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## Determinants of Private Investment in Debre Markos Town, Ethiopia

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### **Abstract**

*This research addresses the methodological gap in understanding the determinants of private investment in Debre Markos Town, Ethiopia, crucial for fostering national development. Conducted as a census targeting all private investors identified by Proclamation number 37/1996, the study includes 135 investors with a capital of Birr 100,000 or more. Data collection involves comprehensive cross-sectional information directly from these investors. Employing rigorous quantitative analysis, specifically multiple linear regression models, the research identifies critical factors influencing private investment, such as investor experience, education, credit accessibility, infrastructure quality, and corruption levels. The findings emphasize the significant impact of experience and credit accessibility, while highlighting challenges related to education levels and corruption. This study not only provides insights into the current state of private investment in Debre Markos but also offers actionable recommendations to improve the investment climate. Recommendations include streamlining licensing processes, promoting investment opportunities, and addressing corruption issues. By elucidating the determinants of private investment, this research aims to inform policymakers, investors, and scholars to stimulate economic growth and development effectively.*

**Keywords:** *Private Investment, Debre Markos, Ethiopia*

## 1. Introduction

Investment is an important macroeconomic factor enabling a nation to experience economic growth. A nation's economic growth, which is a phenomenon of development, demonstrates the connection between investment and growth. For instance, the Harrow-Domar Growth Model asserts that capital accumulation, investment, income growth, and savings are all important factors in developing nations such as Ethiopia Pettinger (2019) Investment refers to the process of creating capital or products that can be used to produce new products or services. Investment is an essential component of a nation's economic development and progress.

Recent research highlights the significance of investment in Ethiopia's economic growth. The World Bank notes that Ethiopia's economy has grown substantially over the past 15 years, driven largely by capital accumulation through public infrastructure investments. Despite a slowdown due to recent economic shocks, the country aims to sustain high growth rates and shift towards a more private-sector-driven economy through its 10-Year Development Plan, which focuses on improving the business climate and addressing macroeconomic imbalances (The Impact of Creating Jobs and Attracting Investments? Economic Growth in Ethiopia, 2024).

Buying a capital asset with the expectation that it would increase in value, generate income, or both is known as a private investment from a macroeconomic perspective. Simply stated a capital asset is any property that is difficult to sell and typically bought to aid in the profit-making of an investor. Land, buildings, machinery and equipment are examples of capital assets. Without investment activity, there can be no development or growth; instead, things remain stuck in a poverty cycle.

Private investment has a larger and more favorable effect on economic growth than governmental investment because it is more efficient and less directly related to corruption, according to AS (2011) and Dehn (2000). Similarly, Kingori (2015) supports the notion that private investment influences economic growth more than public investment (Aklilu 2021).

The private sector plays a significant role in the quantity of domestic investment as well as in the efficient allocation and use of resources. Private investment is crucial for the creation of jobs, as well as for the acceleration of social services and infrastructure.

Ethiopia is one of the least developed countries, which tries to increase investment activity for its economic growth. However, the country's benefit from investment is less as compared to other African countries (Ethiopian Investment Authority. 2012). The report revealed project stagnation and operational delays at all investment activity levels, indicating issues that need to be addressed to encourage and promote investment activities at each investment status.

In line with this, a number of previous researchers studied various variables that determine the investment activities in Ethiopia. For examples, Amenu and Waktola (2021) Analysis of Determinants of Private Investment in Ethiopia revealed that GDP growth, credit availability, and public investment have positive impacts, while macroeconomic instability, lending rate, and inflation have negative impacts, and comprehensive reforms are needed to attract private investment. Acknowledging their effort, however their study primarily focused on broad, national-level factors there remains a significant gap in understanding determinants at a microeconomic level.

Gebreslassie et al. (2015) conducted a study in the Wolaita Zone, specifically in the cities of Sodo, Areka, and Bodity, Ethiopia,

assessing domestic private investment. Their findings revealed that factors such as success stories, efficient government bureaucracy, investment potential, and a favorable investment environment positively contributed to domestic private investment. Conversely, infrastructure and access to finance were found to be insignificant factors in this context. Plus, to that Moges et al. (2022) further analyzed the determinants of private investment performance in Wolaita Sodo city, Ethiopia. their study found that investment incentives, credit facilities, interest on loans, gender, and inflation significantly affect private investment.

