actionable insights and recommendations for policymakers, financial institutions, and fintech providers to leverage the potential of fintech to drive inclusive economic growth in Mogadishu, Somalia.

The study will be significant to the financial institutions in Somali as it will highlight the existing problems related to their institutions and will suggest possible solutions. Therefore, the recommendations that will be provided by this study, if implemented will increase the performance of this organization. The study was conducted to reach the following objectives:

i. To investigate the effect of mobile money in inclusive economic growth in Mogadishu Somalia.

ii. To determine the effect of mobile banking in inclusive economic growth in Mogadishu Somalia.

iii. To examine the impact of online remittance in inclusive economic growth in Mogadishu Somalia.

iv. To fine out the effect of E- commerce in inclusive economic growth in Mogadishu Somalia

2. Literature review

2.1 Definition of concepts

Financial technology

Fintech is a blend of "financial" and "technology". It refers to any app, software, or technology that allows people or businesses to digitally access, manage, or gain insights into their finances or make financial transactions. Over the last decade, as consumers increasingly adopted digital tools, fintech arose as a means to help consumers address financial challenges and make progress toward financial goals. In turn, consumers have come to rely on fintech for a range of uses from banking and budgeting to investments and lending as well as for its tangible everyday benefits (Justin Trificana 2022)

Inclusive economic growth

Inclusive economic growth refers to a form of economic development that benefits all segments of society, ensuring that the advantages of growth are shared equitably and reach marginalized and vulnerable populations. It emphasizes the reduction of poverty, inequality, and exclusion, while promoting opportunities and improving living standards for all individuals. (World Bank 2021)

Mobile money

Mobile money refers to a digital payment system that allows individuals to conduct financial transactions using a mobile device, such as a smart phone. It enables users to send, receive, and store money securely through mobile applications or USSD (Unstructured Supplementary Service Data) codes, without the need for a traditional bank account: (GSMA 2021)

Mobile bank

Mobile bank also known as a digital bank or neobank, is a financial institution that operates entirely online or through mobile applications, providing banking services to customers without the need for physical branches. It is a fully digital and technology-driven banking model that allows individuals to manage their finances conveniently using mobile devices, such as Smartphone's or tablets. (Investopedia 2021).

Online remittance

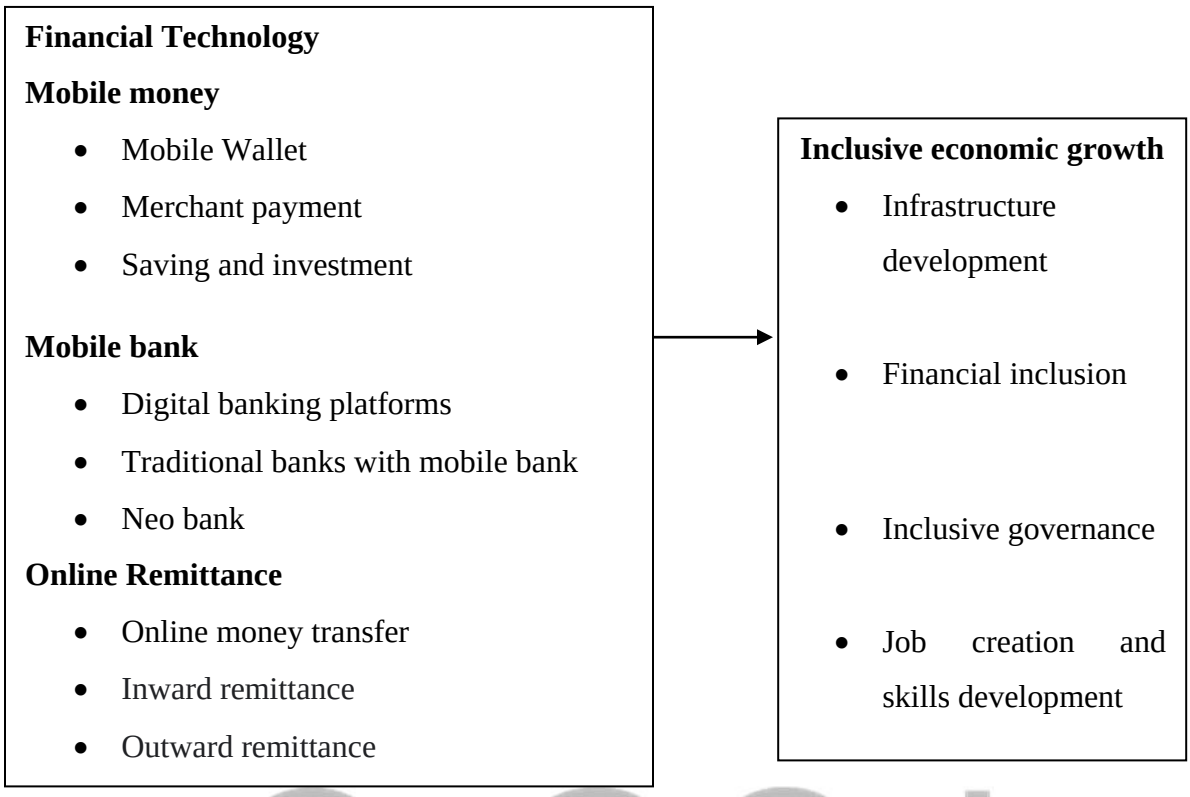
Online remittance refers to the process of electronically sending money from one location to another, typically across international borders, using digital platforms and online banking systems. It allows individuals or businesses to transfer funds to recipients in different countries quickly and conveniently, without the need for physical cash or traditional remittance channels (World Bank 2021).

