



ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

*EFFECTS OF DEMONITIZATION INSTRUMENTSON THE PERFORMANCE
OF MICRO, SMALL AND MEDIUM SCALE ENTERPRISES IN ETHIOPIA: THE
CASE OF ARADA SUBCITY IN ADDIS ABABA.*

BY

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OF MICRO, SMALL AND MEDIUM SCALE ENTERPRISES IN ETHIOPIA: THE
CASE OF ARADA SUBCITY IN ADDIS ABABA*

*A Thesis Submitted to the school of Graduate Studies of Addis Ababa University,
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Degree in Development Economics*

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Declaration

I Adugna Alemayehu, hereby declare that the thesis entitled ‘‘effects of demonetization instruments on the performance of micro, small and medium scale enterprises in Ethiopia’’.The case of arada subcity in Addis Ababa based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted to Addis Ababa University or any other institution.

Declared by: Adugna Alemayehu Advisor Name: Berhanu D. (PHD)

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Statement of Certification of Originality and quality

This is to certify that the thesis prepared by Adugna Alemayehu, entitled: *'effects of demonetization instruments on the performance of micro, small and medium scale enterprises in Ethiopia'*, and submitted in partial fulfilment of the requirements for the Degree of Masters of Developmental Economics complies with the regulations of the University and meets the accepted standards concerning originality and quality.

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LIST OF ACRONYMS

ATM	Automated Teller Machine
CSA	Central Statistical Agency
EBA	Ethiopian Bankers Association
ECA	Economic Commission for Africa
EEA	Ethiopian Economic Association
FDRE	Federal Democratic Republic Of Ethiopia
GFDB	Global Finder Data Base
GDP	Gross Domestic Product
ICT	Information Communication Technology
LDC	Less Developing Country
MSMEs	Micro, Medium and Small Scale Enterprises
MOFED	Ministry Of Finance and Economic United Nation
NBE	National Bank of Ethiopia
PDA	Personal Digital Assistant
POS	Point Of Sale
WB	World Bank

ABSTRACT

People are busy and talking about Demonetization and its effects on the profitability of MSMEs since there is a limitation on cash based economy which is replaced with a new advanced technology and then the study was intended to investigate the effects of demonetization instruments on performance of micro, small, and medium scale enterprises in Addis Ababa Arada sub-city. The study examines the recent trends of the effects of currency demonetization on the profitability of MSMEs. Taking a descriptive and explanatory research design, the study accomplishes the objectives by focusing on the owners of the MSMEs. The target population comprised of 619 MSMEs sectors which are legally registered in Arada sub-city. Stratified sampling method was used to calculate a sample size of 186 respondents because, it allows evaluating data from different subgroups or strata to obtain sample representing entire population and administered questionnaire. The descriptive data were analysed using frequency table and percentage, while linear regression analysis was used to test the relationship between the independent and the dependent variables or formulated hypothesis using SPSS V.26. From the findings, the study concluded that, POS, ATM, Internet Banking, Mobile Banking, and Tele birr has a positive effect and significantly influence the performance (profit) of MSMEs. Based on the findings, some recommendations among others made are; policy makers should strengthen the government policies and regulatory framework to create conducive climate during the process of demonetization. Creating awareness concerning the currency demonetization and encouraging and increasing usage of demonetization instruments, then the simple way that the society is going to the digitalization or cash less economy were created.

Keywords; *Demonetization, MSMEs, Mobile banking, Internet banking, Tele birr, POS, Performance of MSMEs*

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the study

Demonetization is the process in which monetary bills are taken out of circulation and replaced with new notes or other forms of payment which leads to digitalization. It occurs whenever there is a change in national currency and the current form or forms of money is pulled out of circulation and retired, often to be replaced with new notes or coins. The reason behind demonetization varies depending on a country's situation. It can be a market based movement away from cash or an effort to combat tax evasion, cash used for terrorism, avoid black money market. In Ethiopia demonetization is important to curb cash hoarding, to combat illegal trade and to stop the circulation of black money in market and it also increases digitalization and technology. In short run demonetization has negative effects but, in long run it has positive effects on the economy and decline of the cash based transaction that made the nation cashless and thereby benefiting the firm and consumer level (Barnier, 2022).

Demonetization is the process where government declares the currently running currency notes are illegal to be tender after the declaration is made with aim of moving the economy to ward digitalization/cashless transaction by decreasing cash based economic system. It's the old unit of currency replaced with new currency. Cashless economy involves a prevalent application of various computer technologies in the financial system (Okoye & Ezejiolor, 2018).

Globally many countries have used the word and the policy with immense restriction and discomfort, for it disrupts economy and population at large. Such a step, for example, was taken when the European Monetary Union decided to adopt Euro as their common currency. However, the old currencies were allowed to convert into Euros, which is new common currency for a period of time in order to ensure a smooth transition through demonetization. Some other countries too have opted for currency demonetization such as USA (1873), India (1978), and Ghana (1982), Nigeria (1984), Myanmar (1987) and USSR (1991).

Globally, following the process of demonetization the move towards a cashless economy has already begun among policy makers, academicians, and commercial enterprises. The trend towards cashless economy commenced in our daily life during the 1990s, when electronic banking (e-banking) became popular throughout the world. By 2010, e-banking payment methods became common in many developed countries. There is a rapid increase of global non-cash transactions reached 358 billion in 2013, an increase of 7.6% over 2012. Further, the trend in developed countries shows a steady graduation towards cashless economy (World Payments Report, 2015).

Demonetization is a bold step of Government policy towards economic development of Ethiopia. Demonetization is most discussed issue in every corner of Ethiopia after September 2020 announcement. Its main objective is to curb black money and the process of curbing Black Money through Demonetization has made it mandatory to all the Ethiopian citizens to deposit their old currency in to their bank account or exchange them for a new currency. This has forced cash hoarders to deposit their money in bank account and make it accountable. By demonetizing the old currency and adding some limitation on cash transaction, black money has retrieved to a certain extent. It is also interesting to note that this was not the first time that Government of Ethiopia has gone for demonetization of currency; two decades ago a new denomination was introduced at the end of Ethio-Eritrean war (Getachew, 2020).

September 14, 2020 Prime Minister Abiy Ahmed disclosed that ,Ethiopian government has issued the newly printed paper money with the denomination of 10,50,and 100 birr bank notes are changed and a newer denomination of birr 200 has been introduced to tackle inflation. Ordinary Ethiopians have just three month to replace their old currency notes. According to Ethiopian bankers association (EBA) reported that over 113 billion birr is out of formal banking system and as it states that due to demonetization 113 billion birr now have no room outside banks. The major aim of demonetization of money by Ethiopian government is that to curb cash hoarding, black market, corruption, illegal trade activities, and illicit financial flows (Fortune news, May 23 of 2020). In Ethiopia Micro, medium and small scale enterprises (MSMEs) are the back bone of Ethiopian economy by contributing value added of Birr 8.3 million in 1996. Based on the 1992/93 data, this figure constitutes about 3.4% of the GDP, 33% of the industrial sector's

contribution and 52% of the manufacturing sector's contribution to the GDP of the same year (Getachew, 2020).

In Ethiopia most transactions are still cash based as the informal sector has a substantial share in the economy and to reduce these difficulties the National Bank of Ethiopia (NBE) introduced a cash limit on withdrawal not to exceed 100,000 birr (\$2737) later changed to 50,000 birr and limits on account transfers and cash deposits by any other third party is totally prohibited. Introduction of these new currencies would be instrumental to reduce cash-based transactions.

Generally, what motivated the researcher is that, to identify the effects of the recent currency demonetization on the performance of MSMEs in Ethiopia because, it's not familiar in the case of the Ethiopian economy and the effects of demonetization is not known yet. The researcher also tried to see the experience of many countries when they demonetize their currency and its success.

1.2. Statement of Problem

Demonetization is an economic strategy used from time to time in a few developing countries to stabilize the currency and ease inflation but, it's not without its risks. Most economists often warn if it's mishandled, it could trigger market chaos, disorder and uncertainty as citizens scramble to swap their notes. In September, 2020, demonetization announcement has become the new word and most up-to-date big issue to debate nowadays with its limitation and therefore the word demonetization by itself won't be even searched for meaning before Monday, September 2020. After the nice progress of demonetization announced by Prime Minister of Ethiopia, Dr. Abiy Ahmed all started to speak about it and worrying about its effects on the economy became a big issue (Getachew, 2020). The demonetization was made in parliament and had a significant effect on the social sector and the worst affected were the poor and the common people (Santoshi, 2017).

According to Global Findex Data Base (GFDB), in Ethiopia, despite the increase in the account ownership from 22% as of 2013 to 35% in 2014, the country lags behind its many neighbouring countries like Kenya in which 85% of adults have an account. In Ethiopia, most people still rely on cash to pay bills and receive payments in which 99% of adults' payments were with cash compared to 12% of people in Kenya. In Ethiopia, the majority of adults are cash

based in which cash-less economy is at a lower level as indicated by GFDB mobile money accounts users being 0.3%, debit cards users are 4%, and those who receive wage in to accounts are only 17%, internet or mobile banking is 1%, which is the least in sub-Saharan Africa of 34.7 million mobile subscribers in 2017 and 13 million people are with a mobile phone which are unbanked and majority of people suffer from these announcement of demonetization .

Due to the implementation of demonetization, small scale industries were totally ruined and vanished from the market. These industries required daily cash based transaction to run their business smoothly and to achieve their daily target. Small businesses had to restrict their business activities and many of the small businesses undergone great losses with the demonetization process. As their Daily business activities were based on cash transaction like purchase of material, wages, labour, transport which are largely carried out without any digital transaction. Demonetization has an immediate bad effect on Production of small scale industry in short run but it has a positive effect in long run. Because of the announcement of demonetization, immediate production and manufacturing of small scale industries were affected, which leads to decrease the contribution in all over industrial production (Bose, 2018).

A study conducted by All India Manufacturers' Organization (AIMO) and India Development Foundation (IDF) has reported that the effects of demonetization on the performance of MSMEs is negative and loss of revenue by 45% and 35% cut in employment. Many reports stated that, small scale businessmen have immensely affected in short run after demonetization due to lack of awareness about demonetization, cash crunch, lack of technology, internet, illegal crimes, terrorism, ATM robbery, lack of infrastructure like digital payment system and etc. According to Bhaduri (2018) Small traders in retail sector or grocery shops, service sector such as restaurants, nursing homes, gems and jewellery, small traders in agricultural products, small dealers, professionals like doctors, lawyers etc., are significantly affected by announcement of demonetization during last one year.

Bhaduri (2018), conducted the study that, demonetization has a detrimental effect on small scale enterprises. In consumer durable sales like TV, Refrigerator, and Washing machine dropped a greatest sum after implication of demonetization, but it has been improving from the last quarter of 2017. Demand for Gems and jewellery has declined drastically but, Sales of high finished retail products have declined. Service sectors like restaurant services, private educational

institutes, and local vegetable sellers have affected immensely after implication of demonetization. Small grocery and kirana shops have faced a huge cash crunch and till now they are affected. The major problem is that, since MSMEs can't buy and sell goods and services, pay daily wages to their employee's, and purchase raw material all in cash because of limitation on cash based transaction. Demonetization process largely replace cash based economy toward cash less not all by using instruments of demonetization. Ganesan (2017)&Rani (2017) researched on the effect of demonetization on retail outlets. This study states that at initial stage shopkeepers faced huge problems and the markets were very much affected by the cash crunch but, this move also compelled the shopkeepers and consumers to adopt cashless means such as mobile, internet banking which will create a sound or hassle free transaction process in the future.

Mbah & Obiezekwem(2019) studied that there is positive relationship between ATM, POS, SMS, Mobile Banking and performance of MSMEs. Okoke (2017) investigated the effects of POS, ATM, Mobile Banking and the performance of MSMEs is positive and significant. This research study investigates the effects of demonetization in Ethiopia, which is recent issue in our case and in addition to the above variables the effects of new additional variables were included in the study.

It is therefore, evident that previous studies have not covered the effects of demonetization instruments on the performance of micro, small, and medium scale enterprises in Ethiopia. The researcher try to see different studies regarding to the effects of demonetization on performance of MSMEs enterprises, but demonetization is the recent issue in Ethiopia and there is a lack of scientific research studies regarding to the effects of demonetization instruments. Due to this problems as a research gap these study is going to examine and cover the effects of demonetization instruments on the performances of micro, small and medium scale enterprises in Ethiopia by including new additional variables which is not covered in the above empirical study. As an investigation of the researcher, Telebirr is the new adoption technology as an instrument of demonetization which is not covered on the above findings and its effects on MSMEs is unknown and not studied yet by any other researcher which makes the study more interesting.

1.3. Objective of the study

1.3.1. General objectives

The general objective of this study is to analyse the effects of demonetization instruments on the performance of micro, small and medium scale enterprises.

1.3.2. Specific objective

- ❖ To identify the effects of currency demonetization on micro, small and medium scale sectors.
- ❖ To identify the effects of instruments of demonetization (ATM, POS, Telebirr, Mobile and Internet banking) on the profitability of micro, small and medium scale enterprises ((MSMEs) in Arada sub-city.
- ❖ To analyse how usage of instruments of demonetization (ATM, Tele birr, POS, Internet and Mobile banking) changed by MSMEs after implication of demonetization.
- ❖ To give some policy recommendation, about the effects of demonetization on small scale business and pave the way for further study on the same issue.

1.4. Hypothesis of the study

The paper is based on the following formulated null hypotheses to guide the study and strength the analysis through cost of doing business in which dependent and independent variables are related to each other.

H01: It is assumed that, usage of POS machine has no significant effect on the profitability of micro, small and medium scale enterprises.

H02: It is assumed that, usage of ATM machine has no significant effect on the profitability of micro, small and medium scale enterprises.

H03: It is assumed that, usage of Internet Banking has no significant effect on the profitability of micro, small and medium scale enterprises.

H04: It is assumed that, usage of Mobile banking has no significant effect on the profitability of micro, small and medium scale enterprises

H05: It is assumed that, usage of Tele birr has no significant effect on the profitability of micro, small and medium scale enterprises.

1.5. Research Questions

The study will attempt to address the following questions to achieve the intended objectives.