Gofe (2018) looked at what affects investment activities in Nekemte Town. The study used both primary and secondary data and employed descriptive analysis. The results showed that major issues like financial difficulties, lack of credit, and low support from investment offices are key factors affecting investments in the area. However, a limitation of the study is that it only used descriptive analysis, which might not fully capture the complexities of these issues. More advanced analytical methods could provide deeper insights.

One of Ethiopia's resource towns with the potential to attract investors is Debre Markos. These include the state of the weather, availability of raw resources, and labor costs. The Ethiopian Investment Authority (2017) reports that there have been many investment activities in Debre Markos Town; however, this does not imply that all approved projects in Debre Markos have been completed satisfactorily. If this project had been completed completely and correctly, it would have given the general public enormous opportunities, satisfied society's needs and desires by providing the necessary goods and services, and promoted economic progress (Debre Markos Trade and Investment Bureau 2017)

The recognition of private investment as a primary driver of Ethiopia's growth and change, particularly Debre Markos, is still relatively recent. Therefore, it is important to understand the variables or investor behaviors that affect capital. According to Serven & Solimano (1992) research findings, the macro-and microeconomic determinants of private investment, the human capital base, and other factors restrain it.

Birhanu and Molla (2019) explored private investment opportunities and challenges in the East Gojjam zone and identified administrative, policy, infrastructure, macroeconomic, exchange rate fluctuations, and market-related factors as major bottlenecks. Sociocultural and geographical factors are considered to be opportunities.

Molla, M. (2019) explored the factors influencing private investment in East Gojjam Zone, Ethiopia. The study employed a descriptive research design with a qualitative data analysis approach, using purposive and stratified sampling to survey 299 investors with a structured questionnaire. It identifies major obstacles including administrative policies, infrastructure deficiencies, and macroeconomic challenges such as foreign exchange shortages and exchange rate fluctuations. However, the research identified a methodological gap as it solely relied on descriptive analysis.

This research focuses on investigating the determinants of private investment specifically in Debre Markos, Ethiopia, aiming to address the methodological gap identified in previous studies conducted in the broader East Gojjam Zone. By employing quantitative methods such as regression analysis alongside qualitative insights, this study seeks to provide a more nuanced understanding of the administrative, infrastructure, and financial factors influencing private investment in Debre Markos. This approach not only enhances the

depth of analysis but also contributes to filling the research gap within the local context, offering valuable insights for policymakers and investors alike.

### 1.1. Basic Research Questions

In this study, the researcher attempted to identify the factors that affected private investment in Debre Markos town. The following questions guided this investigation:

- ✧ What is the relationship between education levels and private investment growth in Debre Markos town?
- ✧ What is the impact of corruption and bureaucratic inefficiencies on private investment growth in Debre Markos town?
- ✧ What is the impact of availability of credit on private investment growth in Debre Markos town?
- ✧ What role does infrastructure development play in promoting private investment growth in Debre Markos town?
- ✧ What challenges do private investors face in Debre Markos town, and how do these challenges affect investment growth?

### 1.2. Objective of the study

#### 1.2.1. General objective of the study

The main objective of the study was to identify the determinant of private investment at Debre Markos town.

#### 1.2.2. Specific objectives of the study

In order to achieve the general objective, the study had the following three specific objectives.

- ▶ To assess the current private investment in Debre Markos Town.
- ▶ To identify the factors that affect private investment in Debre Markos Town
- ▶ To overcome practical solution to the problem attributed to the Town.

### 1.3. Scope of the Study

This study examines the determinants of private investment in Debre Markos Town, Ethiopia. The scope encompasses the following aspects:

**Geographical Focus:** The study specifically concentrates on Debre Markos Town.

**Sectoral Emphasis:** The primary sectors under investigation include manufacturing and services, which collectively represent a substantial portion of private investment in the Town.

**Time Frame:** The study utilizes cross-sectional data of 2023 to analyze private investment the study area.

## 2. Methodology

### 2.2. Description of the Study Area

Debre Markos town is located in northwestern Ethiopia, in the Amhara National Regional State, East Gojjam zone, at a distance of 300 km from Addis Ababa and 265 km from Bahir Dar the regional capital. Its astronomical location is  $10^{\circ} 21''$  North Latitude and  $37^{\circ} 43'$  East Longitude.

Specifically, the town is surrounded by Aneded Woreda in the East, and the remaining three directions are surrounded by Gozamen Woreda. The town has 1,380 mm an  $18.5^{\circ}$  C average annual rainfall and temperatures respectively. Debre Markos Town has an estimated area of 30.5 square kilometers (Debre Markos Town Administration, 2023).