E-commerce

E-commerce short for electronic commerce, refers to the buying and selling of goods and services over the internet. It involves conducting commercial transactions electronically, where businesses and consumers engage in online exchanges of products, services, and information (Shopify 2021)

2.2 Conceptual framework

The conceptual framework below illustrates the relationship between the study variables as illustrated below:



From the above Conceptual framework, the independent variable of the study is financial technology measured by; mobile money, mobile bank, online remittance and E-commerce. On the other hand, the Dependent Variable of the study is inclusive economic growth, which is operationalized as; infrastructure development, financial inclusion, inclusive governance and job creation and skills development.

2.3 Theories Underpinning the Study

The Technology Acceptance Model is an information systems theory which was developed to explain computer usage and the acceptance of information technology. It is based on Fishbein and Ajzen's theory of reasoned action, which suggests that a person's behavioral intention (BI) depends on a person's attitude (A) and subjective norms (SN),

BI = A + SN.

In short, if a person's attitude and subjective norms are known, the behavioral intention can be predicted (Ajzen & Fishbein 1980). The Technology Acceptance Model, developed by Davis, Bagozzi and Warshaw (Davis 1989; Davis et al. 1989), replaces the attitude measures of Fishbein and Ajzen's theory with two technology acceptance measures: perceived ease of use and perceived usefulness.

Perceived usefulness is defined as the degree to which a person believes that the use of a system will improve his performance. Perceived ease of use refers to the degree to which a person believes that the use of a system will be effortless. The term 'external variables' is used to describe all system design features which have a direct influence on perceived usefulness and perceived ease of use.

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses or spreads through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. Adoption means that a person does something differently than what they had previously i.e., purchase or use a new product, acquire and perform a new behavior, etc. The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible.

Adoption of a new idea, behavior, or product i.e., innovation does not happen simultaneously in a social system; rather it is a process whereby some people are more apt to adopt the innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation

2.4 Empirical review

The effect of mobile money in inclusive economic growth

Mobile money gives people an opportunity to save money in a safer way that can later be used for investments and would generate to a country's economic growth according to the economic theories. It also makes it possible for small businesses and entrepreneurs to scale up and offer their services to a broader group since distance to customers and suppliers are no longer an obstacle. A bank account is not necessary but to carry around savings in cash is risky and inefficient. Some of the reasons to why people do not have a bank account in developing countries is due to high commission costs and the long distance to bank offices (Demirgüç-Kunt & Klapper, 2018). Therefore, a mobile money account would be most beneficial to the disadvantage people in the rural and poor urban areas because of the long distance to bank offices. The mobile money services also make it possible for faster humanitarian assistance as

well as enables people to receive remittances to help the disadvantaged people by delivering digital assistance though mobile money to those affected by crisis or during the pandemic of Covid-19 (Aker, 2020).