- ✓ What are the effects of usage of demonetization instruments ATM, Telebirr, POS, Internet and Mobile banking on the profitability of micro, small and medium scale enterprises?
- ✓ What are the challenges that have hindered the implementation of demonetization instruments by micro, small and medium scale enterprises?
- ✓ Which sector of enterprise is mostly affected by the process of demonetization?
- ✓ What are the negative and positive effects of demonetization on micro, small and medium scale enterprises?

1.6. Significance of the Study

The study attempts to investigate the effects of demonetization on the performances of micro medium and small scale enterprises in Ethiopia, which is the recent issue in our country. The significance of the study has both theoretical and empirical significance. From the perspective of theoretical and empirical significance, the study will add to the existing stock of literature thereby expanding the frontiers of knowledge in the area of study and different categories of people will actually benefit from the findings.

The finding also helps the researcher for award of masters' degree and promotion. It also helps the micro, medium and small scale enterprise to use the research finding and recommendation to improve and enhance their performance during the process of demonetization. The finding also gives clue and helps other researchers, planners; government and policy makers which are particularly in these fields and it may also serve as stepping stone for other researchers to conduct further study in this area.

1.7. Scope of the Study

Geographically, the study took place in Arada sub-city of Addis Ababa, Ethiopia, covering the micro, small and medium scale enterprises (MSMEs) registered in the sub-city. Hence, other area of Addis Ababa and cities were not considered for this study. Methodologically, the study employed both descriptive and explanatory research design with both quantitative and qualitative approaches. Finally, the data collection time will be scheduled between February 2022 and June 2022.

1.8. Limitations of the Study

The study has its own limitations because of the recent currency demonetization released in Ethiopia and it was very difficult to get sufficient data as well as literature on this area from the countries viewpoint. In addition to procedural mistakes, sample inadequacies and assignment unfairness may lead the conclusion of the study to specific population size and the study is limited to one sub-city again due to time and financial constraint. Study also may faces limitation of network connection to download different data and images. Both primary and secondary data were necessary to study, but the limitation of time and cost would make it difficult to collect data from respective parts and lack of recent literature on the area are among the limitation of the study.

1.9. Organization of the Study

The research report is organized into five chapters as follows .the first chapter constitutes background of the study, statement of the problem, objective of the study, research questions, scope, limitation, significance of study, and finally organization of the study. The second chapter presents previous related research done on the topic of effects of demonetization on micro, medium and small scale enterprises. This constitutes Empirical and Theoretical Literature review. The third chapter explains the methodology used in commencing the research. This includes, overview of the whole methodology, types and sources of data, sampling techniques, method used to determine the sample size, tools for the collection of data and ultimately method of data analysis. The fourth chapter discuss the analysis and results of the data collected. Ultimately, the last chapter presents summary of major findings, conclusion and recommendation of the study which are drawn from the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Theoretical Review

2.1.1 Definition of demonetization

Demonetization originated from the French word ‘‘demonetize’’ and it’s the process in which the old unit of currency must be withdrawn from the economy and replaced with new advanced technology of cash less economy(digitalization) and some new currency unit with large limitation on cash based economic system. Demonetization is ending something as no longer the legal tender of a country such as currency notes and Demonetization of money means the cut-off of some cash from the money flow and exchanging it with new cash. When demonetization occurs, the country’s old currency unit is essentially worthless, as it can no longer be used to purchase goods and services in market. Demonetization can occur for several reasons, in different country at different time from a change in national currency to the retirement of older forms of money replaced with the new one. Over time, several countries have implemented currency demonetization measures, notwithstanding with varying degrees of success by reducing cash based payment system by replacing new advanced electronic payment system (Roy, 2018).

According to Merriam Webster Dictionary:

The word demonetization has its root from the verb ‘‘ demonetize’’. It is a transitive verb which has various definitions as follows:

- 1. To stop using old currency notes as a monetary standard and changing cash based payment system to new little physical cash and digitalization.*
- 2. To remove of value for official payment and replacing with non-cash payments system (digitalization).*

According to Adewale (2012) Demonetization, simply illustrates a gradual or a radical movement of the entire payment system of an economy from the use of physical cash to

asystemic adoption of other non-cash mode of payments or digital mode of payments in settlements of all types of transactions, including all commercial, homes, personal, local and international trade both in public and private life within the economy.

Cashless economy implies that all means of payments are carried out without using of physical cash. These payments method will range from online transactions, mobile banking, debit and credit cards, cheques, and wire transfer etc. In other words, financial transactions can be carried out anywhere easily via internet with the use of computers and mobile devices. These instruments were the latest electronic banking innovation and a revolution that change the lives of millions across the world. Hence, these digitalization is a situation where there is little or very low cash flow in a given society, thus every other purchases and transactions will be made via electronic channels due to the effects of demonetization practice.

Here are some theoretical backgrounds of demonetization as follows;

A) Monetary theory

Monetary theory has examined theoretical perspective of demonetization and found that from theoretical point of view, demonetization is not a successful one. Identifying the importance of money, monetary theorist argues that, an economy run with money provides more benefits than an economy run under barter system. So from this point of view, consumption and investment decision of both current and future period will be negatively affected by the process of demonetization(Deka, 2018).

Moreover, in the case of Ethiopian economy, where a huge proportion of transactions are done through cash based payment, the negative effect of demonetization process will be much more. Through money multiplier model, some researcher viewed that demonetization will increase money supply because, demonetization will reduce the currency circulation and will enhance the deposits, and thereby lending by banks are bound to increase for a definite reserve ratio. However, sometime further increase in deposits as a result of demonetization may not lead to increase in money supply if banks already hold excess reserves. Moreover, according to that in the modern economy bank creates money not necessarily through the deposits but through loans. Hence the capability of creating money depends on competitiveness of the banking industry, and the availability of profitable investment opportunities rather than the amount of deposited.

Both formal and informal sector will be affected by demonetization process. For informal sector (Mostly used cash for transaction,), there will be a decline in real interest rate, investment, output, employment, as availability of cash will reduce they have no bank accounts. Whereas for formal sector (used online transaction) price level will decline but, there could not be a reduction in output demand and formal labour market since the organized firms can pay wages and salaries to employee in their bank accounts. The total effects on economy will depend on relative contribution of each of the sector to the GDP(Deka, 2018).

B) Behavioral theory

Countries underwent the purge of demonetization in different times. Behavioural theory is an extensive analysis on behavioral economics perspective of demonetization. The Prospect theory also gives the idea about the possible outcome of a public policy which describes the decision of people under different situation of and the estimation about the possible outcome of each of these options. According to behavioral theory, current situation of risk depends on the expectation of both the current and future perception of gain and loss i.e. current and expected status. According to Behavioral theory, people proposed different pattern of risk preferences as a reaction to a public policy, such as risk-aversion or risk-seeking for gains and losses respectively, under high probability. Risk-seeking and risk-aversion for gains and losses respectively under low probability.

In the context of the demonetization problem, assuming non availability or access to cash for transaction purposes as current situation, people are expected to think that, the move towards a cashless economy due to demonetization process as a negative deviation and hence a loss. The expectation of people facing high losses with high probability, the holder of black money are being expected to be engaged in high risk-seeking behaviour by calculating the probability of holding money and marching toward digitalization payment system(Deka, 2018)..

2.1.1.1 Demonetization Process

Demonetization is a form of economic intervention, where a country moves to replace old form of currency with a new currency notes with same limitation. At the beginning of the

demonetization process, an old currency note is discontinued or no legal tender after a short period of time and pulled out of circulation to be replaced with new forms of currency notes.

After announcement of demonetization, people are given a time to exchange their older banknotes and coins for the new currency notes, before it is officially banned in economy. In case of Ethiopia a time given to exchange banknotes is three month. After a currency has been discontinued, it is no longer legal tender and contains no monetary value in economy. Demonetization process can occur in many different forms in different countries – a country can introduce a new banknotes or coins or implement a completely new form of currency altogether. However, demonetization is a drastic measure that occurs rarely and it can disrupt society if it's not implemented improperly (Corporate finance institution, 2020).

2.1.1.2 Reasons for Demonetization

Many different countries around the world have conducted demonetization measures for various reasons. Governments may choose to demonetize if the currency note gets out of control, due to problems like hyperinflation, corruption, black money, illegal trade and etc... Currency demonetization also aims to prevent criminal actions, such as counterfeiting, terrorism, or tax evasion, black market. In other words, demonetization occurs to introduce a new currency standard in economy. For example, in 2002, European Union introduced Euro, as a common currency that would replace the existing currencies of several nations. In adopting Euro as common currency, countries across Europe discontinued their currencies and introduced the euro as the standard currency across the European Union.

The removal of those old currency notes and replacement of the same and the new currency Notes is expected to remove black money from the economy as they will be blocked since the owners will not be in a position to deposit the same in the banks and Temporarily pause the circulation of large volume of counterfeit currency It would curb the funding for anti-social elements like black market, smuggling, terrorism, surveillance (World economic and social survey, 1999).

2.1.1.3. Advantages of Demonetization

By demonetizing the existing currency notes, a country can receive benefits ranging from crime prevention to greater currency standardization. The following are advantage of Demonetization: (Dhammika, Khanna, & S., 2016).

- Reduce corruption
- Increase in Amount of Savings in bank Account; because there is no minimum limitation on deposit but there is limitation on withdrawal which leads to uses of RTGS, ATM, and POS for withdrawal.
- Increase in Online Transactions; online transactions have witnessed a massive increase in app download and activation of debit or credit cards.
- Support for Government finances and there will also be a much higher collection of income and other taxes by the Government.
- Increases Cashless transactions and utilizing mobile phones to make payments instead of opting for the traditional modes of payment
- It reduces various criminal activities like terrorism, black market, corruption, illegal trade and etc.
- It prevents tax evasion. Throughdemonetization process, old currency notes and coins are discontinued and taken out of circulation, and effectively become worthless which leads the currency has no legal tender.
- Save time and reduce cost by reducing employment rate of many small businesses.

2.1.1.4. Disadvantage of demonetization

Some disadvantages can arise from the demonetization process. The following are among the disadvantage of demonetization:

- ❖ Reduction of cash in circulation which makes it difficult to purchase goods and service in economy.
- ❖ Slow down economic growth by disrupting micro, medium and small scale business performance in short run.

- ❖ Disruption of trade activities, until it adjust to the new currency notes.
- ❖ Loss of traditional payments in society
- ❖ Needs for ATM adjustments with new currency notes.
- ❖ Incurs cost of printing new currency notes
- ❖ Demonetization may cause confusion and disorder among people to exchange their currency before discontinuation.

2.1.2. History of Demonetization

In the world history, one can see several instances of the demonetization process, which were implemented in various countries of the world. Economic policy of demonetization benefits many countries, which was aimed to make the country's failing economy strong.

2.1.2.1 England

Before 1971, pound and penny currencies were used to be circulated in Britain but, to bring uniformity in currency; the government stopped the circulation of old currency notes in 1971, and introduced coins of 5 and 10pounds. Though, government was continuously working towards this huge change they also prepared their own citizens in advance of this impending change. Though, England underwent demonetization process but, it had little effects upon the people and economy and the government gave sufficient time to people to have their money exchanged and also new currency notes was made available in all banks to ensure a smooth functioning of the country's economy.

2.1.2.2. Ghana

In 1982, Ghana one of most developing country in Africa demonetized their 50 cedis note to tackle tax evasion and empty excess liquidity. This made the people of the country support the black market and they started investing in physical assets which obviously made the economy weak and failed at the end.

2.1.2.3 Myanmar

In 1987, the experience of demonetization in Myanmar's military is invalidated around 80% value of money to curb black market which is failed lastly. This decision led to economic chaos and disorder which affects daily activities and inflation rose up with it commodities began to disappearing sooner from markets which in turn led to mass protests and clashes with the military government that killed thousands of people. This call of demonetization by the Burmese government proved very costly for the country and much economist call sit a poor decision as small traders and common public were the worst affected during this process of demonetization and lastly government crackdown.

2.1.2.4. United State of America (1969)

Due the existence of black money in United State, the country was losing its sheen built on Silicon Valley and the so-called even today existent American Dream. In 1969, US President Richard Nixon announced all bills above \$100 null and void and theses announcement of demonetization where successful unlike that many countries were failed. In United State even today, \$100 bill is the maximum available for circulation.

2.1.2.5 Nigeria

The implementation of demonetization in Nigeria was done during the government of Muhammadu Buhari in 1984. Nigeria introduced a new currency notes and banned the old notes. However, the debt-ridden and inflation hit country did not take the change well and the economy were collapsed and failed then, Muhammadu Buhari was thrown out of power in 1985-86.

2.1. Lists of country that had demonetization policy, excluding Ethiopia.

Country	Year	Objective	Results
Germany	1923	To prevent inflation	Inflation fell
USA	1969	To resist black money	Successful
UK	1971	To bring uniformity in currency	Successful
Ghana	1982	To control black money	Failed
Myanmar	1987	To resist black money	Led to political dispute
Nigeria	1984	To fix debt burden and inflation	Economy collapsed

Zaire	1990	To withdraw existing currency from system	Partly successful
USSR	1991	To fight corruption, smuggling	Economy crushed
Australia	1996	To curb black money	Successful
North Korea	2010	To curb black market	Successful
Zimbabwe	2010	To curb hyperinflation	Failed
Pakistan	2015	To prevent black money	Messed up
Philippines	2016	To prevent integrity of currency	Yet not known

Source: Jangid, R &Sohini, S. (2017)

2.1.2.6 Historical background of Ethiopian currency

In the 18th and 19th centuries, the first birr in Ethiopia, Maria Theresa thalers and blocks of salt called "amole tchew" served as currency in Ethiopia. The Maria Theresa thaler was officially adopted as the standard coin in 1855, although the Indian rupee and the Mexican dollar were also used in foreign trade (Linz Mayer& Owen, 2012).

In 1936-41 after the Italian occupation the attempted demonetization of Ethiopian notes into Italian East Africa, the Italian lira was introduced (15th July 1936) and Ethiopian banknotes were withdrawn from circulation at 3 lire per talar (birr). It is not clear, however, when, where, and to what extent these special notes actually circulated (The World Fact Book, 2008). The National Bank of Ethiopia took over note production in 1966 and issued all denominations except for the 500 birr and new Ethiopian birr were demonetized at the end of Ethio-Ertrean war.