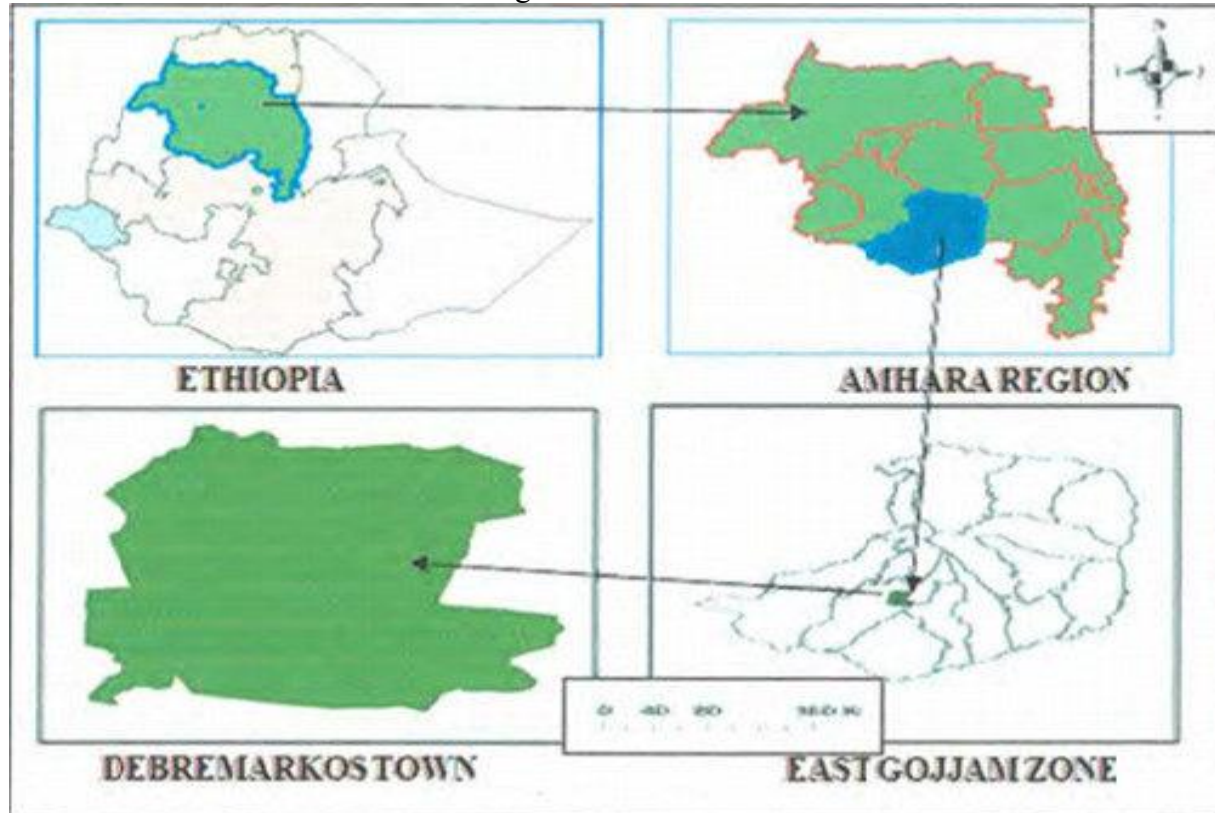


Figure 1. Map of Debre Markos town

### 2.3. Target population

This study examines private investors in Debre Markos town, identified by Proclamation number 37/1996, who meet the capital requirement of Birr 100,000 or higher. The study includes 135 investors, based on the East Gojjam zone investment bureau's report, which meets the minimum requirement in Debre Markos.

### 2.4. Sampling Method and Sampling Size

This study includes 135 investors who meet the minimum requirement, as reported by the East Gojjam zone investment bureaus. The chosen population includes those with an initial capital of 100,000 and above. The sample size is determined by Yamane's formula for  $N > 200$  Yamane (1973) which is applied to a population of 135 investors in a town. The formula is used for  $N > 200$ , as the target population is less than 200, and using a

census is advisable for an accurate statistical estimation.

**2.5. Data Type, Source and Collection Procedure**

This study used cross-sectional data from primary sources. Primary data, first-hand information about variables, nature, and investment situations were obtained from individuals involved in investment activities through structured and unstructured questions. The study employs both open- and closed-ended questions in interviews with investors.