The effect of mobile banking in inclusive economic growth

Mobile finance & banking (also known as M-Banking, mbanking, SMS Banking) is a term used for making account transactions, payments, credit applications, and other banking transactions through a mobile device such as a mobile phone, with or without a link to a traditional banking account. The advantage is that mobile financial services can work without a link to a traditional banking account, while mobile banking services are connected to a banking account. These new modes of carrying out financial transactions constitute what we call financial innovation. Mobile finance & banking has experienced fast growth globally. According to Telecom Trends International Inc., there are now 1.3 billion mobile phones being used around the world, a growth trend which has emerged over the past 20 years, compared to the more than 2.5 billion landlines built over the last century. The number of mobile phones is expected to be 4.5 billion by 2016, compared to 1.5 billion television sets in use today. Mobile banking is currently the largest trend after micro-finance, gaining more than 90 million customers over the past 30 years. Based on this large potential, it is rational to ask the question of how mobile finance & banking can be used to facilitate economic growth, on the one hand, and how to mobilize funds for use in economic growth (e.g., through microfinancial institutions), on the other hand. More specifically, how can these new financial modes help, in term of financial inclusiveness and thus improve the reduction of poverty with inclusive growth. The mobile phone revolution is the origin of change in many Africans' lives, providing not just telecommunications but also access to basic financial services in the form of phone-based money transfers and storage (Jonathan and Camilo, 2015; Ondiege, 2016; Demombynes and Thegeya, 2017; Nguena, 2018, 2016).

The impact of online remittance in inclusive economic growth

Remittances are the money that migrants send home to their families and friends in their home countries. They are a significant source of income for many developing countries, and they can play a role in inclusive economic growth. Online remittances are a type of remittance that is sent electronically, rather than through traditional channels such as cash or wire transfers. Online

remittances are often cheaper and faster than traditional methods, and they can be more convenient for both the sender and the recipient.(Adams, R. H., & Page, J. 2016)

The effect of E- commerce in inclusive economic growth

E-commerce is the buying and selling of goods and services online. It has grown rapidly in recent years, and is now a major force in the global economy. E-commerce has the potential to play a significant role in inclusive economic growth, by providing opportunities for small businesses and entrepreneurs, and by creating jobs in rural and remote areas. E-commerce, short for electronic commerce, refers to the buying and selling of goods, services, and information over the internet. It involves online transactions conducted between businesses, consumers, or a combination of both. E-commerce encompasses various activities such as online shopping, electronic payments, online banking, online ticketing, and more. In e-commerce, transactions are facilitated through electronic means, primarily using websites, mobile applications, or other digital platforms. It allows customers to browse, compare, and purchase products or services from the comfort of their homes or any location with internet access. E-commerce has transformed the way businesses operate and revolutionized the retail industry by providing new channels for commerce and expanding global reach. (International Trade Centre 201

3. Methodology

3.1 Research philosophy

The study employed mixed research design which is descriptive and correlation research design in which quantitative data analyze have been used to produce richer and more complete information. It also attempts to capture attitude of past behavior. Survey studies asses the characteristics of whole population. In this case information was needed to describe the evaluation of stakeholders' involvement in the success of financial technology in Somalia. The researcher used this research design because it can help to observe the phenomenon in a completely natural and unchanged natural environment and also provides an opportunity to integrate the quantitative method of data collection.

3.2 Population

According to salaam Somali bank employee are 1000 as they motioned on their last public published. Therefore, Mogadishu have 300 of that employees and The target population of this

study will be 300 and will be conducted employees of salaam Somali bank in Mogadishu which will be consisted three departments which are department of administrative management, department of accounting and finance and the department of Information Technology.

3.3 Sampling and sampling techniques

The study used Sloven's formula to determine the sample size of the actual respondents. Sloven's formula states: $\mathbf{n} = \frac{\mathbf{N}}{\mathbf{1+N(\alpha)^2}}$

Where; $\mathbf{n}$ = sample size; N = target population; and $\alpha = 0.05$ level of significance

$$n = \frac{300}{1 + 300(0.05)^2}$$

$$n = \frac{300}{1 + 300(0.0025)}$$

$$\mathbf{n = 171}$$

$\mathbf{n = 171}$ Respondents

3.4 Data collection instruments and procedures

Questionnaire

The researcher used close ended questions where the respondents were required to choose among the predetermined responses to the asked questions. The questionnaire was formatted based on Likert scale design. Therefore, frequency and mean have been analyzed on each question. The following model was used:

ITEM	STATEMENTS	SD	D	N	A	SA
		1	2	3	4	5

With:

SD: Strongly Disagree

D: Disagree

N: Neutral

A: Agree

SA: Strongly Agree

3.5 Data Analysis and presentation techniques

The data collected was analyzed using descriptive and correlation statistics. This was represented in percentages, tables, chart and graphs. The data was first edited to get relevant data to address the research questions under the study. The data was presented through report writing, graphs, tables and pie-charts. The data was analyzed both quantitatively and qualitatively.