Recently, current Ethiopian government demonetize its currency notes On September 14, 2020, when PMs Abiy announced the introduction of new banknotes of 10, 50, 100, and 200 birr, with the latter being issued into circulation to meet the needs of issuing a high denomination note to tackle inflation and cash hoarding. PMs Abiy also noted that the country spent 3.7 billion birr (\$101.2 million) to print the new banknotes. Companies and Individuals can cash only up to 1.5 million birr (\$41,000). The cash withdrawal from banks should also not exceed 100,000 birr's (\$2,737) but later changed to 50,000 birr. The old 5-birr notes, while they will remain legal tender, will be replaced with a coin (Eiopian Broadcasting Corporation , 2020).

2.1.3. Instruments of Demonetization

The demonetization instruments or cashless policy concept aims at reducing (not eliminating) the amount of physical cash circulating in the economy and encouraging more electronic based transactions (payment for goods and services as well as other transfers). It equally aims at preventing banks runs. Cashless policy means a situation in which countries, especially less developing countries would transit from a cash-based economic model to a cashless economic model. In other words, demonetization policy is a combination of both the cash- based payment system and electronic payment systems/channels with the latter exceeding the former in terms of utilization (Nweke, 2012).

2.1.3.1 Online/internet banking

Online/internet banking can be defined as an internet portal, through which customers can use different kinds of banking services ranging from bill payments to making investments online. It also refers to the systems that enable small and medium scale enterprises to get access to their accounts and general information on bank products and services through banks website, without the intervention or inconvenience of sending letters, faxes, original signatures and telephone confirmations (Simon & Thomas, 2016). It involves conducting banking transactions on the internet (www) using electronic tools such as the computer, mobile phone without visiting the banking hall. Operators of MSMEs are better off because transaction and business management has been made a lot easier which has a positive effect on the performance of MSMEs. It is one of the cheapest service deliveries for bank products (Pikkarainen et al.,2004).

2.1.3.2 Automated Teller Machine (ATM)

Automated Teller Machine (ATM) has been defined by Abubakir & Tasmin (2012) as a computerized telecommunications device that provides the customers of a financial institution with access to financial transactions in any way without the need of a human clerk or bank teller. Fenuga & Oladejo (2010) States that, it is a machine where cash withdrawals are made over the machine without going to the banking hall. According to him, it also sells recharge cards of all networks as well as makes transfers across all banks and it can be accessed 24 hours/7 days with account balance enquiries. It facilitates a quick small cash withdrawals and transfer which brought ease in a business operation and positive effects on the performance of MSMEs.

2.1.3.3 Mobile banking

Mobile-phone banking defines as a service provided by a financial institution which allows its customers, micro, small and medium scale enterprises, persons and other business ventures to perform transactions over the mobile telephone. He further states that it enables the customer to check his/her account balances, give instruction for bill payment, transfer money between accounts in the same bank and other banks, make payment for goods purchased or services rendered. The term mobile banking(M-banking) is used for performing balance checks, cash withdrawal, account transactions, bill payments, credit applications and other banking transactions through a mobile device such as mobile phones or personal digital assistant (PDA)(Olayemi, 2002).

The earliest mobile banking services were offered over SMS, a service known as SMS banking. Know days, mobile banking is used all over the world with little or no infrastructure, especially remote rural areas where the internet connection is unavailable (Worku et al., 2016).

2.1.3.4 TeleBirr

The newest entrant into the mobile money business and Ethio-Telecom's TeleBirr is very likely to establish a dominant presence in this space. This mobile money service has already attracted 3 million users in the first few weeks of its launch (boosted in part by a Birr 15 promotional incentive). Services to include cash-in/cash-out via agent network, P2P transfers, bill payments, merchant payments, airtime top-up, and micro-credit. As all existing Ethio-Telecom's subscribers (likely 45mn plus unique users) are an easy target market, Ethio-Telecom can likely meet its goal of reaching 21 million users in the first year. Per company indications (at its launch), an assumed 60 percent active customer base will be processing 710mn transactions by volume and Birr 69.6bn by value by the end of the first year, implying on average of 4.7 transactions per customer per month and near Birr 100 of value per individual transaction.

2.1.3.4. Point of Sale Terminals

This mode of e-banking handles Cheque confirmation, credit authorization, cash deposit and withdrawal and cash payment. It has a numerous benefits and improves electronic fund relocation at the point of sales. Thus, customers account would be debited directly with the cost of purchase in an opening such as a petrol station or supermarket. The suggestion of this is that

customers can make payment for goods and services without necessarily coming in contact with bodily cash as the purchase price would be debited on the buyer's card and credited on the seller's account (Abubakir A. , 2017).

2.1.4 Overview of Micro, medium and Small Enterprises (MSMEs).

There is no universally accepted definition of micro, medium and small scale enterprises but, the changes in price level and advancement in technology affects its actual definition. The functional and easy to measure factors that can be used as definition criteria for micro and small scale enterprises are turnover, gross output, and employment (Safiriyu & Njogo, 2012).

Carpenter (2003) identified other criteria to define MSMEs based on financial strength, relative size, sales value, initial capital outlay, and types of industry. Micro, medium and small scale enterprises can be assumed a lot of meaning in different countries and at different times.

Globally, about 95% of the businesses are MSMEs and contributing up to 60% of employment in private sector of the economy (Ayyagari, Kunt, & Maksimovic, 2011). According to the study of Egena, et al (2014) in Singapore, 99% of enterprises are MSMEs, making contribution 70% of the total employment and over 50% of GDP in the economy. Likewise in South Africa, 91% of the firms are SMEs, contributing 61% to employment and 57% to GDP. On the contrary, SMEs in Nigeria contribute only 25% to employment, 46.54% to GDP and 2.7% to export earnings which are the lowest contribution of all.

In Ethiopia, Micro enterprise is an enterprise that operates with less than 10 people including the owner or their total asset is not exceeding Birr 100,000 (one hundred thousand), medium scale enterprises are those that employ between 100 and 500 employees' with paid up capital 500,000 to 1,000,000 while small enterprise is an enterprise that operates with 10-99 persons or with a paid up capital of total asset Birr 100,000 (one hundred thousand) and not exceeding Birr 1.5 million (FDRE, 2011).

In spite of its definition, a micro, medium and small scale enterprise (MSMEs) are generally referred to as the engine of economic growth in many less developed countries and has a key factor in promoting private sector development. Micro, medium and small scale enterprises not

only contribute significantly to improved living standards but, they also bring about substantial local capital formation and achieve high levels of productivity and capability.

2.1.2.1. Characteristics of MSMEs

In Ethiopia the ownership and registration status of MSMEs are usually low and often sole proprietorship and largely characterized by informal sectors. High level of poverty and low income is a major characteristic of such enterprises. Thus the process of demonetization policy as implemented by the national bank of Ethiopia (NBE) could hinder the performance, operation and growth of MSMEs, with a significant negative influence on total investment and national economy. MSMEs Transactions via physical cash are usually very high. During the process of demonetization, there is some challenges such lack of ICT knowledge and technical skill, non-availability of ICT, fear of online fraud, non-availability of POS, distance to ATMs, cost of internet, unreliable network and ICT phobia, commission charge attached to cash less transaction and etc. In many less developed countries A lot of MSMEs businesses enterprises have very poor banking habit. ATM usage, online banking, POS machine does not mean much to them since their transaction is largely based on “Cash and Carry basis” (Omose, 2011).

2.1.2.2. Growth and Survival of MSMEs.

Before taking a further step towards cashless economy, it is more important to know how the cashless policy/demonetization affects small business segment. What are the supports needed to survive and grow in the changed environment? Cash is a legal tender and everyone can handle it easily. Demonetization process hit vulnerably all sectors in MSMEs segment. The electronic (e-payments) money scheme is often linked to a bank account, and a good number of consumers and small business are unbanked in many less developed country. They may also not be literate to deal with technology. It is necessary to know how payments systems are made by these people and what changes are required to survive.

Demonetization slows down economic growth for a while. Sectors like IT, recruitment services, security services survived in the new economic wave while, sectors like textile, construction, construction materials, automobile, logistics, consumer durable etc., were vulnerably affected because, their daily business activity is largely based on cash transaction. In the immediate term,

the ability of the unorganized sector reduced to deal with digital payment system (Ibrahim, & Nasir, 2016).

Table 1.2 the performance of different sectors in the aftermaths of demonetization.

<i>IT services</i>	<i>Pharmaceuticals</i>	<i>Textile</i>
<i>Recruitment agencies</i>	<i>Agriculture</i>	<i>Construction & construction materials</i>
<i>Security service</i>	<i>electrical equipment</i>	<i>Automobile related</i>
<i>Engineering</i>	<i>Packaging</i>	<i>Steel</i>
	<i>Consumer products</i>	<i>Logistics</i>
		<i>Consumer durables</i>

Source: CRISIL, Press Release January 5, 2017.

Legend: Slightly less impacted Moderately impacted Significantly impacted Not impacted

As we have seen from the above table micro, medium, and small scale enterprises which are more related to ICT and electronics are less affected by demonetization because most of their transactions are carried out by electronic means of payments but, most enterprises such as consumer durables, textile and construction materials are the most affected business by demonetization because, their daily activities are largely based on cash transactions for their wages and labour payments which is not based on electronic payments.

2.2. Empirical Review

Various literatures fortify that demonetization is an economic system in which goods and services are exchanged through electronic form without complete cash less. It is a process of adopting ICT facilities in economic transactions by reducing the physical cash to low level. Regarding the effects of demonetization, several research studies, guess, projections and individual suggestions have been carried out in different countries as follows structured based on their period of the study.

Khursange (2014) findings reveal that people know about the instruments of demonetization such as online services, but still many people are unaware and many of them are non-users. In his

opinion that demonetization has both positive and negative impact, but in the long run, it will definitely have a positive impact in controlling black market and fake money.

Mali(2016)Made an attempt to examine the effects of demonetization on different sectors resulting into boom for some sectors like E- Wallet business and somewhere resulting into temporary slowdown like micro business and some seasonal business sectors, where most of the transactions are cash based.

Sinha & Rai(2016) studied that, in their article that the most supreme sufferers of demonetization were the informal sectors in Indian economy, where the cashless transactions are minimal. They have indicated that microeconomic and macroeconomic effects of demonetization. The microeconomic effects are beneficial i.e. uncollected tax revenue increased &political move on terror financing was restrained, whereas the macroeconomic effect of demonetization was not beneficial.

Wali A., et al.,(2014)in their research examined that, the effects of electronic payment(e-payment) system by using survey instruments method (questionnaire) and randomly selected 550 samples and the results of the study indicates that, there is a positive effects of e- payments system on the performance of MSMEs. Also,the study indicates that, the effects of electronic payment system due to demonetization process have a positive effect on the performance of MSMEs.

Kirigano B. M., et al.(2016)examined the effect of mobile banking, one of the instruments of demonetization on performance of MSMEs in Kitale Town, Nairobi, Kenya. Descriptive method of research design was used for the study. The result showed that positive and strong relationship exists between mobile phone transfer service innovation and enterprises performance. The study concludes that, when such innovations are used, they help to bring customers leading to more business income. But, the authors only examined the effects of mobile banking;the effects of other variables were not included in their study.

According toPornita & Vasimraj(2017) studied that, it is pretty clear that demonetization has affected positively the e-commerce industry. During demonetization process, people buying and selling more products through online transaction, instead of retail shop due to cash crunch. The buyers and sellers have adopted new method of making payment and pre demonetization period

consumers were making payment by choosing physical cash on delivery option but, now majority of them are shifted from cash payments system to debit card and Pay m-wallet to make payments. Hence, they concluded that, demonetization has opened a huge opportunities for the e-commerce industry and it will prove huge boom for digital payment market. The authors examined that, technology related sectors are more benefited from the process of demonetization because, they are largely cash based and those sectors which are far away from digital market were negatively affected by the process of demonetization.

A study conducted by All India Manufacturers' Organization (AIMO) has reported that, a drop in employment and loss in revenue of MSMEs during demonetization process. According to AIMO, Medium and large scale industries engaged in big-ticket and road construction, reported that, a 35 per cent decrease in employment and 45 per cent revenue loss. The study indicates that, the announcements of demonetization negatively affected business enterprises and reduction of profits. According to Kurosaki(2019) the effect of demonetization was more on unregistered firms. Few firms used the mode of digital payment but due to rare instances of the usage of it, they switched over to the normal mode after the turmoil was over.

Dhandayuthapani & Vishnupriya(2017)in their study on the effects of demonetization on various sectors assessed fall in price of shares traded in stock market due to large deposits in bank. The study concluded that, withdrawal of older currency notes in the market will boost demand for bond market and the real estate market would undergo cleansing due to reduction in black money.

Bansal(2016)Examined the effects of demonetization on deferent sectors and aftermaths of demonetization, only agricultural sector shows positive improvement while, other two sectors – manufacturing and service sectors were crashed down. He also focuses on the effects of demonetization process in different sectors of Indian economy. The author investigates the effects of demonetization on overall agricultural sectors not on urban agricultural but, this study mainly focuses on the effects of demonetization on urban agricultural sectors.

A research conducted by CD Equisearch Private limited(2017)concentrated on the effects of demonetization on various sectors. According to the finding, Demonetization shed a dark shadow on the increasing performance of tourism & hospitality industry in India. These sectors are

facing a tough time. November through January months generally witnesses the maximum inflow of international tourists in India but, due to the ban during the process of demonetization, there has been a 65% drop in Christmas & New Year vacation bookings. Physical Cash crunch has negatively affected the liquidity of currency exchanges in the country. The article identify that demonetization negatively affected the performance of hospitality and tourism which were largely cash based and seasonal sectors.

Research carried out by Humphrey(2017) findings indicates that, operators of small scale business have zero tolerance to ICT practice in both the operations and transactions of their businesses; and this establish a major challenge to the adoption of demonetization instruments in the study area and usually, there was a negative significant effect of the introduction of cashless policy on the processes and growth of small scale businesses in Ogoni land, Nigeria.