**2.6. Data Analysis Method**

The study utilized descriptive statistics and an econometric model to analyze data, summarizing data using averages, frequencies, standard deviations, and percentages. Multiple linear regression models were used to identify the determinants of private investment in Debre Markos.

**2.7. Model Specification**

Modeling depends on the type of dependent variable. For continuous outcome (dependent) variables, multiple linear regression models are usually used to examine possible relationships between the dependent and independent variables of the study (Gujarati, 1987). The dependent variable in this study is private investment, defined by the amount of current capital investors hold in Birr. Therefore, multiple linear regression model is

suitable for this investigation. The study of determinants influencing private investment, specifically defined by the amount of current capital held in Birr, is crucial for understanding Ethiopia's economic dynamics. Private investment is vital for fostering economic growth, job creation, and overall development. By identifying factors that influence investment decisions in Birr, this research aims to provide insights that can inform targeted policies to enhance business conditions and attract more investment in local currency.

$$Y_i = \beta_o + \beta_i X_i + \epsilon_i \dots\dots\dots (1)$$

where  $\beta_o$  is a constant term,  $\beta_i$  is the coefficient of the independent variables  $X_i$ ,  $\epsilon_i$  is the error term, and  $Y_i$  is the current capital, which is taken as the measurement of the dependent variable (private investment).

$$Y_i = \beta_o + \beta_1 Iexp + \beta_2 Educ + \beta_3 Mexp + \beta_4 Credit + \beta_5 Infst + \beta_6 Burea + \beta_7 Corr + \epsilon_i \dots (2)$$

Where *Iexp* is Experience of investor, *Educ* is Education, *Mexp* is Experience of manager, *Credit* is Credit accessibility to private sector, *Infst* is Infrastructure facility, *Burea* is Bureaucratic red tape and *Corr* is corruption. The definitions of the explanatory variables, measurement, and their expected hypotheses are explained in Table 1.

**Table 1. Description of explanatory variables**

| Variables                                     | Variable type | Variable measurement   | Expected effect |
|---|---------------|--|-----------------|
| <b>Credit accessibility to private sector</b> | Dummy         | =1 if no, 0 otherwise  | -               |
| <b>Experience of manager</b>                  | Continues     | When the management began overseeing his company or any other company up until this point. | +               |
| <b>Education</b>                              | Categorical   | Education level attended by the private investor   | +               |

|                                |  |  |   |
|--------------------------------|--|--|---|
|                                |  | =1 if below grade 12, =2 if grade 12 up to first degree, =3 if MSc and above                                   |   |
| <b>Experience of investor</b>  | Continues  | The time when an investor starts a similar or current business   | + |
| <b>Infrastructure facility</b> | Dummy  | Availability and access of infrastructure facilities like road, water, electric etc.<br>=1 if yes, 0 otherwise | + |
| <b>Bureaucratic red tape</b>   | Dummy  | 1 if there is bureaucratic red tape (complex rules and procedures leading to delays), 0 otherwise.             | - |
| <b>Corruption</b>              | Dummy  | 1 if there is no corruption, 0 otherwise.  | - |
| <b>Private investment</b>      | It is a continuous variable that can be measured by the amount of current capital in Birr. |  |   |

Source: Author design

### 2.7.1. Justification of Expected Effects

#### **Credit Accessibility to Private Sector:**

Limited access to credit can constrain the ability of private investors to fund their projects. A "No" response (indicating lack of credit access) is expected to negatively influence private investment, as investors who cannot access credit might struggle to secure necessary funds, hindering their ability to invest and expand their businesses. Therefore, lack of credit accessibility is expected to reduce private investment.

**Experience of Manager:** Experienced managers bring valuable skills, knowledge, and networks that can enhance business operations and attract investment. Therefore, more experienced managers are likely to positively impact private investment.

**Education:** Higher levels of education typically correlate with better business acumen and decision-making skills. Investors with higher education levels are expected to be more capable of managing investments effectively, thus positively influencing private investment.

**Experience of Investor:** Experienced investors possess substantial knowledge, skills, and networks, leading to more

informed and strategic decision-making, positively impacting private investment.

**Infrastructure Facility:** Access to essential infrastructure reduces operational costs and increases efficiency, making investment more attractive.

**Bureaucratic Red Tape:** Excessive bureaucratic red tape can lead to delays and increased costs, discouraging investment. Therefore, higher levels of bureaucratic red tape are expected to negatively impact private investment.