3.6 Ethical consideration of the study

To ensure ethical considerations in undertaking the study and the safety, social and psychological well-being of the respondents involved in the study, the researcher got an introductory letter from Kigali University. On the other hand, to ensure the safety of the person and/or community involved in the study the researcher got the consent of the respondents before they fill in the questionnaires. The study also ensured the privacy and confidentiality of the information provided by the respondent which must be solely used for academic purposes.

4. Findings

4.1 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Under this section, the researcher analyzed the following characteristics: sex, age, education, department, experience and post occupied.

Table 4.1Profile of respondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Sex				
Male	138	80.7	80.7	80.7
Female	33	19.3	19.3	100.0
Total	171	100.0	100.0	
Age				
25-29 years	91	53.2	53.2	53.2
30-34 years	62	36.3	36.3	89.5
35-39 years	16	9.4	9.4	98.8
45-49 years	1	.6	.6	99.4
50-54 years	1	.6	.6	100.0
Total	171	100.0	100.0	

Education				
PHD	2	1.2	1.2	1.2
Masters	58	33.9	33.9	35.1
Bachelors	95	55.6	55.6	90.6
Diploma	16	9.4	9.4	100.0
Total	171	100.0	100.0	
Department				
Administrative management	26	15.2	15.2	15.2
Accounting & Finance	93	54.4	54.4	69.6
Technological information	52	30.4	30.4	100.0
Total	171	100.0	100.0	
Working experience				
0-4 years	105	61.4	61.4	61.4
5-9 years	64	37.4	37.4	98.8
10-14years	1	.6	.6	99.4
15 and above years	1	.6	.6	100.0
Total	171	100.0	100.0	
Category of respondents				
Top Management staff	12	7.0	7.0	7.0
Operational staff	62	36.3	36.3	43.3
Accountant	96	56.1	56.1	99.4
Supervisor	1	.6	.6	100.0
Total	171	100.0	100.0	

Concerning sex, the results in Table 4.2 indicate that 138 respondents (80.7%) are men while 33 (19.3%) are women.

Concerning age, the results indicate that 91 respondents (53.2%) are 25-29 years, 62 (36.3%) are the age of 30-34 years, 16(9.4%) are the age of 35-39 years, 1 (0.6%) are the age of 45-49 years, while 1(0.6%) are the age of 50-54 years.

Concerning education level, the results show that 2 respondents (1.2%) have PHD, 58 (33.9%) have masters' degrees, 95(55.6%) have bachelors' degrees, and 16 (9.4%) have Diploma. Concerning department, 26 respondents (15.2%) work in Administrative management, 93 (54.4%) work in accounting & Finance, while 52 (30.4%) work in technological information.

Concerning working experience, the results indicate that 105 (61.4%) have 0-4 years of working experience, 64 (37.4%) have 5-9 years, 1 (0.6%) have 10-14 years while 1(0.6%) have 15 and above years. Concerning the category of respondents, the results show that 12 (7.0%) are top managers, 62 (36.3%) are operational staff, 96 (56.1%) are accountants, and 1 (0.6%) are supervisors.

4.2.1 DESCRIPTIVE ANALYZE

The effect of mobile money in inclusive economic growth

Objective one of this study sought to establish the effect of mobile money in inclusive economic growth in Mogadishu Somalia at salaam Somali bank. Descriptive analysis was conducted and the results are presented in table 4.2.1

Table 4.2.1 the effect of mobile money in inclusive economic growth

Statement	N	Mean	Std. Deviation
Mobile money gives people an opportunity to save money in a safer way that can later be used for investments and would generate to a country's economic growth	171	3.88	.518
Mobile money makes it possible for small businesses and entrepreneurs to scale up and offer their services to a broader group since distance to	171	3.80	.677

customers and suppliers are no longer an obstacle			
A mobile money account would be most beneficial to the disadvantage people in the rural and poor urban areas because of the long distance to bank offices	171	3.71	.763
The mobile money services also make it possible for faster humanitarian assistance as well as enables people to receive remittances to help the disadvantaged people by delivering digital assistance though mobile money to those affected by crisis or during the pandemic of Covid-19	171	3.69	.828
Mobile money has become an opportunity to close the financial inclusive gap since the lack of a formal financial system has been identified as a barrier for poverty reduction	171	3.74	.786
Mean Average		3.7637	

