

Research Article

Demonetization and Its Determinants in the Financial Markets of Ethiopia: An Economic Policy Analysis

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Abstract

The main objective of this study is to identify the determinants of implementing demonetization in micro and small-scale enterprises in Ethiopian in case of Addis Ababa city. To achieve this objective, this study employed explanatory research design and data was collected from across the population at one point in time. The researcher used primary sources of data which was collected via questionnaire. The descriptive and econometric data analysis, particularly the logistic regression analysis was used to test the relationship between explanatory and the dependent variables. The researcher selected a sample of 315 respondents using Stratified sampling method, The logistic regression result indicated that management factors, financial factors, political-legal factors, marketing factors, and technological factors have a significant and positive effect on the implementation of demonetization in Lideta sub city of Addis Ababa City. Finally, based on the findings of a study, the researcher suggests that all concerned bodies such as financial institutions, the media, government bodies and Micro and small enterprise owners should work toward expanding the means for to demonetization, since it has functions such as cost and time to save, increase sales volume, boost government tax collection, reduce illegal activities and black money prevalence, encourage technological advancements which contributes for the country's economic growth as a whole. Creating awareness concerning currency demonetization and encouraging and increasing the usage of demonetization instruments, then the simple way that society is going to use is a digitalization.

Keywords

Determinants, Demonetization, Micro and Small Enterprise, Addis Ababa, Ethiopia

1. Introduction

The digitalization has made the world as a small planet and due to artificial intelligence; people are being faster, wiser and smarter than before. The internet is the main base of digital world that has very important role towards human's perspectives in contemporary society [24].

As a result of the disruptions to the economy and population at large, several nations around the world use the word and the policy with great restraint and discomfort. A good example of

this was when the European Monetary Union chose to use the Euro as their standard form of payment. To enable a smooth transition throughout the process of demonetization, the old currencies were nevertheless permitted to convert into the new unified currency, the Euro, for a period of time. USA (1873), India (1978), Ghana (1982), Nigeria (1984), Myanmar (1987), and USSR (1991) are just a few of the nations that have chosen to demonetize their currencies [15].

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As a result of the disruptions to the economy and population at large, several nations around the world use the word and the policy with great restraint and discomfort. A good example of this was when the European Monetary Union chose to use the Euro as their standard form of payment. To enable a smooth transition throughout the process of demonetization, the old currencies were nevertheless permitted to convert into the new unified currency, the Euro, for a period of time. USA (1873), India (1978), Ghana (1982), Nigeria (1984), Myanmar (1987), and USSR (1991) are just a few of the nations that have chosen to demonetize their currencies [17].

Following the demonetization process, policymakers, academics, and business organizations around the world have already started moving towards a cashless economy. When electronic banking, or "e-banking," became widely accepted in the 1990s, a trend towards a cashless economy started to emerge in our daily lives. By 2010, several developed countries had adopted e-banking as a standard payment method. Global non-cash transactions are rising quickly and totaled 358 billion in 2013, an increase of 7.6% from 2012. Furthermore, there is a continuous progression towards a cashless economy in wealthy nations [63].

Demonetization is a daring move by the government in the direction of Ethiopia's economic progress. After the announcement for September 2020, demonetization has become the subject of most conversation throughout Ethiopia. Its primary goal is to combat black money, and as part of the process to do so through demonetization, all Ethiopian people are now required to deposit their old cash in their bank accounts or swap it for new currency [29]. Cash hoarders have been compelled by this to put their money in bank accounts and hold it accountable. Black money has been partially recovered thanks to the demonetization of old currency and the addition of some restrictions on cash transactions. It's also interesting that the government of Ethiopia has demonetized currency before; two decades ago, a new denomination was introduced after the end of the Ethio-Eritrean War [27].

In order to combat inflation, the Ethiopian government has issued newly produced paper money with the denominations of 10, 50, and 100 Birr. Prime Minister Abiy Ahmed also announced that a newer denomination of 200 Birr has been launched. Ethiopians in the general public have only three months to replace their outdated cash notes. According to the Ethiopian Bankers Association (EBA), over 113 billion Birr have been removed from the formal banking system and are no longer usable outside of banks as a result of demonetization [2]. The primary goal of Ethiopia's demonetization program is to reduce currency hoarding, the black market, corruption, unlawful commerce, and illicit financial flows. Micro

and small enterprises (MSEs) in Ethiopia form the backbone of the country's economy, adding 8.3 million Birr worth of value in 1996. Based on data from 1992–1993, this amount represents roughly 3.4% of the GDP, 33% of the contribution from the industrial sector, and 52% of the contribution from the manufacturing sector to the GDP in the same year [27].