Mbah & Obiezekwem(2019) studied relationship between instruments of demonetization and performance of small and medium scale enterprises in Anambra state; Regression analysis was used to test the hypotheses of the study. The results of the study concluded that, there is a significant and positive relationship between; automated teller machine (ATM), point of sale services (POS), transaction alerts (SMS), mobile banking and performance of MSMEs.

Okoke(2017) investigated that, the effect of instruments of demonetization on the growth of small and medium scale enterprises in Anambra State, Nigeria. The study used descriptive survey method. Major statistical tools of analysis were Pearson correlation and multiple regression analysis. The result of the analysis showed that, automated teller machine, point of sale and mobile banking have positive and significant effect on the development of small and medium scale enterprises in Anambra State. The study concluded that, with more awareness being created about the usefulness of cashless practices, SMEs will perform better.

Kombe & Wafula(2015) investigated the effects of internet banking by using descriptive survey design and the results indicates that internet banking reduces time and increase quality of service rather than cost reduction but, the effects of other instruments were not included in their study.

From the above literature review the effects of demonetization instruments on the performance of small scale enterprise is a positive and enhances the advances of technology, increases

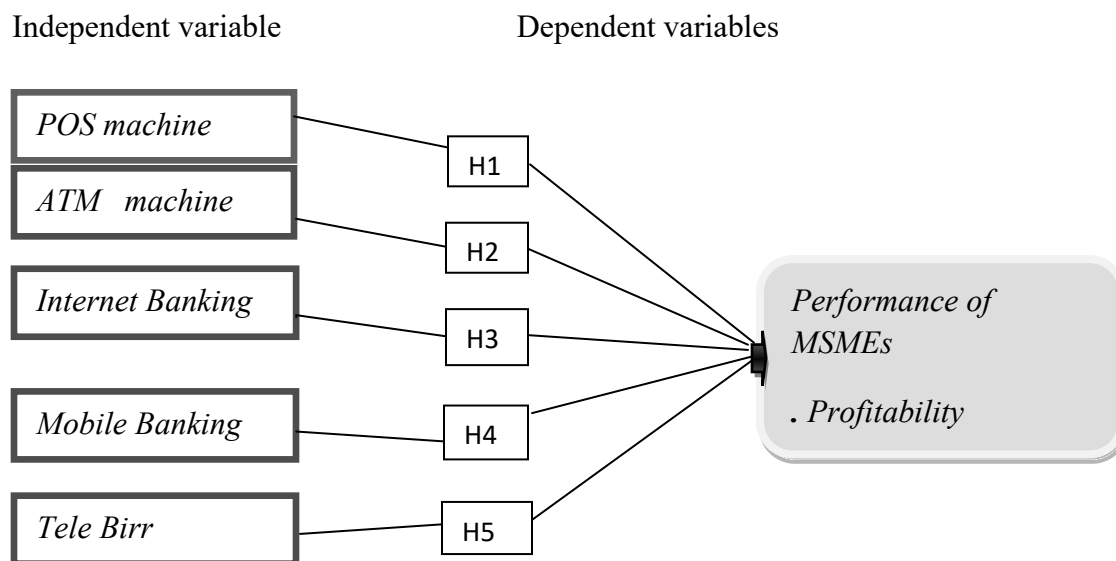
business incomes according to the study carried out by Kirigano B. M. et al (2016), Pornita & Vasimraja (2017), Wali A., et al. (2014) Okoke (2017) and Mbah & Obiezekwem (2019). However, the result of the study by Humphrey (2017) CD Equisearch Private limited (2017) and (AIMO) indicate that the effect of adoption of e-payments has negative effects on the performance of MSMEs. The finding of Khursange (2014) on the effects of instruments of demonetization on the performance of MSMEs is both positive and negative effects in long run and short run respectively. These mixed results and alternative views from different countries and writers are mainly because of lack of comprehensive analysis of instruments of demonetization and performance of MSMEs. This study intends to take a departure from past studies and incorporate several variables and their effect on performance of MSMEs.

Chodorow-reich et al. (2019), Chandrasekhar & Ghosh (2018), Mukherjee (2019), Sivathanu (2018) studied that micro, small and medium scale enterprises suffered immense complexity in exchanging their old notes and adjusting to use digital technology. Swin & Das (2018) found that, demonetization positively affected the elimination of black currency, fake money, and terrorist funding.

Generally, according to the above study, the effects of demonetization is huge on informal sectors than formal sectors because, formal sector largely cash based payment system and these all reviews were carried out in different countries experiences at different time but, these experience is recent in Ethiopia and its effects whether positive or negative is not identified by any other researcher which is going to be studied. It's evident that, the above studies try to see some application of demonetization instruments and their effects on the performance of MSMEs such as credit cards, POS, mobile banking, debit cards and etc. Despite the above literature, the researcher tries to add the effects of some additional instruments such as Telebirr and the effects of these instruments is recent in case of our country which is not known and studied yet by any other researcher. Also the announcement of demonetization is the recent issue in Ethiopia.

2.3. Conceptual framework

After reviewing the theoretical and empirical literature discussed earlier, the researcher developed the following conceptual frame work;



Source: developed by researcher, 2022

Figure2.1. Conceptual frame works

The above diagram shows that micro, medium and small scale enterprise performance (profit) is a function of POS, ATM, Mobile banking, Telebirr, and Internet banking. Cost of doing business is the transmission mechanism through which the instrument of demonetization affects the profitability of MSMEs.

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Description of the Study Area

The study will be conducted in Arada sub-city, Addis Ababa the capital city of Ethiopia and its one of the 11 sub-city administrations in Addis Ababa which is located in the northern parts Addis. From these 11 sub city administration, the study focused on the owners of micro, small and medium scale enterprises (MSMEs) located in Arada sub city administration. Arada sub-city was purposely selected from 11 sub-city administration because of its nearness and convenience to collect data in short period of time. According to CSA (2011), it's also landed on 9.9 sq.km and population density 225,999 and the sub-city has a total of 10 woredas (CSA, 2011).

3.7. Research approach

In order to achieve the objective of this study, the researcher adopted both qualitative and quantitative research approach to investigate the effects of demonetization on the performance of small scale enterprise. Quantitative research allowed researcher to measure and analyse statistical data, asks specific narrow questions and collect numeric (numbered) data from respondents. Qualitative research approach is concerned with subjective assessment of respondent's attitudes, opinions and behaviour. Qualitative research approach also used to elaborate and convert interview information from respondents without depending on the numerical measurements. Employing this approach was used to neutralize or cancel the biases of applying any of a single approach, enables to use multiple methods of data collection and a means to offset the weakness inherent in a single method with the strengths of the other method (Creswell, 2003).

3.2. Research Design

Descriptive and explanatory research design was used by researcher and data was collected from a cross the population at one point in time because, this research design is cheap, less time consuming, easy data collection and analysis and also the research question of the study call for

description of impacts, challenges, contribution or opportunity of demonetization on the performance of micro, medium and small scale enterprises (Amin, 2005)

In other words explanatory research design allows the researcher to assess the cause and effects between the independent and the dependent variables and observes that, survey design is considered appropriate because, it has the advantage of effectiveness in obtaining information about personal perceptions, belief, feelings, motivations, anticipation and future plans as well as past behaviour, attitudes, practices and opinion of the respondents (Kothari, Research Methodology:Methods and Techniques, 2004).

3.3. Types and sources of data

Both primary and secondary sources of data were used in data collection

i) Primary sources

A primary data was collected through semi-structured questionnaire, which was completed by the owners of enterprises and interview method of data collection is preferred due to its high response rate. Through interviews, clarification of issues is easily achievable leading to accuracy of data from the respondents (Kothari, Research Methodology:Methods and Techniques, 2004).

ii) Secondary sources

Secondary sources of data on the background, economic aspects, impacts, and general merit-demerits, regarding to the effects of demonetization will be collected from published or unpublished government's documents, news reports, books, various journals, websites and internet resources will be reviewed to make the study fruitful.

3.4. Sample Techniques

As stated above, the intention of the study is to assess the impacts of demonetization on the performance of micro, medium and small scale enterprises which are located in Arada sub-city. Inorder to achieve the stated objective, stratified and simple random sampling procedure was used to select the sample for the study; because of the variations in the target population and it's more reliable and detailed information can be obtained. It's also more appropriate, which further facilitates comparisons strategy. With this technique, the sampling frame can be organized into relatively homogenous sub-groups (strata) before selecting elements for the sample.

These strata's are sectors of MSMEs such as service, trade, construction, manufacturing and urban agriculture sectors, which are randomly selected by researcher to obtain sample population that represents the entire population being studied and dividing the population into homogeneous groups called strata to cover the effects of instruments of demonetization. Finally, the samples were selected based on the proportion of the population.

3.5. Population and sample size

3.5.1. Research population

According to Addis Ababa city administration MSMEs report (2011) there about 616 MSMEs in Arada sub-city of Addis Ababa. Therefore, total numbers of MSMEs are the target population of the study. Then, our target population for these study 616 MSMEs owners that are legally registered in Arada sub-city, who have been working in five (5) sectors of MSMEs as shown below.

Table 2.1 Total population determination.

No.	Sector	No. Of MSMEs(population)
1	Service	234
2	Manufacturing	76
3	Construction	61
4	Trade	191
5	Urban agriculture	54
	Total	616

Source: Addis Ababa city administration MSMEs report (2011)

3.5.2. Sample size

Based on Kothari(2004) sample size determination formula, the researcher convinced that it was better to determine the sample size of the study at 95% confidence level or 0.05 level of precision as follows; Thus, sample size is calculated based on the following formula (Kothari,2004).

$$n = \frac{z^2 pq N}{e^2 (N-1) + z^2 pq} \text{Where; } n = \text{total sample size}$$

$$n = \frac{z^2 pq N}{e^2 (N-1) + z^2 pq} = \frac{(1.96)^2 * 0.7 * 0.3 * 616}{(0.05)^2 (616-1) + (1.96)^2 * 0.7 * 0.3} = 212$$

N= total population

P= Sample proportion (assumed to be 0.7 since this would be the maximum sample size and it's based on the result of pilot study).

q=1-p

E= level of significance/sampling error

$$\text{Sample size for service sector} = \frac{\text{total service sector owners} \times n}{\text{total population}} = 80$$

$$\text{Sample size for manufacturing sector} = \frac{\text{total manufacturing sector owners} \times n}{\text{total population}} = 26$$

$$\text{Sample size for construction} = \frac{\text{total construction owners} \times n}{\text{total population}} = 21$$

$$\text{Sample size for trade sector} = \frac{\text{total trade sector owners} \times n}{\text{total population}} = 66$$

$$\text{Sample size for urban agriculture sector} = \frac{\text{total urban agriculture sector owners} \times n}{\text{total population}} = 19$$

3.6. Method of data analysis

The data acquired through interview, survey or questionnaire were analysed using simple descriptive statistical technique methods such as table, graphs or percentages are used to show the effects of demonetization on MSMEs. The survey was carried out through the administration of semi-structured questionnaire on the owners and operators of small scale businesses in the Arada sub-city and these questionnaires based on five-point Likert Scale ranging from Strongly Disagree to Strongly Agree and the researcher also interviewed the owners of MSMEs to collect key information on the effects of demonetization policy on the performance of MSMEs to augment the analysis.

Likert Scale is scaling procedure that allows the respondents to express their opinion on a scale starting from low negative to high positive responses. This has helped the researcher to examine the strength of the responses received from the respondents. The statistical package for social sciences (SPSS) version 26 were used for the detail analyse of the data collected. The SPSS software has allowed the researcher to utilize a range of tests to examine the relation between the dependent and the independent variables. Inferential analyses were carried out by using Correlation analysis and multiple regression analysis to determine whether the five independent variables have any significant effect on the performance of MSMEs.

3.8. Model specification

As stated before the problem associated with demonetization absence of cash based payments, low level of using e-banking or digitalization and demonetization alone is not enough to combat black money, illegal trade, and corruption. Instruments of demonetization applied in order to reduce these cash based economic system. Based on the above empirical background the performance of MSMEs is a function of instruments of demonetization.

Depending on the above theoretical and evident literature reviews the researcher specified the following model based on previous model designed by (Jumba & Wepukhulu, 2019). The basic objective of using multiple linear regression equation in the study is to make the study more effective at explaining, understanding and predicting the stated variables and it makes a number of assumptions about data. The functional relationship between the dependent (profitability of MSMEs) and independent variables (IB, ATM, MB, POS, and by introducing TB as one of explanatory variables) is specified based on earlier empirical model of Igbara & Emerenini (2015), Okafor (2020), Okoke (2017).

Functional form on which the model is expressed as:

$$Y = f(X_1, X_2, X_3, X_4, X_5) \quad (1)$$

The specific functional form of the model is given as:

$$\text{MSMEs } \pi = f(\text{IB, ATM, MB, POS, TB}) \quad (2)$$

Statistically, equation 2 above is not specified due to the absence of the constant parameter and error term. Specifying econometrically, we have:

$$\pi = \alpha_0 + \alpha_1 \text{ IB} + \alpha_2 \text{ ATM} + \alpha_3 \text{ MB} + \alpha_4 \text{ POS} + \alpha_5 \text{ TB} + \mu_t \quad (3)$$

Where: MSMEs π = profitability of Micro, Small and Medium Scale Enterprises

POS = Point of sale α_0 = the intercept

MB = Mobile banking μ_t = Stochastic error margin

TB= Telebirr IB = Internet banking

ATM = Automated Teller Machine

While, $\alpha_1, \alpha_2 \dots \alpha_n$ are the coefficients of variables to be estimated.

The expected signs of the coefficients are as follows: $\alpha_1 > 0$, $\alpha_2 > 0$ and $\alpha_3 > 0$ or $\alpha_i^*s > 0$.

Similar model is used in the empirical studies like Okoke (2017), Mbah & Obiezekwem(2019) and Kirigano B. M., et al.,(2016) to examine the effects demonetization instruments on the performance of micro, samall and meduim scale enterprises. Litrature reviews confirms that these instruments of demonetization are not analysed before in Ethiopia.

3.8. Validity and Reliability

Validity is the degree to which a test measures the accuracy and meaningfulness of the inferences which are based on the research results. Reliability analysis is concerned with the internal consistency of the research instrument (Bryman A. a., 2007).