This section tested the effect of mobile money in inclusive economic growth in salaam Somali bank in Mogadishu Somalia. Table 4.2.1 shows that the mean of respondents 3.88 agree that the Mobile money gives people an opportunity to save money in a safer way that can later be used for investments and would generate to a country's economic growth, 3.80 agree that the Mobile money makes it possible for small businesses and entrepreneurs to scale up and offer their services to a broader group since distance to customers and suppliers are no longer an obstacle, 3.71 agreed that A mobile money account would be most beneficial to the disadvantage people in the rural and poor urban areas because of the long distance to bank offices, 3.69 agreed that the mobile money services also make it possible for faster humanitarian assistance as well as enables people to receive remittances to help the disadvantaged people by delivering digital assistance

though mobile money to those affected by crisis or during the pandemic of Covid-19, 3.74 agree that the Mobile money has become an opportunity to close the financial inclusive gap since the lack of a formal financial system has been identified as a barrier for poverty reduction. The average mean score for the responses was 3.7637 which indicate that many employees agreed to the study of the effect of mobile money in inclusive economic growth in Mogadishu Somalia, The findings agreed past study.

The effect of mobile bank in inclusive economic growth

Objective two of this study sought to analyze the effect of mobile bank in inclusive economic growth in Mogadishu Somalia at salaam Somali bank. Descriptive analysis was conducted and the results are presented in table 4.2.2

Table 4.2.2 the effect of mobile bank in inclusive economic growth

Statement	N	Mean	Std. Deviation
Mobile finance & banking is used for making account transactions, payments, credit applications, and other banking transactions through a mobile device such as a mobile phone, with or without a link to a traditional banking account	171	3.64	.823
Mobile banking is currently the largest trend after micro-finance, gaining more than 90 million customers over the past 30 years	171	3.71	.765
Most African nations still need to take full advantage of the many benefits procured by these mobile banking services	171	3.73	.744
These new modes of carrying out financial transactions constitute what	171	3.75	.693

we call financial innovation. Mobile finance & banking has experienced fast growth globally			
Online banking has become the new normal for many people in the last couple of years. With the ever-changing world of technology and dynamic consumer lifestyles, more people are switching to digital life for their finances and account management	171	3.70	.783
Mean Average		3.7053	

This section tested the effect of mobile bank in inclusive economic growth in salaam Somali bank in Mogadishu Somalia. Table 4.2.2 shows that the mean of respondents 3.64 agree that the Mobile finance & banking is used for making account transactions, payments, credit applications, and other banking transactions through a mobile device such as a mobile phone, with or without a link to a traditional banking account, 3.71 agree that the Mobile banking is currently the largest trend after micro-finance, gaining more than 90 million customers over the past 30 years, 3.73 agreed that Most African nations still need to take full advantage of the many benefits procured by these mobile banking services, 3.75 agreed that the These new modes of carrying out financial transactions constitute what we call financial innovation. Mobile finance & banking has experienced fast growth globally, 3.70 agree that the Online banking has become the new normal for many people in the last couple of years. With the ever-changing world of technology and dynamic consumer lifestyles, more people are switching to digital life for their finances and account management. The average mean score for the responses was 3.7053 which indicate that many employees agreed to the study of the effect of mobile bank in inclusive economic growth in Mogadishu Somalia, The findings agreed past study.

The effect of online remittance in inclusive economic growth

Objective three of this study sought to determine the effect of online remittance in inclusive economic growth in Mogadishu Somalia at salaam Somali bank.

Descriptive analysis was conducted and the results are presented in table 4.2.3

Table 4.2.3 the effect of online remittance in inclusive economic growth

Statement	N	Mean	Std. Deviation
Online remittances are a type of remittance that is sent electronically, rather than through traditional channels such as cash or wire transfers	171	3.73	.752
Online remittances are often cheaper and faster than traditional methods, and they can be more convenient for both the sender and the recipient	171	3.70	.789
Remittances are the money that migrants send home to their families and friends in their home countries. They are a significant source of income for many developing countries, and they can play a role in inclusive economic growth	171	3.69	.746
Online remittance services are typically linked to banking systems or partner financial institutions, enabling users to fund their transfers through bank accounts, debit cards, or credit cards	171	3.56	.875
Online remittances can help to reduce poverty in developing countries by providing a source of income for poor households	171	3.61	.929

Mean Average	3.6561

This section tested the effect of online remittance in inclusive economic growth in salaam Somali bank in Mogadishu Somalia. Table 4.2.3 shows that the mean of respondents 3.73 agree that the Online remittances are a type of remittance that is sent electronically, rather than through traditional channels such as cash or wire transfers, 3.70 agree that the Online remittances are often cheaper and faster than traditional methods, and they can be more convenient for both the sender and the recipient, 3.69 agreed that Remittances are the money that migrants send home to their families and friends in their home countries. They are a significant source of income for many developing countries, and they can play a role in inclusive economic growth, 3.56 agreed that the Online remittance services are typically linked to banking systems or partner financial institutions, enabling users to fund their transfers through bank accounts, debit cards, or credit cards, 3.61 agree that the Online remittances can help to reduce poverty in developing countries by providing a source of income for poor households. The average mean score for the responses was 3.6561 which indicate that many employees agreed to the study of the effect of online remittance in inclusive economic growth in Mogadishu Somalia, The findings agreed past study.