Demonetization refers to removing currency notes from circulation and replacing them with new notes or other forms of payment that eventually lead to digitalization. It happens whenever there is a change in a country's monetary system and the old currency is retired and taken out of circulation, frequently to be replaced by fresh coins or notes. Demonetization has different causes according to the circumstances in each country [34]. It might be a market-based shift away from cash or a campaign against tax evasion, money used for terrorism, or avoiding the black market. Ethiopia needs to demonetize to reduce cash hoarding, fight unlawful commerce, and limit the flow of black money into the economy, and advance digitization and technology. Demonetization initially has negative effects, but over time it improves the economy and reduces the number of cash-based transactions, making the country cashless and benefiting businesses and consumers at all levels [9].

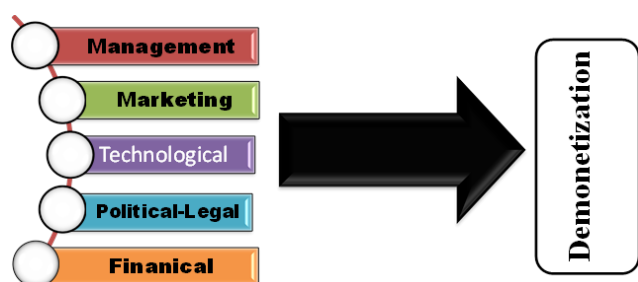
Demonetization is the process by which the government declares that the present currency notes are no longer legal tender. This proclamation is done to shift the economy towards digitization and cashless transactions by reducing the reliance on the cash economy. It's replacing the previous unit of currency with a new currency. The financial sector uses various computer technologies frequently in a cashless environment [47].

Since the informal sector contributes significantly to the economy and in order to ease these issues, the majority of transactions in Ethiopia are still made in cash. The Nation Bank of Ethiopia (NBE) imposed cash withdrawal limits of no more than 100,000 Birr (\$2737), later reduced to 50,000 Birr, and outright forbade any other third party from making cash deposits or account transfers. The introduction of these new currencies would be crucial to reducing transactions that are cash-based [3].

In this study the researcher identified the determinant factors for implementing demonetization specifically in micro and small enterprise in Ethiopia, and the researcher reviewed for the experiences and trends from different countries for better economic policy [39].

Conceptual framework

After critically reviewing the theoretical and empirical literature the researcher developed the following conceptual frame work:

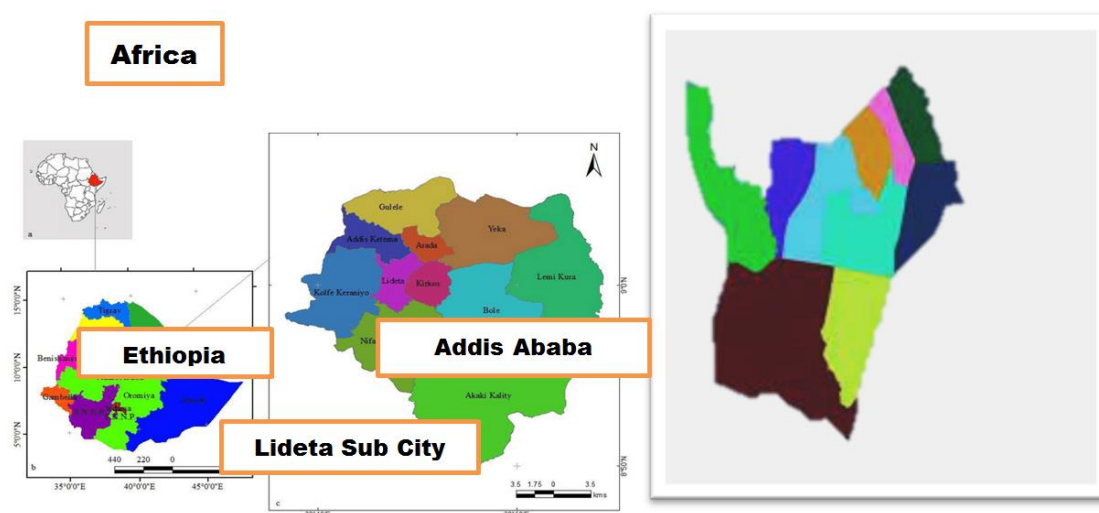


Source: Author own design from the review of literatures, 2024.