A pilot study is one of the important stages in research project and is conducted to identify potential problem areas and deficiencies in research instruments prior to implementation. Generally, 10-20% of the main sample size is reasonable number for conducting a pilot study. For this study 15% of questionnaires were tested and passed the assumption of pilot testing. Questionnaires were tested on potential respondents to make the data collecting instruments objective, relevant, suitable and reliable to the problem as recommended by. Proper detection by advisor has been taken to insure validity of the instruments. Finally, the improved

version of questionnaires were printed and dispatched. Cronbach alpha coefficient was used to analyse the reliability or internal consistency of items and typically alpha value of 0.67 or higher is taken as a good indication of reliability (Hassan, 2006).

3.9. Ethical Considerations

The participants were assured that they have right to participate or withdraw at any time from the study. The names or identifications of the respondents were secret and information collected from them treated with maximum confidentiality. In addition, informed consent was obtained from the participants before they are enrolled in to the study. The consent form was written in English stating the study's objectives, nature of participant's involvement, risk and benefits, and confidentiality of the data. Respondents then were requested to read the consent form carefully and by doing so they would be given clear options on voluntary participation. It was also made clear that they could refuse to answer any questions and terminate it whenever they desire and fill to do so. Confidentiality of information was insured by removing personal identifiers from the survey questionnaires. Respondents thus were also protected against any possible adverse consequences from participating in the study.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. Introduction

In this chapter, data collected through different techniques were analysed. The demographic data was examined using descriptive statistics and summarized in various frequency table and data was analysed using help of SPSS statistical software. In the analysis, total of two hundred twelve (212) questionnaires were distributed to the owners of five purposively selected sectors in Arada sub-city. Out of the two hundred twelve (212) questionnaires distributed, one hundred eighty six (186) were successfully completed, returned back and used for the study.

4.2. Response rate

Table 3.1 Determination of response rate.

Sector in MSMEs	<i>Questionnaires distributed</i>	<i>Questionnaires filled & returned</i>	<i>Response rate (%)</i>
Service	84	70	83
Trade	68	55	81
Manufacturing	27	25	93
Construction	22	20	91
Urban agriculture	19	16	84
Total	212	186	88

According to Kothari(2004) any response rate of 50% is ‘adequate’, 60% is ‘good’ and 70% or higher is ‘very good for analyses. The analysis, findings, and discussion of the research results with help of SPSS version 26 are presented in the following section. From table 4.1 the response rate was approximately 88% of the total questionnaires distributed which is sufficient and consistent for analysis of the findings while, 12% were non response rate because of the unwillingness of respondents due to rapid expansion of Covid19 during data collection.

4.3. Validity and Reliability Test

Reliability test is used to insure internal consistency and accuracy of measurement scale among the items included in each of the scales. To test reliability of the data instrument, Cronbach's coefficient alpha is estimated. A higher alpha coefficient indicates higher scale reliability. Specifically, George & Mallery (2003) suggests that scales with 0.60 Alpha coefficients' and above are considered acceptable and good reliability.

As shown in the table below for reliability test of Cronbach's Alpha coefficients for instruments of demonetization ranges from 0.717 to 0.874 and overall Cronbach's Alpha coefficients' for expected scale items is 0.760 which is acceptable by scholars and it can be concluded that each survey instrument represents a reliable and valid construct.

Table 4.2 Reliability Test (Cronbach's Alpha)

<i>Variables</i>	<i>No, of items</i>	<i>Cronbach's Alpha coefficient</i>
POS	5	0.756
ATM	5	0.874
Internet Banking	6	0.717
Mobile Banking	5	0.779
Tele Birr	6	0.822
Reliability of total scale		0.7896

Sources: research findings, 2022.

4.4. Questionnaire pilot testing

In business research, a questionnaire is a common tool used to collect data. These questionnaires should be piloted. The pilot test aims to refine the questionnaires to insure that respondents have no problem in answering the questions. Also it assesses the validity and reliability of the questions. Generally, 10-20% of the main sample size is a reasonable number for conducting a pilot study (Hazzi & Maldaon., 2015). For this study 15% of the questionnaires were tested and passed the assumption of pilot testing. The response has shown the general ease of completion of the questionnaires and there were no improvement suggestion for further adjustment from respondents.

4.5. Demographic information of respondents

Demographic information of the respondents were derived from questionnaires which includes questions related to personal profiles of respondents such as: Data on age, gender, level of education, experiences and position held by the respondents of MESMEs enterprises which summarized in the table below.

Table 4.2: Demographic characteristics of the respondents

NO.	Items	Measurement	Frequency	Percentage (%)
1	Gender	Male	123	66.1
		Female	63	33.9
		Total	186	100
2	Age	Below 20	54	29
		21-30	92	49.5
		31-40	29	15.6
		41-50	7	3.8
		51-60	4	2.2
		Above 61	-	-
		Total	186	100
3	Education	Not completed primary education	14	7.5
		Primary education	28	15.1
		Secondary education	48	25.8
		Collage education	33	17.7
		University degree	63	33.9
		Other qualification	-	-
		Total	186	100
4	Marital status	Single	98	52.7
		Married	68	36.6
		Divorced	19	10.2
		Widowed	1	0.5
		Total	186	100
5	Types of enterprise	Service	70	37.6
		Trade	55	29.6
		Construction	20	10.8
		Manufacturing	25	13.4
		Urban agriculture	16	8.6
		Total	186	100

6	Position held	Owners	125	67.2
		Employee	61	32.80
		Total	186	100
7	Experience	Less than one year	11	5.9
		1-2 year	62	33.3
		3-4 year	51	27.4
		5-6 years	32	17.2
		7 and above years	30	16.1
		Total	186	100

Source: Own survey, 2022

Table 4.2, Item 1 show that, from total 186 respondents 66.1% were male respondents while, 33.9 were female respondents. This indicated that a male respondent contains more than half of the female respondents and this implies that there was gender diversity in the study.

Table 4.2, Item 2 shows that out of 186 respondents, 49.5% respondents are under age 21-30 followed by 29% with age group below 20 and 15.6% were grouped under 31-40 years, 3.8% were also found in 41-50 years old and lastly only 2.2 % were above the age group 51-60 years. There is no respondent that are found in the age group above 61 years. This implies that the majority of the respondents were dominated by the youth age group. Item 3 of Table 4.2 indicated that, 33.9% of the respondents have a bachelor degree followed by 25.8 % secondary education and only 7.5 % of respondents not completed elementary education. This implies that majority of the respondents are above secondary education and probably able to read, understand and interpret the research question on the effects of currency demonetization. Table 4.2 of item 4, shows that, 52.7% of the respondents are single and followed by 36.6% which are married. This indicates that, majority of the respondents are single.

From the above table 4.2, item 5 shows that, 37.6% of the respondents are engaged in service sector, followed by trade sector which is 29.6%. Only 8.6% of respondents were involved in urban agriculture. This implies that, service sector concentrated largely at the centre of the capital city.

Table 4.2 item 6 shows that, 67.2% of the respondents were the owners of enterprise and 32.80% were the employees of the firms. This indicates that, the position of the study was mostly held by the owners of the firm and details of information were obtained about MSMEs.

Item 7 of the table 4.2 shows that, 33.3% of the respondents had been in operation for 1-2 years, 27.4% for 3-4 years and 17.2% were for 5-6 years of experience. Only 5.9% were in operation below one year of experience. This implies that majority of MSMEs had operated a relatively longer period of time and suitable for being used for the study.

4.6. Analysis of Collected Data

This section presents analysis of the collected data that shows the results of descriptive and inferential statistics. In order to assess the objective of the study, correlation and regression analysis were also performed.

4.4.1 Descriptive analysis

In this section, the results of descriptive analysis were presented. In order to achieve and assess the objective of the study, the effects of instruments of demonetization on the performance of MSMEs were analysed using descriptive statistics.

4.4.1.1 Effects of demonetization instruments/channels on the performance of MSMEs

1) Effects of POS machine

Descriptive statistics (percentage) were used in order to analyse the response of respondents with regard to the effects of POS machine on the performance of MSMEs. Respondents were asked to indicate their level of agreement/disagreement on the effects of POS machine on a scale of 1-5. The results are presented in table 4.3 below.

Table 4.3: Effects of using pos machine on the performance of MSMEs

Items	Responses (frequencies & percentage)					
		SD	D	N	A	SA
1.POS machine provides affordable cost in transaction	Freq	3	63	0	57	63
	%	1.6	33.9	0	30.6	33.9
2.I face a financial challenge in using POS machine	Freq	2	77	9	52	46

	%	1.1	41.4	4.8	28	24.7
3. Adoption of POS machine after demonetization enables me to buy and sell goods and service without carrying physical cash.	Freq	14	53	11	37	71
	%	7.5	28.5	5.9	19.9	38.2
4. I don't use POS machine before demonetization but, I started using, since demonetization.	Freq	2	72	9	52	51
	%	1.1	38.7	4.8	28	27.4
6. I have seen growth of profit in my business since, the time I started using POS machine after demonetization	Freq	10	55	5	37	79
	%	5.4	29.6	2.7	19.9	42.5

Source :Own survey, 2022

As indicated on the table 4.3 above, 33.9% of the respondents agreed with the statement that, the provision of affordable cost of POS machine and also 33.9% disagree with affordable cost of POS machine. 41.4% of the respondents disagree with the statements of the financial challenges of using POS machine because, 38.7% of respondents were using POS machine before demonetization. However, 38.2 % of respondents agreed that, they enable to buy and sell goods and service without carrying physical cash. 38.7 % of respondents are disagreeing that, usage of POS machine started since demonetization process started. This implies that MSMEs owners already started using POS machine before demonetization announcement. But majority of respondents were started to use POS after announcements of demonetization that is 55.4 % agreed. On the other hand 42.5 % of the respondents are strongly agreed with the growth of their profit since they started using POS machine after announcement of demonetization. Generally, a descriptive result of the study implies that, POS machine significantly affect the performance of MSMEs.

ii) Effects of ATM

Respondents were asked to indicate their level of agreement/disagreement on the effects of ATM machine on the performance of MSMEs based on a scale of 1-5 that is analysed using descriptive statistics (percentage) in the table below.

Table 4.4: Effects of using ATM machine on the performance of MSMEs

Items	Responses (Frequency and percentage)					
		SD	D	N	A	SA
1. Usage of ATM decreased, after implication of	Freq	10	92	2	28	54

demonetization	%	5.4	49.5	1.1	15.1	29
2. Usage of ATM increased sales and revenue of MSMEs	Freq	19	55	2	26	84
	%	10.2	29.6	1.1	14	45.2
3. ATM transaction increased profit, after implication of demonetization	Freq	17	50	3	31	85
	%	9.1	26.9	1.6	16.7	45.7
4. There is no good accessibility of ATM and huge dispute problems.	Freq	23	49	3	25	86
	%	12.4	26.3	1.6	13.4	46.2
5. ATM transaction saves a tremendous time to carry out other activity daily.	Freq	21	46	3	29	87
	%	11.3	24.7	1.6	15.6	46.8

Source: Own survey, 2022

Table 4.4 above shows that, 49.5% that are more than half of the respondents disagreed that, the usage of ATM decreased, after implication of demonetization and only 15.1% of the respondents agree with the decrease in usage of ATM after implication of demonetization. 45.2 % of the respondents strongly agree with the usage of ATM increase sales and revenue of MSMEs. 45.7% agreed with the usage of ATM increased the profit of MSMEs and 46.2 % of the respondents were strongly agreeing that there is no good accessibility of ATM and huge dispute problems. This implies that many ATM are out of service and the availability of the ATM is rare from place to place and also with major dispute problem which is significantly affects the performance of MSMEs. Also 46.8% of the respondents agreed that ATM transaction saves time to carry out other activities rather than visiting the banking hall and teller.

iii) Effects of internet banking

Respondents were asked to indicate their level of agreement/disagreement on the effects of internet banking on the performance of MSMEs based on a scale of 1-5 that is analysed using descriptive statistics (percentage) in the table below.

Table 4.3: Effects of using internet banking on the performance of MSMEs

Items	Responses(Frequency &percentage)					
		SD	D	N	A	SA
1. Internet banking is not useful in my daily activities and its usage not increased during demonetization process	Freq	32	95	3	20	36
	%	17.2	51.1	1.6	10.8	19.4
2. Internet banking not enables me to perform financial transaction quickly	Freq	29	90	3	28	36
	%	15.6	48.4	1.6	15.1	19.4
3. I have the skills to use internet banking, hence it's easy for me	Freq	66	73	1	21	25
	%	35.5	39.2	0.5	11.3	13.4

4. There is adequate quality of internet connection to get apps	Freq	62	70	0	17	37
	%	33.3	37.6	0	9.1	19.9
5. There is a chance of losing money through internet banking transaction	Freq	52	62	3	21	48
	%	28	33.3	1.6	11.3	25.8
6. The commission attached to internet banking affect the profit of enterprise.	Freq	41	92	0	15	38
	%	22	49.5		8.1	20.4

Source: Own survey, 2022

Table 4.3 shows that, 51.1% of the respondents agree that the usefulness of internet banking in daily activities and its usage is increased during the process of demonetization. Only 19.4 % of the respondents are strongly agreed that internet banking is not useful in daily activities of the respondents. The figure shows that, 48.4% responded that, internet banking enables to perform MSMEs transaction quickly and 19.4% of the respondents are strongly agree that internet banking does not enable MSMEs to perform transaction quickly. The response of the item 3 of the above table shows that, 39.2 % of respondents have no skills to use internet banking and it's not easy for them. Only 13.4 % of the respondents have the skill to use internet banking and it's easy for them. Table 4.3 item 4 shows that, 37.6% of the respondents' disagreed and 33.3% of them were strongly disagreed with the quality of internet connection to get the application of internet banking. Only 9.1% were agreed with the quality of internet connection to get the application. The other is that, 33.3 % of the respondents were disagree with the chance of losing money though internet banking transaction and 11.3 were agree and 25.8 were strongly agree that there is a chance of losing money through internet banking .

Regarding to the commission of internet banking on the effects of the performance of MSMEs table 4.3 shows that, 49.5% of the respondents were disagree that the commission attached to internet banking affects the profit of MSMEs and 22% were strongly disagree with the effects of commission. Only 8.1 agree and 20.4 were strongly agree .This implies that internet banking has a significant effects on the performance of micro, medium and small scale enterprises. According to the above descriptive statistics of the respondents, the usage of internet banking increased during the process of demonetization but, hindered by lack of knowledge about using internet banking and an availability of good quality of network connection.