The effect of E-commerce in inclusive economic growth

Objective four of this study sought to determine the effect of E- commerce in inclusive economic growth in Mogadishu Somalia at salaam Somali bank. Descriptive analysis was conducted and the results are presented in table 4.2.4

Table 4.3.4 the effect of mobile E-commerce in inclusive economic growth

Statement	N	Mean	Std. Deviation
E-commerce is the buying and selling of goods and services online. It has grown rapidly in recent years, and is now a major force in the global economy	171	3.68	.755
E-commerce has the potential to play a significant role in inclusive	171	3.56	.861

economic growth, by providing opportunities for small businesses and entrepreneurs, and by creating jobs in rural and remote areas			
E-commerce encompasses various activities such as online shopping, electronic payments, online banking, online ticketing, and more	171	3.68	.809
E-commerce has transformed the way businesses operate and revolutionized the retail industry by providing new channels for commerce and expanding global reach	171	3.68	.763
E-commerce can help to overcome these challenges by providing a low-cost way to reach customers in other parts of the country or in other countries	171	3.65	.822
Mean Average		3.6515	

This section tested the effect of E-commerce in inclusive economic growth in salaam Somali bank in Mogadishu Somalia. Table 4.2.4 shows that the mean of respondents 3.68 agree that the E-commerce is the buying and selling of goods and services online It has grown rapidly in recent years, and is now a major force in the global economy, 3.56 agree that the E-commerce has the potential to play a significant role in inclusive economic growth, by providing opportunities for small businesses and entrepreneurs, and by creating jobs in rural and remote areas, 3.68 agreed that E-commerce encompasses various activities such as online shopping, electronic payments, online banking, online ticketing, and more, 3.68 agreed that the E-commerce has transformed the way businesses operate and revolutionized the retail industry by providing new channels for commerce and expanding global reach, 3.65 agree that the E-commerce can help to overcome these challenges by providing a low-cost way to reach customers in other parts of the country or

in other countries. The average mean score for the responses was 3.6515 which indicate that many employees agreed to the study of the effect of E-commerce in inclusive economic growth in Mogadishu Somalia, The findings agreed past study.

Inclusive economic growth

This study sought to the inclusive economic growth in Mogadishu Somalia at salaam Somali bank. Descriptive analysis was conducted and the results are presented in table 4.2.5

Table 4.2.5 the inclusive economic growth

Statement	N	Mean	Std. Deviation
Inclusive economic growth is a pattern of economic development that benefits all segments of society, ensuring that the benefits of increased wealth and productivity are shared equitably among different social groups	171	3.67	.796
Inclusive economic growth aims to reduce poverty, inequality, and social exclusion by creating opportunities for all individuals to participate in and benefit from economic activities	171	3.63	.861
Inclusive economic growth is economic growth that is distributed fairly across society and creates opportunities for all	171	3.66	.776
The inclusive growth approach takes a long term perspective as the focus is on productive employment rather than on direct income redistribution as a means of increasing incomes for excluded groups	171	3.58	.831

Here we emphasize the idea of equality of opportunity in terms of access to markets, resources, and unbiased regulatory environment for businesses and individuals	171	3.68	.731
Mean Average		3.6515	

This section tested inclusive economic growth in salaam Somali bank in Mogadishu Somalia. Table 4.2.5 shows that the mean of respondents 3.67 agree that the Inclusive economic growth is a pattern of economic development that benefits all segments of society, ensuring that the benefits of increased wealth and productivity are shared equitably among different social groups, 3.63 agree that Inclusive economic growth aims to reduce poverty, inequality, and social exclusion by creating opportunities for all individuals to participate in and benefit from economic activities, 3.66 agreed that Inclusive economic growth is economic growth that is distributed fairly across society and creates opportunities for all, 3.58 agreed that the inclusive growth approach takes a long term perspective as the focus is on productive employment rather than on direct income redistribution as a means of increasing incomes for excluded groups, 3.68 agree that the Here we emphasize the idea of equality of opportunity in terms of access to markets, resources, and unbiased regulatory environment for businesses and individuals. The average mean score for the responses was 3.6515 which indicate that many employees agreed to the study of the inclusive economic growth in Mogadishu Somalia, The findings agreed past study