Figure 1. Conceptual framework of the study: provides a roadmap for empirical investigation and Research paradigms focus on the philosophical underpinnings of research.

2. Research Methodology

The study was conducted in Addis Ababa, which is the capital city of Ethiopia, specifically Lideta Sub-city and it is located in the central-western area of the city [43]. The Addis Ababa administrations study focused on the micro and small-scale enterprises (MSEs) located in Lideta sub city administration. Lideta sub-city was purposely selected because of its strategic area for the existence of most MSEs to collect data in short period of time. According to CSA (2011), it's also landed on 9.18sq.km and population density 214,769 and the sub-city has a total of 10 woredas [16].



Source: Addis Ababa City Administration office, 2024.

Figure 2. Map of the study area: Visual representation of geographical regions and sub-cities.

2.1. Research Approach and Design

In order to achieve the objective of this study, the researcher employed quantitative research approach to investigate the determinants of implementing demonetization in micro and small-scale enterprises [8]. Quantitative research allowed researcher to measure and analyze statistical data, asks specific narrow questions and collect numeric (numbered) data from respondents. Using quantitative data analysis enables the researcher good level of research precision and simplifies the activities of analyzing data by using various statistical tools [14].

This study is employed quantitative type of research approach due to its convenience for secondary data and quantitative data. Quantitative methods were employed to examine the relationship between variables.

2.2. Sources and Types of Data

To examine demonetizations and its determinants the researcher used primary sources of data which was collected via questionnaire. The study also employed secondary data sources in order to triangulate the data collected through questionnaire. In order 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 [4]. MSEs 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 implementation of demonetization. Finally, the sample was selected based on the proportion of the population [49].

2.3. Econometric Model

Demonetization is the process of invalidating a currency by stripping its legal status and replacing it with alternative payments. This occurs when a nation changes its currency, and can also be a regulation of money circulation using various tools [58]. Examining demonetization and its determinants towards enhancing economic growth needs a clear perception and application of logistic regression which requires large sample size, but if small sample used for the study it desirable to use bootstrap methods as suggested by different scholars [53]. In addition, logistic regression can handle non-linear relationships between the dependent and independent variables, because it applies a non-linear log transformation of the linear regression [13].

Basic assumptions that must be met for logistic regression include independence of errors, linearity in the logit for continuous variables, absence of multicollinearity, and lack of strongly influential outliers [59].

The logistic regression model using a statistical software package such as R, (with libraries like scikit-learn or Stata models), or SPSS. Logistic regression assumes that there is a linear relationship between the log odds of the dependent variable and the independent variables [7].

$$Li = \ln \left(\frac{p(x)}{1-p(x)} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + ui$$

Where, Li - logs of odds ratio/logit

Ln - natural logarithm

Bi - coefficient for each independent variable

B₀ - intercept of the regression

Xi - each independent variable and Ui - error term

From this general logit model, the following were derived and applied for this specific study.

$$Li = \beta_0 + \beta_1 MG + \beta_2 FI + \beta_3 PL + \beta_4 MR + \beta_5 TE + ui$$

Where, Li- log of the odd ratio of implementing of demonetization.

$$Y = \ln \left(\frac{p(x)}{1-p(x)} \right)$$

Where, 1 = presence of implementing of demonetization, let assume $P(Y=1) = p(X)$

0 = absence of implementing of demonetization. $P(Y=0) = 1 - p(X)$

2.4. Description of Variables

Dependent Variable: Demonetization is the process of invalidating a currency by stripping its legal status and replacing it with alternative payments. This occurs when a nation changes its currency, and can also be a regulation of money circulation using various tools [58].