IV) Effects of mobile banking

In these section the effects of mobile banking on the performance of MSMEs is discussed. The response to questions is organized in the following table.

Table 4.4: Effects of using mobile banking on the performance of MSMEs

Items	Responses(Frequency &percentage)					
		SD	D	N	A	SA
1. After demonetization, the usage of mobile banking increased.	Freq	27	32	1	34	92
	%	14.5	17.2	5	18.3	49.5
2. Due to demonetization, usage of mobile banking increased profits of enterprises.	Freq	30	32	3	27	94
	%	16.1	17.2	1.6	14.5	50.5
3. Mobile banking increased sales, revenue and boost cash flows	Freq	10	56	8	74	38
	%	5.4	30.1	4.3	39.8	20.4
4. Implication of mobile banking negatively affected a day to day activity of the businesses	Freq	13	80	4	48	41
	%	7	43	2.2	25.8	22
5. Transaction cost of mobile banking negatively affected the performance of MSMEs?	Freq	14	56	0	84	32
	%	7.5	30.1	0	45.2	17.2

Source: Own Survey, 2022

Table 4.4 shows that, 49.5 % of the respondents responded that, the usage of mobile banking increased during the process of demonetization and 32% of the responses were disagree with the usage of mobile banking increased. The figure above also shows that, 50.5% of the responses of the respondents strongly agreed with the increased usage of mobile banking also increased the profits of MSMEs. Table 4.4.of the item 3 shows that, 39.8 %(74) of the respondents agreed that, mobile banking increased the sales, revenue and boost cash flows and only 5.4% were strongly disagree that, mobile banking increased sales, revenue and boost cash flows. Table 4.4 also shows that, 43% of the respondents were disagree with negative effects of mobile banking while, 25.8% of the respondents were agree that, mobile banking negatively affected a day to day activities of MSMEs.

Regarding to the charged cost of mobile banking transaction 45.2 %(84) of the respondents agreed that the performance of MSMEs were affected negatively. 30.1% of the respondents disagree with the negative effects of mobile banking. Generally, mobile banking has a significant effect on the performance of MSMEs. This implies that majority of the respondents agree that usage of mobile banking increased during the process of demonetization and it increased the profits of enterprises because, mobile banking is easy to use any were and any places were the Network is available.

V) Effects of Tele birr

In order to analyse the responses of representative of MSMEs, the effects of the newly launched variable Tele birr was analysed using descriptive statistics (percentage) in the table below.

Table 4.5: Effects of using Tele birr on the performance of MSMEs

Items	Responses (Frequency and percentage)					
		SD	D	N	A	SA
1. I have no awareness about Tele birr	Freq	21	63	7	56	39
	%	11.3	33.9	3.8	30.1	21
2. I have Tele birr account and I believed its usage increased the profit, after announcement of demonetisation	Freq	33	39	2	40	72
	%	17.7	21	1.1	21.5	38.7
3. The announcement of Tele birr relieves me the problems of having to open a bank account	Freq	21	71	3	25	61
	%	14	38.2	1.6	13.4	32.8
4. I have started buying and selling goods and service by using the application of Tele birr	Freq	28	29	3	26	100
	%	15.1	15.6	1.6	14	53.8
5. Tele birr makes our transaction faster, cheaper, and more secure	Freq	34	24	4	26	98
	%	18.3	12.9	2.2	14	52.7
6. Lack of technical and managerial skills hinders the usage of Tele birr	Freq	34	16	2	26	108
	%	18.3	8.6	1.1	14	58.1

Sources: Own Survey, 2022

Table 4.5 above shows that, 33.9 %(63) of the respondents have awareness about the announcement of Tele birr but, 30.1% of the respondents were have no awareness about Tele birr. From the table above, 38.7% of respondents have and opened Tele birr account and majority of the respondents believed that the usage of new launched application increased the profits of MSMEs. 21% of respondents agree and 17.7% of the them were strongly disagree with having a

Tele birr account and whether usage of Tele birr increased the profits of MSMEs . Table 4.5 item 3 also shows that, 38.2 % of the respondents disagreed that the relevance of Tele birr from opening of new bank accounts but, 32.8 of the respondents are strongly agreed with Tele birr relieves the MSMEs from the problems of having to open a new bank accounts.

Item 4 of table 4.5 shows that, 53.8% of the respondents strongly agreed that they have started buying and selling goods and service using Tele birr but, 15.6% of them were disagree and not started using Tele birr for buying and selling goods and service.52.7 %(98) of sample respondents strongly agreed that Tele birr makes their transaction faster, cheaper, and more secure but, only 18% of the respondents were strongly disagree faster transaction of Tele birr. 58.1% of the respondents strongly agreed and replied that, Lack of technical and managerial skills hinders the usage of Tele birr. 18.3 % of respondents were strongly disagreed with the lack of technical and managerial skills not hindered the usage of Tele birr. This implies that majority of respondents agreed that usage of Tele birr increased the profit, faster transaction, exchange goods and service but, the usage of Tele birr is hindered by lack of knowledge in operating the application and from the descriptive result, Tele birr has a significant effects on the performance of MSMEs.

In the interview session, researcher also asked the respondents opinion on the challenge that hinders the usage of demonetization instruments and they respond that, lack of managerial and technical skills, commission attached to these instruments, lack of acceptance from society's point of view are among the major responses.

VI) Performance of MSMEs

The study were going to saw the performance of MSMEs by their profit but, by their nature entrepreneurs are unwilling to tell their profits quantitatively and the researcher asked different question using five point Likert scale to understand their current performance in the table below.

Table 4.6: the performance of MSMEs

Items	Responses (Frequency and percentage)					
		SD	D	N	A	SA
1. I don't faced difficulty through demonetization process	Freq	0	65	9	63	49
	%	0	34.9	4.8	33.9	26.3
2. Demonetization not affected a day to day activity of my businesses.	Freq	5	80	4	47	50
	%	2.7	43	2.2	25.3	26.9
3. Demonetization does not reduced inflation, black market, corruption and illegal trade.	Freq	6	54	0	84	42
	%	3.2	29	0	45.2	22.6
4. Recently, demonetization significantly increased the demand and supply of goods and service in the market.	Freq	5	71	17	55	38
	%	2.7	38.2	9.1	29.6	20.4
5. Demonetization leads to the closure of many business enterprises.	Freq	18	44	11	39	74
	%	9.7	23.7	5.9	21	39.8
6. Demonetization decreased in sales, revenue, and market share of our products	Freq	17	26	3	39	101
	%	9.1	14	1.6	21	54.3
7. Demonetization process increased the usage of digital payment.	Freq	17	26	3	39	101
	%	9.1	14	3	39	54.3
8. I am dealing most business transaction through digital payment, after announcement of demonetization.	Freq	21	21	3	37	104
	%	11.3	11.3	1.6	19.9	55.9
9. I am dealing most business transaction through cash till know, after announcement of demonetization.	Freq	23	23	3	32	105
	%	12.4	12.4	1.6	17.2	56.7

Source: Own Survey, 2022

Table 4.6 shows that, 34.9% of the respondents responded that they were faced difficulty with demonetization process. But, 33.9% of them were not faced with the announcement of demonetization process. 43% of the respondent's day to day activities of business were affected by demonetization process and 26.9% responses agreed that demonetization process not affected day to day activities of their business. Regarding to the effects of demonetization, 45.2% of the responses indicates that, demonetization not reduced inflation, black market, corruption and illegal trade. Only 29% of the respondents believed that, demonetization reduced inflation, black market, corruption and illegal trade. This implies that majority of respondents were believed that current demonetization process does not reduced the existing problem of inflation, corruption and black market.

Interview response also showsthat, the major problems that faces MSMEs during the process of demonetization is the limitation of physical cash based transaction and circulation in economy.Majority of respondent's responses indicates that, they were confused of demonetization announcement.

From table 4.6 above 38.2% of the respondents disagree that; demonetization increased the demand and supply of goods and services in the market. 29.6% of sampled respondents agree that demonetization process increased the demand and supply of goods and service in the market. This implies that most of respondents believe that due to demonetization process the demand and supply of goods and service in the market reduced because, of liquidity crises in the economy.

Item 5 of the above table 4.6 indicates that, 39.8% of the respondents strongly agree that, demonetization process leads to the closure of many business enterprises while, 23.7% of the respondents were strongly disagree that, demonetization not lead to the closure of many business enterprises. The other one is that 54.3% of the respondents were strongly agree that demonetization process decreased sales, revenue, profits and market share of their products. From the above sampled respondents, 54.3% of them strongly agree that the process of demonetization increased the usage of digital payments system. This is due to cash shortage during the process of demonetization that leads the MSMEs toward the digital payment system.

After announcement of demonetization, 55.9% of respondents were dealing their business transaction through digital payment system. Only 11.3% of the respondents were disagreeing with dealing transaction through digital payment. However, 56.7% of the respondents agree and they are still dealing their transaction through cash. This implies that; still know majority of MSMEs were dealing their business activities through cash payment system which indicates that, a day to day activity of many business enterprises activities were based on cash.

Interview made with the owners of MSMEs enterprises indicates that, they are not currently satisfied with the announcements of demonetization because, as it indicates from the above table, the process of demonetization reduces cash based transaction with huge limitation which affects the performances of MSMEs. As the finding indicates, the day to day activities of enterprises were challenged due to this process.

The respondents asked questions on the positive and negative effects of currency demonetization. They respond that, the negative effects of currency demonetization is the shortage of cash circulation in economy, loss of traditional payment, slow down the growth of MSMEs, reduction of consumption, disruption of trade activities and reduction in employment rate in many MSMEs enterprises are among the negative effects of currency demonetization. The positive effects of currency demonetization are increase bank deposit which leads to increase loan and investment for enterprises, wide spread increase digitalization and cash less transaction due to limitation on physical cash, a massive increase in apps download, increase tax collection for the government, reduction of black market, it also save time and reduce cost by reducing employment rate of many MSMEs enterprises.

4.4.2 Econometric Analysis

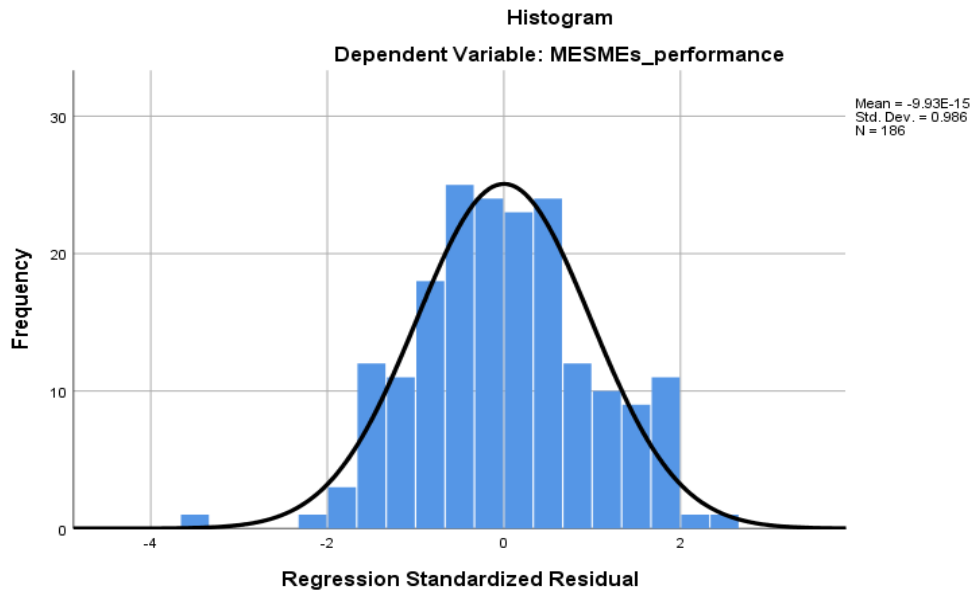
4.4.2.1 Assumption of multiple regression

Before directly dealing with the regression model some important assumption of multiple regression models such as multi-co linearity, heteroscedasticity, normality are checked and to look at those hypotheses whether to accept or rejects the null or alternative hypothesis (Hair et al, 1998).

I) Normality test

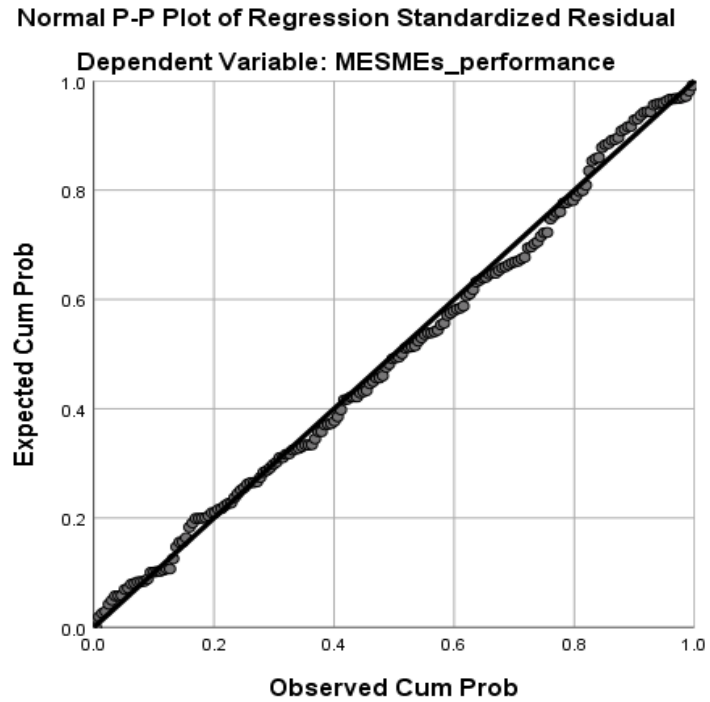
The assumption of normality means that when the data roughly fits a bell curve shape before running certain statistical test or regression. A testing process for assuming normality was used to determine whether or not the data fit the normal distribution. Normality was confirmed by examining the variables distribution (i.e. histogram) and their values of skewness and kurtosis. The distributions of the variables were approximately normally distributed from histogram that clusters around the mean.