4.3 Data Analysis and Presentation: Regression Analysis

4.3.1 Multiple Regression Analysis

The Multiple regression analysis was performed to evaluate the relationship between the independent variable “financial technology” and dependent inclusive economic growth and the independent variables of financial technology were (Mobile money, mobile bank, online remittance and E-commerce) and to test the research the effect of financial technology on inclusive economic growth in Mogadishu-Somalia. Multiple regression analysis was conducted in order to establish the best combination of independent (predictor) variables would be to predict the dependent (predicted) variable and to establish the best model of the study, the research used statistical package for social sciences (SPSS) to code, enter and compute the measurements of the multiple regressions.

4.3 .1 Model Summary

Table 4.3.1 Model summery

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.946	.896	.893	.12299

a. Predictors: (Constant), E-Commerce, Online remittance, mobile money, Mobile Bank

Model summary is a summery that describes how far the independent variables explain the dependent variable that mean the greater R-value has the great number of the independent variables explain with dependent variable. In order to test the research, a standard multiple regression analysis was conducted using inclusive economic growth as the dependent variable, mobile money, mobile bank, online remittance and E-commerce as the predicting variables.

Table from the model summary in table 4.3.1 it is clear that the R was (.946) indicating that a combination of mobile money, mobile bank, online remittance and E-commerce explained (89.3%) of the variation in inclusive economic growth in Mogadishu Somalia.

4.3.2 Analysis of Variance

Table 4.3.2 Analysis of variance

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.586	4	5.397	356.783	.000[a]
	Residual	2.511	166	.015		
	Total	24.097	170			

a. Predictors: (Constant), E-Commerce, Online remittance, mobile money, Mobile Bank

b. Dependent Variable: Inclusive Economic Growth

From the ANOVA table 4.3.2 it is clear that the overall standard multiple regression model the model Predictors: (mobile money, mobile bank, online remittance and E-commerce) are significant in predicting How mobile money, mobile bank, online remittance and E commerce on

inclusive economic growth in Mogadishu, Somalia. The regression model achieves a degree of fit as reflected by an R2 of 0.15 (F = 365.783; P = .000< 0.05).

4.3.3 Regression Coefficients

Table 4.3.3 Regression Coefficient

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.229	.158		1.448	.149
	Mobile money	-.026	.031	-.023	-.863	.390
	Mobile bank	-.011	.028	-.011	-.408	.684
	Online remittance	.001	.026	.001	.051	.959
	E-Commerce	.970	.027	.955	35.367	.000

a. Dependent Variable: Inclusive economic growth

Table 4.3.3 presents the regression results on mobile money, mobile bank, online remittance, E-commerce on inclusive economic growth in salaam Somali bank in Mogadishu Somalia. And the multiple regression equation was that: is IEG= $\beta_0 + \beta_{1MM} + \beta_{2MB} + \beta_{3OR} + \beta_{4EC} + \varepsilon$ and the multiple regression equation became

IEG= $.229 \; -.026_{1MM} \; -.011_{2MB} + .001_{3OR} \; + .970_{4EC}$

Hypotheses results

The study seeks to investigate the effect of mobile money, mobile bank, online remittance and E-commerce on inclusive economic growth. Following hypotheses were proposed

H0: There is no significant effect of mobile money in inclusive economic growth in Mogadishu Somalia.

H0: There is no significant effect of mobile banking in inclusive economic growth in Mogadishu Somalia.

H0: There is no significant effect of online remittance in inclusive economic growth in Mogadishu Somalia.

H0: There is no significant effect of E- commerce in inclusive economic growth in Mogadishu Somalia.

The inclusive economic growth was regressed on predicting of mobile money, mobile bank, online remittance and E-commerce. The table of 4.3.2 indicates the independent variables significantly predict inclusive economic growth F (4,166) = 356.783, P<0.05, which indicates that the four factors under this study have a significant effect on inclusive economic growth, and this means we reject the null hypotheses and accept the alternative hypotheses.