Independent Variables

- i. **Management Factors:** involve strategies, decisions, and actions taken by governing bodies and enterprise owners in implementing demonetization. They involve government planning, execution, and efficiency [64]. These factors can be measured by assessing cash flow, cost and time management, currency replacement, and alternative transaction options during the demonetization period. In this study, management factors address the issues of handling cash safely in the markets, reducing once own transaction time, reducing cost of daily transaction and encouraging non cash transaction which makes convenience for all bodies involved in that transaction [7].
- ii. **Financial Factors:** encompass all aspects related to the impact of demonetization on the economy, financial institutions, and individuals [5]. It includes aspects such as liquidity, banking sector stability, fiscal implications, and effectiveness of counter measures. Financial factors in this study signifies that the encouragement of bank deposits, boosting sales volume, intensify the instrumental payment mechanism and the creation of cashless methods of transactions which offer the option of credit transactions which is very useful [23].
- iii. **Political-Legal Factors:** involve the regulatory framework and political support for demonetization. This includes laws, policies, political stability, and public perception of the demonetization initiative [18]. The political-legal factors' impact can be measured through public opinion polls, media coverage sentiment analysis, legal challenges faced, and the government's response to criticism. Political-legal factors consist of laws, regulations, and political will that support or hinder the implementation of demonetization. Political stability, government commitment, and legal frameworks must align to ensure a favorable environment for the process. Additionally, enforcement of regulations and compliance mechanisms contribute to the implementation of demonetization [36].
- iv. **Marketing Factors:** are concerned with the communication and outreach activities used to educate and facilitate the public during demonetization [30]. It includes campaigns, awareness programs, capacity building, and ease of transition to alternative modes of transactions [25]. The effectiveness of marketing efforts can be measured by evaluating survey responses, public engagement levels, awareness and adoption rates of digital payment platforms, and public sentiment analysis. In this study, marketing factors indicates that, the power of marketing instruments that enable the sub city to implement demonetization. These instruments include such as expansion of POS machines and other means of digital applications [11].
- v. **Technological Factors:** encompass the readiness and infrastructure necessary for a successful demonetization. It includes the availability of digital payment infrastructure,

cyber security solutions, and usability of technology by the masses [35]. Technological factors can be measured by examining the increase in digital payment transaction volumes, the number of Point of Sale (POS) machines, Automated teller machine (ATM) deployed, internet penetration, and the security of digital transaction [65].

3. Results and Discussions

3.1. Descriptive Analysis

The study represents a response rate of 92 percent. Therefore, data were analyzed based on the data collected using questionnaires from 290 (92%) respondents.

Table 1. Sectors of the respondents.

Sectors of MSEs	Frequency	Percent	Valid Percent	Cumulative Percent
Service Sector	107	36.9	36.9	36.9
Manufacturing Sector	36	12.4	12.4	49.3
Construction Sector	29	10.0	10.0	59.3
Trade Sector	92	31.7	31.7	91.0
Urban agricultural Sector	26	9.0	9.0	100.0
Total	290	100.0	100.0	

Source: Author Computation Using SPSS, 2024.

As shown on table above 36.9% of the respondents are engaged in service sector, followed by trade sector which is 31.7%. About 9% of respondents were involved in urban agriculture. This implies that, service sector took a large share than other sectors under consideration [40, 2].

Moreover, 7.9% of the respondents had been in operation for 1-2 years, 13.8% for 3-4 years and 57.9% were for 5-6 years of experience. Only 4.1% were in operation below one year of experience. This implies that majority of MSEs had operated a relatively longer period of time and suitable for being used for the study [44].

3.2. Determinant of Implementing Demonetization in MSEs

The determinants of implementing demonetization in MSEs were asked positively using Likert scale through which respondent shown their level of agreement [50]. The identified variables expected to implement demonetization. The respondent was asked to indicated their level of agreement with the factors on the following measurements scale such as 1=strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, and 5= strongly agree. Their responses organized in the following manner [54].

Management Factors

About 20.3% of respondents are strongly agreed that demonetization mechanism reduced their transaction time. 33.8% of total respondents also agreed with reduction of transaction time via demonetization [60]. This show as, most of the respondent's transaction time was reduced due to im-

plementation of demonetization. About 32.4% and 34.5% of total respondents strongly agreed and agreed respectively that demonetization enables the Micro and small enterprises to handle their cash in the market safely [6]. This reveal that most respondents believe that demonetization help them to handle their cash in a good manner. In a similar way 34.8% and 35.9% of respondent strongly agreed and agreed respectively that demonetization minimized the cost of handling their daily transaction. 41.4% of total respondent of the study also strongly agreed that demonetization helps them in keeping a track of their expenditure. About 50.3% and 40% of the total respondents also strongly agreed and agreed respectively on having cashless transaction is comfortable for them. In general, these descriptions tell as the essence of demonetization in reducing transaction time and cost plus made convenience for their daily activities [26, 12].