Figure 4.1. Histogram of regression standardized residual



Source: Own survey, 2022

Figure4.2. Normal P-P Plot of regression standardized residual



Source: Own survey, 2022

Figure 4.2 revealed that, the residuals are normally distributed around its mean and it's depicted a random scatter of plots around 45 degree lines which indicate the normal distribution of the data. The linearity assumption can easily be checked using scatter plots or residual plots: plots of the residuals vs. either the predicted values of the dependent variable or against (one of) the independent variable's (Hoekstra. et al, 2014).

The study used another method of assessing normality test rather than, graphically (Normal Probability Plot) which is numerical (Skewness and Kurtosis). Assessment of the variables levels of Skewness and kurtosis is one of the method will determine normality. In fact, Skewness provides an indication of the symmetry of the distribution. Kurtosis turns to peakedness of distribution to normal distribution.

Accordingly, the normal distribution is detected based on skewness and kurtosis statistics. The acceptable range of normality for both statistics is between -1.96 and +1.96 (Fredland et al, 2013). Therefore, as depicted in table 4.7 below, all variables values of kurtosis and skewness are almost within the acceptable range for normality. So, this implies that all items show close to normal distribution considering the criteria of skewness and kurtosis values between -1.96 and +1.96. Therefore, the data used in this study was normally distributed.

Table 4.7: Normality Distribution (skewness and kurtosis)

Descriptive Statistics

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
MSMEs_profit	186	-1.073	.178	.544	.355
POS	186	-.218	.178	-.901	.355
ATM	186	-.407	.178	-1.220	.355
INTERNET_BANKING	186	.203	.178	-.819	.355
MOBILE_BANKING	186	-.537	.178	-.676	.355
TELE_BIRR	186	-.946	.178	-.186	.355
Valid N (listwise)	186				

II) Multi-co linearity test

Multi-co linearity means that two or more of the independent variables were highly correlated and this situation may ruin the results of multiple regressions. Multi-co linearity was observed by using tolerance and variance inflation factor (VIF). The cut-off point for multi-co linearity determination was a tolerance value greater than 0.10 and VIF value less than 10 and these means that there is no problem of multi-co linearity among the independent variables (Hair et al, 2006).

The VIF values in the table below were less than ten and the tolerance level is greater than 0.10 meant that there was no multi-co linearity among the independent variables of the study and it was concluded that there was absence of multi-co linearity symptoms and the data was malleable to regression analysis as it meet the assumption criteria of absence of multi-co linearity. In other words the correlation coefficient above 0.7 could cause serious multi-co linearity leading to inefficient estimation and less reliable results (Kennedy, 2008).

Table 4.4.1 Multi co linearity test

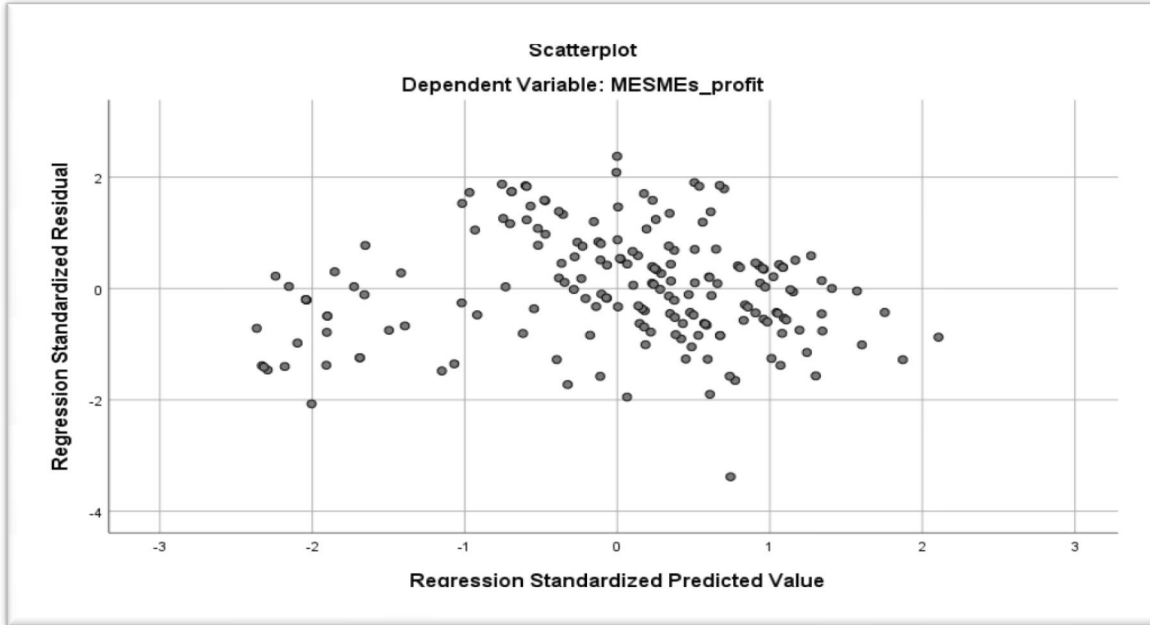
Model	Co linearity statistics	
	Tolerance	VIF
POS	0.708	1.412
ATM	0.566	1.765
Internet Banking	0.864	1.157
Mobile Banking	0.632	1.582
Tele Birr	0.604	1.656

Source: Research findings, 2022

III) Homoscedasticity test

Homoscedasticity is the assumption that the variation in the residuals is similar at each point across the model and equal variance of error across all level of the independent variables. In other words, the spread of the residuals should be fairly constant across the model. Residuals are randomly scattered around zero (horizontal line) providing even distribution Osborne & Water (2002) which shows that no violation of homoscedasticity. Heteroscedasticity is indicated when the scatter is not evenly distributed.

Figure 1.3. Homoscedasticity



Based on the above scatter plot it can be concluded that the regression model does not incur heteroscedasticity problem. Having same scatter (same distance) from the line implies homoskedasticity but, different scatter were points are at widely varying distance from regression line implies the problem of heteroscedasticity.

IV) Autocorrelation (Independence of Errors)

The prediction of independence of errors might not be perfect particularly when prediction errors are correlated and it's the assumption that our residuals are independent or uncorrelated. The Durban-Watson method was used in this analysis to check for the existence of serial correlation between the residuals. As recommended by Tabachnik & Fidell (2007) a value of greater than 1 and less than 3 is deemed appropriate to show lack of serial correlation among the error terms. As shown in the table below, the Durban Watson for this study was 1.328 which is greater than one and less than three which is an indication that the model does not contain autocorrelation.

Table 4.4.2 Independence of error term

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.906 ^a	.821	.816	.37154	1.328

source : research finding, 2022

a. predictors: (constant), Tele birr, internet banking, POS, mobile banking, ATM

b. Dependent Variable: MSMEs_ profitability

V) Linearity Test for variables

Linearity is the assumption that the relationship between dependent and independent variables are linear. The argument that if the relationship between dependent and independent variables is not linear, the result of regression analysis will under-estimate or overestimate the true relationship which leads to an increased chances of a type I error or type II errors. In this analysis, linearity was evaluated using the correlation coefficient of Pearson product matrix to measure the strength of linear association. Linear model predict values which fall in a straight line by having a constant change of unit or slope of the dependent variable for a constant change of the independent variables. Pearson correlation test was used to classify the association between variables.

Tabachinik and Fidel (2007) recommend that the value of correlation coefficients should be between -1 and 1. Correlation of +1 indicates a perfect positive correlation, while a value of -1 represents a perfect negative correlation and a value of 0.00 indicates no linear relationship between variables. Thus the study's correlation findings showed that, POS, ATM, Mobile and internet banking characteristics were positive and significant with the performance of MSMEs (profit).

Table 4.4.3 Pearson Correlation Matrix

Variables		MSMEs_profit	POS	ATM	IB	MB	TB
MSMEs_profit	Pearson Correlation	1					
	Sig. (2-tailed)			.			
POS	Pearson Correlation	.710**	1				
	Sig. (2-tailed)	.000					
ATM	Pearson Correlation	.669**	.357**	1			
	Sig. (2-tailed)	.000	.000				
IB	Pearson Correlation	.424**	.296**	.296**	1		
	Sig. (2-tailed)	.000	.000	.000			
MB	Pearson Correlation	.717**	.451**	.523**	.270**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
TB	Pearson Correlation	.647**	.427**	.573**	.196**	.448**	1
	Sig. (2-tailed)	.000	.000	.000	.007	.000	

Sources: Research Findings, 2022

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

As could be seen from Table 4.2 above there is a significant and strong positive linear relationship exists between and among the variables. However, some relationships are strong while others are weak, but they are good enough to permit further analysis on the data as there is no multi co linearity relationship since all correlation coefficient among the variables were below 0.75Gujirati (2004) and if the correlation coefficients between variables are above 0.8 there is a serious multi co linearity problem. The highest correlation coefficient is found between mobile banking and performance of MSMEs which is 0.717 which is indicates strong relationship.

4.4.2.2. Regression analysis

Regression is a technique used to predict the value of a dependent variable using one or more independent variable (Albaum, 1997). Regression analysis is a statistical tool for investigation of the relationship between dependent and independent variables. Usually, investigator seeks to ascertain the causal effect of one variable upon another .Multiple linear regression were conducted in order to determine the power of independent variables on dependent variables,

and to identify the relationship between variables. The reason for using multiple linear regression analysis was to investigate the effects of currency demonetization on the performance of MSMEs.

Table 4.4.3 Model summary

Model	R	R2	Adjusted R2
1	.906	.821	.816

Source: research findings, 2022

a. Predictors: (Constant), TELE_BIRR, INTERNET_BANKING, POS, MOBILE_BANKING, ATM

b. Dependent Variable: MSMEs_profitability

R statistics or value (0.906) indicates that, the presence of strong correlation between predictors and dependent implies that the percentage of variation in the dependent variables explained by the independent variables.

Table 4.4.1 presents the coefficients of model fitness on how instruments of demonetization explains the performance which is in these case the profits of micro, medium and small scale enterprises. The profitability has an overall correlation with demonetization instruments of 0.821 which is very strong and positive. This means that, approximately 82.1% variation from profitability of MSMEs are explained by demonetization instruments variables at 5% level of significance. This indicates that, there is a good fit of the regression model used. Therefore, this is a good indication of the true position that MSMEs performances can be explained by usages of instruments of demonetization such as POS machine, ATM, mobile banking, Internet banking and Tele birr.

Table 4.4.4 Analysis of variance (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	113.696	5	22.739	164.723	.000 ^b
	Residual	24.848	180	.138		
	Total	138.544	185			

Source: research findings, 2022

a. Dependent Variable: MSMEs_profitability

b. Predictors: (Constant), TELE_BIRR, INTERNET_BANKING, POS, MOBILE_BANKING, ATM

Table 4.4.4 shows that, analysis of variance (ANOVA) results were used to test overall significance of the regression estimation model. It indicates that the model is highly significant in explaining the relationship between MSMEs profitability and instruments of demonetization at 5% level of significance. The analysis of variance shows that, f -calculated (164.7) is greater than the critical (0.00) and this implies that the model was overall significant and well specified and therefore, the co-efficient of the regression show that, there is a strong relationship between MSMEs performance and instruments of demonetization.

Table 4.4.5. Coefficients of Determination

Model	Coefficients Beta	Standard Error	T	Sig
1 (constant)	0.217	.126	1.714	0.088
POS	0.343	.034	10.070	0.00
ATM	0.158	.029	5.364	0.00
Internet banking	0.114	.031	3.665	0.00
Mobile banking	0.259	.033	7.779	0.00
Tele birr	0.148	.031	4.764	0.00

Source: Research findings, 2022

a. Dependent Variable: MSMEs_profitability

From the above table 4.4.5, the findings of the study reflect that, β coefficients provide a direction of relationships between dependent and independent variables. However, all coefficients are statistically significant ($p < 0.05$) at 5% level of significance. The results of multiple regression analysis shows that there are five variables significantly contributing to predicting the performance of MSMEs and all independent variables positively influences the performance of MSMEs because, these instruments of demonetization were reduces cost of transportation, reduces cash based transaction which paves the way for illegal trade and theft, save times for MSMEs not to visit the banking hall. The major problem as indicated by respondents is that lack of technical skill and knowledge in using the instruments of

demonetization and majority of respondents has a positive attitude toward adoption of demonetization instruments.

From the table 4.4.3 the regression model can be written as follows:

$$MSMEs\ profit = 0.217 + 0.343(POS) + 0.158(ATM) + 0.114(IB) + 0.259(MB) + 0.148(TB)$$

Interpretation of the results

From the regression results of the study, all expected coefficients were positively related with the profitability of MSMEs and meets as expected earlier. Profitability would be at 0.271 when the other instruments of demonetization are held at constant. POS machine is significant and positively related to profitability of MSMEs. A one unit increase in a usage of POS service would lead to increase in profitability of MSMEs by 0.343, keeping the other variables constant. Pos machine has a higher significant effect on the profitability of MSMEs because; it's available in all places in 24 hours with low level of dispute transaction. ATM has a significant effect at 5% level of significance and positively related to the profitability of small scale enterprises and a unit increases in a usage of ATM service would lead to increase profitability of MSMEs by 0.158 holding the other variables constant. Internet Banking also has a positive significant effect at 5% level of significance and positively related to the performance of MSMEs. A one unit increase in adoption of internet banking would leads to increase in profitability of MSMEs by 0.114.

The effect of mobile banking on the profitability of MSMEs is highly positive and significant at 5% level of significance. Keeping all other variables constant, a unit increase adoption or usage of mobile banking service will lead to an increase of 0.259 in the profits of MSMEs. From the finding above Tele birr has a positive significant effect on the performance of enterprises at 5% level of significance. Holding the other independent variables constant, a unit increase in adoption of new instruments of demonetization Tele birr will leads to an increase in profitability of MSMEs by 0.148. The finding above supported by Wali A., et al(2014) And Mbah & Obiezekwem (2019) who conducted the study on the effects of POS, ATM, and Mobile banking on the performance of MSMEs is direct and positively related. However, Humphrey (2017) contradicts with the above findings.