Additionally, coefficient were further assessed to certain the influence of each of the factors on the inclusive economic growth H0 evaluates whether there is no significant effect of mobile money in inclusive economic growth, the results revealed that the mobile money has no significant effect on inclusive economic growth (β=-0.026 t-statics= -0.863 P- value=0.390), H0 which is null hypotheses was accepted because P-value>0.05 and rejected the alternative hypotheses H1. H0 evaluates whether there is no significant effect of mobile bank in inclusive economic growth, the results revealed that the mobile bank has no significant effect on inclusive economic growth (β= -0.011 t-statics= -0.408 P- value=0.684), H0 which is null hypotheses was accepted because P-value>0.05 and rejected the alternative hypotheses H1. H0 evaluates whether there is no significant effect of online remittance in inclusive economic growth, the results revealed that the online remittance has no significant effect on inclusive economic growth (β=0.001t-statics= .051 P- value=0.959), H0 which is null hypotheses was accepted because P-value>0.05 and rejected the alternative hypotheses H1. H0 evaluates whether there is no significant effect of E-commerce in inclusive economic growth, the results revealed that the E-commerce has significant effect on inclusive economic growth (β=0.970 t-statics= 35.367 P-value=.000), H0 which is null hypotheses was rejected because P-value<0.05 and accepted the alternative hypotheses H1 which is there is a significant effect of E-commerce on inclusive economic growth.

4.4 CORRELATION ANALYZE AMONG VARIABLES

Table 4.4.1 Correlations

Correlations

		Mobile money	Mobile Bank	E-Commerce	Online remittance	IEG
Mobile money	Pearson Correlation	1	.204**	.257**	.099	.220**
	Sig. (2-tailed)		.007	.001	.018	.004
	N	171	171	171	171	171
Mobile Bank	Pearson Correlation	.204**	1	.267**	.167*	.240**
	Sig. (2-tailed)	.007		.000	.029	.002
	N	171	171	171	171	171
E-Commerce	Pearson Correlation	.257**	.267**	1	.212**	.946**
	Sig. (2-tailed)	.001	.000		.005	.000
	N	171	171	171	171	171
Online remittance	Pearson Correlation	.099	.167*	.212**	1	.199**
	Sig. (2-tailed)	.018	.029	.005		.009
	N	171	171	171	171	171
Inclusive Economic Growth	Pearson Correlation	.220**	.240**	.946**	.199**	1
	Sig. (2-tailed)	.004	.002	.000	.009	
	N	171	171	171	171	171

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

In the above table 4.4.1 Shows that the result of correlation analyzes of the relationship between "variables of financial technology on inclusive economic growth and how they relates each other with their degrees" And in the first variable (mobile money) with inclusive economic growth. Thus the mobile money has positive and weak relationship with inclusive economic growth as indicated the Pearson Correlation (r=0.220, p=0.004), in the second variable (mobile bank) with inclusive

economic growth. Thus the mobile bank has positive and weak relationship with inclusive economic growth as indicated the Pearson Correlation (r=0.240, p=0.002), in the third variable (online remittance) with inclusive economic growth. Thus the online remittance has positive and strong relationship with inclusive economic growth as indicated the Pearson Correlation (r=0.946, p=0.00), in the last variable (E-commerce) with inclusive economic growth. Thus the E-commerce has positive and weak relationship with inclusive economic growth as indicated the Pearson Correlation (r=0.199, p=0.009.)the finally as the variables indicated that the relationship were positive and weak there is only one which has strong relationship t and that is online remittance and means that the financial technology has positive influence on inclusive economic growth in Mogadishu, Somalia.

5. Conclusion

In conclusion, this study examined the effect of various forms of financial technology (mobile money, mobile banking, online remittance, and E-commerce) on inclusive economic growth in Mogadishu, Somalia. The results of the descriptive analysis indicated that respondents generally agreed that these financial technologies have a positive impact on economic growth, with average mean scores above 3.5. The multiple regression analysis revealed that a combination of these financial technologies explained approximately 89.3% of the variation in inclusive economic growth. This result is statistically significant, and it supports the hypothesis that financial technology has a significant effect on inclusive economic growth in Mogadishu, Somalia. Analyzing the individual contributions of each financial technology, it was found that mobile money and mobile banking did not have a significant impact on inclusive economic growth. Online remittance, on the other hand, had a strong positive impact. E-commerce emerged as the most influential factor, significantly contributing to inclusive economic growth. Correlation analysis further confirmed that these financial technologies were positively related to inclusive economic growth, with online remittance demonstrating a particularly strong relationship. In summary, the findings of this study suggest that financial technology, especially online remittance and E-commerce, plays a significant role in promoting inclusive economic growth in Mogadishu, Somalia. These technologies provide opportunities for economic development, create jobs, and reduce poverty, contributing to a more equitable distribution of wealth. Policymakers and financial institutions should consider the potential of these technologies in fostering economic growth and promoting financial inclusion in the region.

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