Financial Factors

Above 33.1% and 37.2% of total respondents strongly agreed and agreed respectively on low sales and profit resulted from low access to financial services. 61% and 33.4% of the respondents also strongly agreed and agreed respectively that demonetization enables them to encourage their deposits. 45.2% and 33.4% of the total respondents are also strongly agreed and agreed respectively that sales volume has increased due to demonetization [19]. In the same way, 50.7% and 30% of the respondents strongly agreed and agreed respectively that implementation of demonetization creates cashless economy which encourage deposits. In general, most of the respondents believed that demonetization boost their sales volume, encourage their

deposits and improved their access to financial services. The result of this study confirms with the study made by [57], in India which states that, demonetization enables saving and creates cashless economy.

Political-Legal Factors

According to the collected data, about 38.3% and 26.9% of the total respondents respectively agreed and strongly agreed that demonetization helps to achieve fair government tax payment system. In the same way, 47.2% and 41.7% of total respondent strongly agreed and agreed respectively that demonetization helps to reduce corruption and other illegal activities which escalate inflation on one country [10]. From the total respondents 22.1% and 35.5% respectively strongly agreed and agreed that demonetization process paved away for the usage of digital payment system. 22.1% of the respondent of this study also agreed that the declaration of demonetization by government enables to keep the normal economic condition in the country and 37.2% and 45.5% of them strongly agreed on this issue. In general, we can conclude that implementation of demonetization helps to have fair government tax payment system, reduce corruption and encourages digital payment systems [32, 45].

Marketing Factors

According to the above Table 1, 31.7% and 49.7% of the total respondents strongly agreed and agreed respectively that POS machine payment system was encouraged by implementation of demonetization. 31.4% and 42.8% of the respondent also agreed and strongly agreed respectively on cashless transaction mechanism is getting popular now days than ever [41]. In similar way, from the total respondents, 31.7% and 48.3% agreed and strongly agreed respectively that introducing diverse payment methods increases customer choice and sales. From the result above about 43.8% of the respondents just started buying and selling goods and service by using the digital application which is one mechanism of demonetization. From this we can understand that, most of the respondents are believed that now day's implementation of demonetization motivates them to use digital payment mechanism which boosts their sales volume in the market. The result of this study is consistent with [1] of Nigeria that concluded marketing factors has significant effect

on currency demonetization [37].

Technological Factors

Table 2 below revealed that about 50.7% and 29% of the total respondents agreed and strongly agreed respectively that implementation of demonetization enable them to use POS machine, mobile banking, ATM and other demonetization mechanism which improve their daily sales and revenue [51]. In similar way, about 49.3% of the total respondents agreed that they trust digital bank system as a real bank and most of them believed that they get comfort with cashless transactions they made in their daily business activities. 51.4% and 16.2% of the total respondents do not worried about the security of digital banking. Whereas, about 6.2% of the respondents worried about the security of digital banking and 24.8% of them left neutral on this issue. In other question above about 39% and 42.8% of the respondents are strongly agreed and agreed respectively that cashless transaction can be made from anywhere and reduce cost of presenting physically for any payment [62]. In general, we can understand that implementation of demonetization encourages them to use technological outputs such as POS machine, mobile banking, ATM and other demonetization mechanism which increase their revenue and simplify their daily activities. This finding is consistent with the study of development of Electronic banking in Nigeria by [48].

3.3. Econometrics Analysis

The reliability test of Cronbach's Alpha coefficients for factors of implementing demonetization ranges from 0.973 to 0.983 and overall Cronbach's Alpha coefficient for expected scale items is 0.977 which is acceptable by scholars and it can be concluded that each survey instrument represents a reliable and valid construct [55].

Binary logit regression results

To identify the coefficient of estimates, effect of predictors and significance level of each independent variable in the model, the binary logit model was used with important elements including logistic coefficients β , Wald test, p value, and odd ratio [61].

Table 2. Parameters for Variables in the Equation.

Independent variables	B	S. E.	Wald	Df	Sig	OR = Exp (B)
Management	-3.927	.589	44.444	1	.000	.020
Technological	1.060	.532	3.964	1	.046	2.886
Step 1 Financial	1.036	.456	5.168	1	.023	2.819
Marketing	1.002	.441	5.157	1	.023	2.723
Political	1.244	.534	5.431	1	.020	3.469

Independent variables	B	S. E.	Wald	Df	Sig	OR = Exp (B)
Constant	1.235	4.005	.095	1	.758	3.439

Source: Author Computation Using SPSS, 2024.