4.4.2.3 Hypotheses Testing

The hypotheses of the study were restated and tested in this section of the analysis. The tests were conducted at a 0.05 level of significance.

Table 4.4.6 Summary of the study results

Hypotheses		Beta	P- value	Decision
H01	POS machine has no significant effect on the performance of MSMEs.	0.343	0.00	Reject null
H02	ATM machine has no significant effect on the performance of MSMEs	0.158	0.00	Reject null
H03	Internet banking has no significant effect on the performance of MSMEs	0.114	0.00	Reject null
H04	Mobile banking has no significant effect on the performance of MSMEs	0.259	0.00	Reject null
H05	Tele Birr has no significant effect on the performance of MSMEs	0.148	0.00	Reject null

The decision on the null and alternative hypothesis presented based in the above table 4.4.6 as follows:

HO1: POS machine has no significant effect on the performance of MSMEs. The coefficient of POS machine is 0.343, which is significant and positive and its p –value is 0.00, which is less than 0.05. Consequently, the null hypotheses was rejected while the alternative one is accepted which suggests that POS machine services have a positive and significant effects on the performance of MSMEs.

HO2: ATM machine has no significant effect on the performance of MSMEs. In the same case, the coefficients of ATM has a value of 0.158 which is positive and significant and its p –vale is also 0.00 which is less than 0.05. Therefore, the null hypothesis were rejected since the ATM usage have a positive and significant effects of the performance of MSMEs and the alternative hypothesis were accepted which suggests that, ATM usage has a positive and significant effects on the performance of MSMEs. The findings were similar with the study of Ali and Emenike (2016).

HO3: Internet Banking has no significant effect on the performance of MSMEs. Internet banking has a positive and significant effect with coefficient of 0.114 and p-value 0.00 which is less than 0.05. The null hypothesis were rejected since the adoption of Internet banking has significant effects of on the performance of MSMEs and the alternative hypothesis were accepted which suggests that Internet banking has a positive and significant effects on the performance of MSMEs.

HO4: Mobile banking has no significant effect on the performance of MSMEs. Mobile banking has a positive and significant effect with coefficient of 0.259 and p-value 0.00 which is less than 0.05. The null hypothesis were rejected since the usage of Internet banking has significant effects of on the performance of MSMEs and the alternative hypothesis were accepted which suggests that Mobile banking has a positive and significant effects on the performance of MSMEs.

HO5: Tele Birr has no significant effect on the performance of MSMEs. Tele birr has a positive and significant effect with coefficient of 0.148 and p-value 0.00. Therefore, the null hypotheses were rejected and the alternative one is accepted.

CHAPTER 5

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter deals with the summary of major findings, conclusion and recommendation for the research findings in line with objective of the study. The recommendation part on the other hand suggests possible solutions to the major findings of the study.

5.2. Summary of the findings

The primary objective of the study was to examine the effects of currency demonetization on the performance of micro, medium and small scale enterprise. In order to do this, five instruments of demonetization variables are used. These are POS machine, Internet Banking, Mobile Banking, ATM and Tele birr. Hence, this study has attempted to identify the effects of those instruments on the performance of MSMEs in case of Arada sub-city.

Stratified sampling strategy was adopted to select 212 samples from five purposively selected sectors of enterprises and 186 questionnaires were successfully filled and returned with 88% response rate. Questionnaires' was used as a principal tool for the data collection. The collected data were analysed using basic statistical tools such as frequencies, charts, tables, and percentages. The SPSS version 26 windows software was used in analysing the data. Descriptive part of the study revealed that, the majority of MSMEs respondents are male and fall under age 21-30 ages with the majority of respondents holds university degree. The study finding analysis indicates that, after currency demonetization the usage of, ATM, Internet banking, Mobile banking and Tele birr were significantly increased due to limitation of cash based transaction. Huge liquidity crises, slowdown of sales, mass usage of digitalization which leads to lack of technical and managerial skill are among the effects of currency demonetization. Interview schedule also shows that, majority of business enterprises were not satisfied with announcement of demonetization. From our study it's clear that the MSMEs slowly had changed their methods of payments to online after demonetization.

The ANOVA result shows that there is statistically significant relationship between instruments of demonetization and the performance of MSMEs.

The correlation analyses among the explanatory variables are a good predictor of profitability of MSMEs due to their higher correlation coefficient. The independent variables are those instruments of demonetization have a positive relationship with the profitability of MSMEs as per the hypothesis tested and agreed. As the results of the findings all independent variables have a significant effect on the profitability of MSMEs

5.3. Conclusion

In this study the level of performance of MSMEs with the different quality dimensions pertaining to the theoretical model was evaluated. Accordingly, the major findings of the study are presented as follows:

Descriptive analysis revealed that the majority of respondents are owners of enterprise and young age group of 21-30 years. Majority of the respondents are the owners of service sector, 1-2 years of experience and their marital status are single. After announcements of demonetization majority of business enterprises were still carried out their transaction through cash. Demonetization has led to increase in usage of ATM, Mobile banking, Internet banking, Tele birr and opening of new accounts due to decrease in circulation of currency notes.

As it was described in the report findings adjusted R-square values for the regression model was 0.82. This indicates that the explanatory variables; POS machine, Tele birr ATM, Internet banking, and Mobile banking used in these study explains approximately about 82% of variation in the level of MSMEs performance. The remaining 18% of variation in the level of MSMEs performance is explained by other variables which are not included in the model. POS machine, Internet banking, Mobile banking, Tele birr and ATM all have a positive significant effect on the performance of MSMEs. A unit increase in the usage of ATM, POS, Internet banking, Mobile banking and Tele birr leads to increase in the performance of MSMEs by 15.8%, 34.3%, 11.4%, 25.9% and 14.8% respectively which are significant at 5% level of significance.

5.4. Recommendation

The analysis of this work includes the implication of currency demonetization as far as the effects of instruments of demonetization on the performance of micro, medium and small scale enterprises. Therefore, based on the study results the following recommendations are forwarded for the concerned bodies.

- ❖ The study results revealed that, majority of the owners of the enterprises were males. This is not fair especially, in a country where feminist groups are fighting for women empowerment. Its therefore, recommended that the government policy have to take a notice toward MSMEs gender distribution and create some gender balance in their future establishment. Therefore, owners of enterprises should work on increasing usage of demonetization instruments in all aspects and invest more resources in enhancing encase of education and experiences of enterprises.
- ❖ Demonetization instruments POS, ATM, Internet Banking, Mobile Banking, and Tele birr have highly significant effects on the performance of micro, medium and small scale enterprise, and then the government should give better attention toward the distribution of these channels in all aspects. The results of the finding indicates cash based transaction is still high and these indicates that there is low level of awareness toward digitalization and lack of technical and managerial skills and this needs improvements.
- ❖ It has been found that, the major aim of demonetization is to reduce inflation, black market but, the result is far away that inflation is increasing from time to time. Therefore, the study recommends that the government should strengthen the policies and regulatory framework to create conducive climate for MSMEs during the process of demonetization.
- ❖ Governments should create deep awareness to MSMEs concerning the usage of demonetization instruments, and attract MSMEs by different encouragement promotion, then simple way the society going to cash less economy.
- ❖ For eliminating fake currency the government should give a time period to exchange the currency (at least more than three month) replace the cash with these instruments of demonetization.
- ❖

5.5. Further Research

This research study is an important contribution to the literature due to the findings of the study which helps policy makers to formulate policy. The study examined the effects of instruments demonetization such as POS, ATM, Internet banking, Mobile banking and Tele birt on the performance of MSMEs. However, other variables that was not included in this study. Therefore, future researcher may be interested in validating the consistency of the result and provide supplementary results for this study by including other variables such as; SMS, RTGS Call centre, Debit card and E-birt.

The study used only five independent variables and 212 sample size in case of Arada sub-city. Future research can increase and modify the independent variables and sample size of the study in order to improve the result of the study. The area of the study is concentrated only in one sub-city and future research study may extend the area of the research study.

Performance was the dependent variables in this study. However, this is a general term that covers only profitability measures. Hence, future studies should be conduct focusing on other concepts like financial or non-financial measures, firm's growth, and competitive advantage. The main objective of currency demonetization is to reduced inflation, black market, corruption and illegal trade. But, the result of this study indicates that, currency demonetization does not reduce inflation, black market, corruption and illegal trade which needs further study.

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**APPENDIX I
QUESTIONNAIRE**

ADDIA ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

Dear sir/madam,

Greetings!

I am conducting a research survey, on the **effectsof currency demonetization in Ethiopia on the performance of micro, medium and small scale enterprise**. This study will be undertaken as a partial fulfilment of the requirement for the completion of MSc degree in Economics. Therefore, you are kindly requested to respond to the questions with utmost good faith, freely and to the best of your knowledge. There is no need to write your name on the questionnaire. Hope the research findings will contribute in policy making. Kindly spare few minutes and fill up the questionnaire.

Part I: Demographic and socio-economic Information about the respondents.

Please encircle your appropriate answer

1. Gender;

1. Male 2. Female

2. Age;

1. Below 20 2. 20-30 3. 31-40

4. 41-50 5. 51-60 6. Above 60

3. Educational level;

1. Not completed primary education 2. primary education 3. secondary education

Q1	I don't faced difficulty through demonetization process					
Q2	Demonetization not affected a day to day activity of my businesses.					
Q3	Demonetization does not reduced inflation, black market, corruption and illegal trade.					
Q4	Many business enterprises are still suffering from negative effects of demonetization					
Q5	Recently, demonetization significantly increased the demand and supply of goods and service in the market.					
Q6	Demonetization decreased in sales, revenue, and market share of our products.					
Q7	Demonetization process increased the usage of digital payment.					
	.					
Q8	I am dealing most business transaction through digital payment after announcement of demonetization.					
Q9	I am dealing most business transaction through cash till know after announcement of demonetization.					

Part III. Question related to effects of demonetization instruments and performance of MSMEs.

1) Effects of mobile banking on the performance of MSMEs.

Instruction: below are lists of statements pertaining that the **effects of instruments of demonetization on the performances of MSMEs**. Please indicate whether you agree or disagree with each statement by ticking (√) on the space that specify your choice from the options that ranges from 1=strongly agree to 5=strongly disagree

Note: 1- SA- Strongly agrees 2- A- Agree 3- N- Neutral 4- D- Disagree 5- SD – Strongly Disagree

		SD	D	N	A	SA
Q1	After demonetization, the usage of mobile banking increased.					
Q2	After demonetization, usage of mobile banking increased my profits.					
Q3	Mobile banking increased sales and boost cash flows					
Q4	Implication of mobile banking negatively affected a day to day activity of the businesses?					
Q5	Transaction cost of mobile banking negatively affected the performance of MSMEs					

2) Effects of ATM on the performance of MSMEs.

		SD	D	N	A	SA
Q1	Usage of ATM decreased after implication of demonetization					
Q2	Usage of ATM increased sales and revenue of MSMEs					

Q3	There is no good accessibility of ATM and huge dispute problems.					
Q4	ATM transaction increased profit, after implication of demonetization					
Q5	ATM transaction save a tremendous time to carry out other activity daily					

3) Effects of internet banking on the performance MSMEs

		SD	D	N	A	SA
Q1	1. Internet banking is not useful in my daily activities and its usage not increased during demonetization process					
Q2	Internet banking not enables me to perform financial transaction quickly					
Q3	I have the skills to use internet banking, hence it's easy for me					
Q4	There is adequate quality of internet connection to get apps					
Q5	The commission attached to internet banking affect our profit and hinders the usage of internet banking.					
Q6	There is chance of losing money through internet banking transaction					

4) Effects of POS machine on the performance MSMEs

		SD	D	N	A	SA
Q1	POS machine provides affordable cost in transaction					
Q2	I face a financial challenge in using POS machine					
Q3	Adoption POS machine after demonetization enables me to buy and					

	sell goods and service without carrying physical cash.					
Q4	I don't use POS machine before demonetization but, I started since demonetization ad increased revenue.					
Q5	I have seen growth of profit in my business since, the time I started using POS machine.					

5) Effects of Tele bIRR on the performance MSMEs

		SD	D	N	A	SA
Q1	I have no awareness about Tele bIRR					
Q2	I have Tele bIRR account and I believed its usage increased the profit, after announcement of demonetisation					
Q3	The announcement of Tele bIRR relieves me the problems of having to open a bank account					
Q4	I have started buying and selling goods and service by using the application of Tele bIRR					
Q5	Tele bIRR makes our transaction faster, cheaper, and more secure					
Q6	Lack of technical and managerial skills hinders the usage of Tele bIRR					

III any other comments on the effects of demonetization on the performance of MSMEs.

Appendix II

Interview questions to the owners of micro, medium and small scale enterprises

1. Are you satisfied with the recent currency demonetization?
2. What is the challenge that hinders the usage of demonetization instruments after announcement of currency demonetization?
3. What are the major problems that face MSMEs after currency demonetization?
4. What are your suggestions on the positive and negative effects of currency demonetization?
5. What do you think that the contribution of recent currency demonetization on the performance of your business?

Appendix III Correlation matrix

		MSMEs _profit	POS	ATM	INTERNET_BAN KING	MOBILE_BANKING
MSMEs_profit	Pearson Correlation	1	.710**	.669**	.424**	.717**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	186	186	186	186	186
POS	Pearson Correlation	.710**	1	.353**	.290**	.445**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	186	186	186	186	186
ATM	Pearson Correlation	.669**	.353**	1	.296**	.523**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	186	186	186	186	186
INTERNET_BANKING	Pearson Correlation	.424**	.290**	.296**	1	.270**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	186	186	186	186	186
MOBILE_BANKING	Pearson Correlation	.717**	.445**	.523**	.270**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	186	186	186	186	186
TELE_BIRR	Pearson Correlation	.647**	.422**	.573**	.196**	.448**
	Sig. (2-tailed)	.000	.000	.000	.007	.000
	N	186	186	186	186	186

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

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.217	.126		1.714	.088
	POS	.343	.034	.378	10.070	.000
	ATM	.158	.029	.225	5.364	.000
	INTERNET_BANKING	.114	.031	.124	3.665	.000
	MOBILE_BANKING	.259	.033	.309	7.779	.000
	TELE_BIRR	.148	.031	.194	4.764	.000

a. Dependent Variable: MESMEs_profit