**P< 0.01, 95% level of Confidence, N = 290

By applying all coefficients to the logistic regression model, we obtain the following predicted full model:

$$\begin{aligned}\text{Logit } p(x) &= \left(\frac{p(x)}{1-p(x)} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + u_i \\ &= \beta_0 + \beta_1 \text{MG} + \beta_2 \text{FI} + \beta_3 \text{PL} + \beta_4 \text{MR} + \beta_5 \text{TE} + u_i \\ &= 1.235 - 3.927\text{MG} + 1.036\text{FI} + 1.244\text{PL} + 1.002\text{MR} + 1.060\text{TE}\end{aligned}$$

The EXP (β) value associated with marketing factor is 2.723. Then, holding other factor constant, when marketing is raised by one unit, the odds ratio is 2.723 times as large and therefore, implementing demonetization are 2.723 times likely to present and significant at one percent [56]. Moreover, in this study as revealed in Table 2 all explanatory variable coefficients of Wald statistics are different from zero (44.444, 5.168, 5.431, 5.157 and 3.964) that confirm the explanatory variable effect on the outcomes, the p value of each predictor are less than 0.05 (i.e. 0.000, 0.023, 0.020, 0.023 and 0.046) which confirm that the above five explanatory variables (management, technological, financial, marketing and political-legal) are significance in determining the outcome [35].

3.4. Assessment of the Significance of Predictors Not Included in Null Model

Once the prediction power of the null model and its significance level are identified, the next important thing to do is check the significance of predictors that are not included in the null model.

Thus, Table 3 and Table 4 revealed the significance of each independent variable that is not included in the baseline model and the omnibus tests of the model respectively. As evidenced in Table 4: the independent variable that is not included in the baseline model is less than 0.05 (i.e. $p < 0.05$) and significant [52]. Moreover, the omnibus tests of the model are significant for all predictors. Therefore, this indicates that the new model with explanatory variables is different, and including all predictors improves the new model over the baseline model. Then the variable not in the equation table tells us whether each independent variable improves the model.

Table 3. Variables not in the Equation.

		Score	Df	Sig
Step 0 Variable	Management	79.781	1	.000
	Technological	15.619	1	.000
	Financial	9.095	1	.003
	Marketing	12.825	1	.000
	Political	6.306	1	.012
Overall Statistics			5	.000

Source: Author Computation Using SPSS, 2024.

Table 4. Omnibus Tests of Model Coefficients.

		Chi-square	Df	Sig.
Step 1	Step	129.726	5	.000
	Block	129.726	5	.000
	Model	129.726	5	.000

Source: Author Computation Using SPSS, 2024.

Table 4 above shows that when all five predictor variables are considered together, they significantly predict the implementing demonetization in MSEs $\chi^2 = 129.726$, $df = 5$, $N = 290$, $p < 0.05$.

The table labeled variables not in the equation tell us that the residual chi-square statistic is 129.726 which is significant at $p < 0.05$. It labels this statistic overall statics [46].

In other words, adding one or more of these variables will have a significant impact on the model's predictive power. If

the residual chi-square probability had been greater than 0.05, forcing the entire variable that had been excluded from the model back into the model would not have contributed significantly to its predictive power [20]. Management, financial, political-legal, marketing, and technological factors may have a significant impact on the model ($p < 0.05$). The Omnibus Test of Model Coefficients yields a Chi-Square of 129.726 which is significant at 0.05. The researchers can then conclude that including predictors in the model has significantly improved our ability to predict the presence of demonetization implementation in MSEs [22].

3.5. Evaluation of Prediction Power of Models with All Predictors

Cox & Snell R Square Model summary indicated that there is good relationship between the predictors and the response variable at 83%. Hosmer-Lemeshow test suggesting that the model was fit to the data well at statistics χ^2 , 6.565 & p value of .584 which is ($p > .05$) which means that the data fit the model adequately [42, 31].

Therefore, the logistic regression results obtained from the model were utilized to test these hypotheses. The hypotheses sought to test for a significant influence of management factor (MG), technological (TE), financial (FI), marketing (MR) and political-legal (PL) on the direct effect of implementing demonetization which was measured in terms of whether MSEs implementing demonetization or not [21].

The result showed that management factors has effects on implementing demonetization as revealed by Wald test of 44.444 which is different from zero and also significant in determining the outcome with the p value (0.000) is less than significance level 0.05. Also, the result showed that financial factors has effects on implementing demonetization as revealed by Wald test of 5.168 which is different from zero and also significant in determining the outcome with the p value (0.0) is less than significance level 0.05. In the meantime, The logistic regression result supports this hypothesis at ($P < 0.05$) level of significant and indicated by Wald test = 5.431, $p = .020$, Exp (β) = 3.469. This results with the overall contribution of Political-legal factors and its positive relationship with the implementing demonetization leads to support the proposed hypothesis (H03) [33].

Marketing factors is significant in determining the outcome as the p value (0.000) is less than significance level 0.05. This clearly revealed that marketing factors significantly determine the implementing demonetization in MSEs. Moreover, The result indicates that existence of strong relationship, and effects of technological factors on implementing demonetization as revealed by Wald test of 3.964 and the odd ratio of 2.886 respectively [38].

To sum-up, the main aim of this study was to examine major determinants of implementing demonetization in micro and small-scale enterprises in Ethiopia a case of Lideta sub-city of Addis Ababa city Administration. To attain this

objective, the researcher employed quantitative research approach and explanatory research design. To gather the required quantitative data, the researcher used primary sources of data which was collected via questionnaire. In order to achieve the stated objective, this study used stratified and simple random sampling procedure to select 315 sample of the study out of target population 1486 number of micro and small scale enterprises in the sub city. From the total of 315 questionnaires distributed to sampled respondents, 290 questionnaires were collected and analyzed using the Statistical Package for Social Sciences (SPSS 25) using descriptive statistics and binary logistic regression analysis was employed in the research to investigate the determinants implementing demonetization in micro and small-scale enterprises in Ethiopia a case of Lideta sub-city of Addis Ababa city Administration. Finally, the collected data was analyzed by using statistical package for social sciences (SPSS) version 25 [1].

This study identified about five major variables that determine implementation of Demonetization in Ethiopia specifically in this study area. These independent variables include such as management factors, financial Factors, political-legal factors, marketing factors and technological factors. Based on the results of logistic regression model, all explanatory variables mean management factors, financial Factors, political-legal factors, marketing factors and technological factors has significant impact on implementation of demonetization in Lideta su-city micro and small scale enterprises [28].

This study finds that the composite measure of management factors, financial Factors, political-legal factors, marketing factors and technological factors for 83% (Nagelkerke modified $R^2 = 0.83$) variance for the implementation of Demonetization in the micro and small scale enterprises. That means, the impact of these five independent variables contributed for the dependent variable demonetization were 83%, and the remaining 17% were other variables that are not included in this study.

Thus, the conclusions and recommendations are drawn from the findings of the study specifically related to the management factors, financial Factors, political-legal factors, marketing factors and technological factors given to the implementation of demonetization activities in the MSEs at Lideta sub city.

4. Conclusions

The main aim of this study was to examine major determinants of implementing demonetization in micro and small-scale enterprises in Ethiopia.

In this study the factors that contribute for implementation of Demonetization in MSEs with the different quality dimensions pertaining to the theoretical model was evaluated. Accordingly, the major findings of the study are presented as follows: The demographic data of this study reveal that a

large number of male respondents which accounts for 184 (64.1%) and 104 (35.9%) of female working on selected sectors in Lideta sub-city which indicates the absence of bias in the survey instrument related to the gender of the respondents. The education level of the respondents indicates 32.1% of the respondents have a bachelor degree followed by 27.9% Diploma/Certification and about 13.8% of respondents completed Postgraduate Degree. This implies that almost the whole selected respondents' literates and they can probably able to read, understand and interpret the research question on the factors of implementing demonetization.

After reviewing the previous literature, the researcher identified about five explanatory variables that aim to determine the implementation of Demonetization in Ethiopia. These variables are management factors, financial factors, political-legal factors, marketing factors and technological factors. The finding of this study is concluded as follow:

Management Factors which indicates the strategies, decisions, and actions taken by governing bodies and enterprise owners in implementing demonetization has a significant and positive effect on implementation of Demonetization in Ethiopia.

Financial factors involve that the encouragement of bank deposits, boosting sales volume, intensification of the instrumental payment mechanism and the creation of cashless transaction. In this study, a financial factor has a positive and significant effect on determining the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City.

Political-legal factors consist of laws, regulations, political will, and their enforcements that support or hinder the implementation of demonetization. The finding of this study revealed that, a political-legal factor has significant and positive effect on the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City.

Marketing factors indicates the power of marketing instruments such as expansion of POS machines and other means of digital applications that enable the sub city to implement demonetization. This study showed that, marketing factors has a positive and significant effect on determining the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City.

Technological factors imply the intensification of digital payment transaction volumes, the number of Point of Sale (POS) machines, Automated teller machine (ATM) deployed, internet penetration, and the security of digital transaction which enables the implementation of demonetization. The finding of this study showed that a technological factor has significant and positive effect on the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City.

From this study result, the researcher understands that implementation of demonetization in study area is on its good progress. Various stakeholders are working toward expanding the trends of demonetization. This show us they understood

the all-round extensive benefits implementing demonetization.

Some opportunities can arise from the demonetization process. Demonetization paves a way for modernization of the financial system. Demonetization could provide an opportunity to modernize Ethiopia's financial system and promote digital transactions. Demonetization plays a vital role in reduction of corruption. Demonetization could help reduce corruption by making it more difficult for individuals to hoard large amounts of cash. Demonetization could help improve tax collection by bringing more transactions into the formal economy.

From this study result some of Challenges can arise from the demonetization process. Lack of access to full-fledged networks and banking services for implementing demonetization fully operationalized. Ethiopia is a predominantly cash-based economy, and demonetization could lead to liquidity issues and hinder economic transactions if it is continued without solving means of implementation properly. For fully implementing various means of demonetization there is lack of public awareness. There would need to be a comprehensive public awareness campaign to educate part of citizens about the process and ensure a smooth transition.

5. Recommendations

The aim of this study was to examine major determinants of implementing demonetization in micro and small-scale enterprises in Ethiopia in case of Lideta sub city of Addis Ababa city. Therefore, based up on the result of this research finding, the researcher forwarded the following recommendations:

- 1) The finding of the study reveal that, management factors which indicates the strategies, decisions, and actions taken by governing bodies and enterprise owners in implementing demonetization has a significant and positive effect on implementation of Demonetization in Ethiopia. Based on this the researcher suggests that, the concerned government body should expand and strength the management factors above which smoothen the cash flow, reduce the transaction cost and time and expand alternative transaction options.
- 2) The result of the study indicated that the positive and significant impact of financial factors on the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City. Based on this the researcher suggested that, the government and other concerned body should work toward intensification of the instrumental payment mechanism which paves an opportunity for boosting the sales volumes of the MSEs and contributes for transition to cashless economy.
- 3) The finding of this study showed that, political-legal factor has significant and positive effect on the implementation of Demonetization in Ethiopia in case of

Lideta sub city of Addis Ababa City. Based this, the researcher suggested that the government bodies should strengthen the enforcements of policies, rules, and regulations concerning with demonetization since this factor helps to increase government taxes, reduce corruption, illegal activities, inflation and etc.

- 4) Since marketing factors has a positive and significant effect on determining the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City, this study suggests that, the concerned bodies such as financial institutions, medias and government should works toward expanding the digital means of transaction which do have a great role in boosting government revenue and owners of MSEs.
- 5) Technological factors have factor has significant and positive effect on the implementation of Demonetization in Ethiopia in case of Lideta sub city of Addis Ababa City. Therefore, the researcher recommends that, the whole stakeholder's in Ethiopia should strive toward intensifying the technological advancements which supports for demonetization.
- 6) Governments should create deep awareness to MSEs concerning the usage of demonetization instruments, and attract MSEs by different encouragement promotion, then simple way the society going to cash less economy.
- 7) 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 MSEs during the process of demonetization.

Abbreviations

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
MSEs	Micro 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

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Author Contributions

Tadele Melaku Chala is the sole author. The author read and approved the final manuscript.

Ethics Approval and Consent to Participate

Ethics approval and consent to participate Ethical clearance was obtained from the Research Ethical Review Committee (RERC) of Ambo University, Director of Research and Community Services, and permission and supporting letter was taken from the Addis Ababa city and given to each study area. Verbal informed consent from each participant was obtained during data collection. The farmers' were given the right to refuse to take part in the study as well as to withdraw at any time during the study. All participants, farmers' and experts were assured of confidentiality.

Consent for Publication

The author obtained permission from all participants in the Addis Ababa, Ambo University to publish the work.

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Data Availability Statement

Data are available upon request from the corresponding author.

Conflicts of Interest

The author declares that they have no competing interest.

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