**Corruption:** Corruption creates an unpredictable business environment, increases costs, and deters investors. Therefore, higher levels of corruption are expected to negatively impact private investment.

## 3. Results and Discussions

This chapter presents the descriptive statistical and econometric model results, revealing the pattern of relationships between private investment and its determinants.

### 3.2. Descriptive Analysis

This section focuses on the descriptive analysis of data using frequencies of descriptive statistics and means, utilizing two investment sectors: the manufacturing and

service sectors. This research focuses on the manufacturing and service sectors due to their significant economic impact in Debre Markos Town, Ethiopia. The manufacturing sector drives industrial growth and job creation, while the service sector, encompassing 87.41% of private investors. These sectors are major employers and their interdependence provides a comprehensive view of investment dynamics. Insights from this focus guide targeted interventions to enhance investment and support sustainable economic growth, backed by reliable data from the Debre Markos Investment Office.

### 3.2.1. Distribution of Private Investment in Debre Markos Town by Sector

The manufacturing sector involves investors accumulating capital by delivering tangible goods, the service sector invests capital to make services profitable in the future, and individual or group investors participate in both sectors. Data from Debre Markos Investment Office depicted in Table 2, shows that 87.41% of private investors are involved in service delivery, while 12.59% are involved in manufacturing.

Table 2. Major investment sector and their relative size

| Investor             | Frequency | Percent |
|----------------------|-----------|---------|
| Service sector       | 118       | 87.41%  |
| Manufacturing sector | 17        | 12.59%  |
| Total                | 135       | 100%    |

Source: Debre Markos Investment Office

### 3.2.2. Education Level and Private Investment

From following Table 3, investors with diverse academic knowledge have varying

understandings of investment risks, returns, and management.

Table 3. Education level of investors

| Education level | Below grade 12 | Grade 12-Degree | MSc & above | Total |
|-----------------|----------------|-----------------|-------------|-------|
| Frequency       | 35             | 58              | 42          | 135   |
| Percent         | 26%            | 43%             | 31%         | 100%  |

Source: Own survey



The data in Table 4, show that investors with a schooling level below grade 12 have an average current capital of Birr 531013.62, while those with a degree and above have an

average capital of 2495692.8 Birr and 661870.5 Birr respectively. This finding indicates a positive relationship between an investor's education level and current capital.

Table 4 Relationship Between Current Capital and Education Level

| Investor Education | Summary of Mean  | Investors Current Capital |            |
|--------------------|------------------|---------------------------|------------|
|                    |                  | Std. Dev.                 | Freq.      |
| Below grade 12     | 531013.09        | 285357.62                 | 35         |
| Grade 12-Degree    | 2495692.8        | 3548868.4                 | 58         |
| MSc and above      | 6618709.5        | 7138153.8                 | 42         |
| <b>Total</b>       | <b>3269047.7</b> | <b>5167394.6</b>          | <b>135</b> |

Source: Own survey

### 3.2.3. Corruption, Bureaucratic Red Tape, Infrastructural Facility and Credit Accessibility

The study collected information on investors' perceptions of corruption using distributed 'yes' or 'no' questions as presented in Table 5. with the frequency varying depending on the variable. For instance, 42.2% of investor's perceived corruption, while 57.8% believed that there was no corruption. The data from investors revealed that 39.3% perceived

bureaucratic red tape, while 60.7% perceived no bureaucratic red tape.

The study reveals that out of the 135 investors in the town, 63.7% have sufficient access to basic infrastructural facilities, while 36.3% do not, indicating that infrastructural accessibility is a significant factor influencing private investment. In addition, credit accessibility is a key factor that influences private investment in towns. Of the 135 investors, 63.7% had sufficient access, while 36.3% lacked access, with 49 having insufficient credit to finance their businesses.

Table 5, Distribution of investors based on their perception toward dummy explanatory variables

| No | Variable                 | Frequency |    |       | Percent |       |       |
|----|--------------------------|-----------|----|-------|---------|-------|-------|
|    |                          | Yes       | No | Total | Yes     | No    | Total |
| 1  | Corruption               | 57        | 78 | 135   | 42.2%   | 57.8% | 100%  |
| 2  | Bureaucratic red tape    | 53        | 82 | 135   | 39.3%   | 60.7% | 100%  |
| 3  | Infrastructural facility | 86        | 49 | 135   | 63.7%   | 36.3% | 100%  |

|          |                             |           |           |            |              |              |             |
|----------|-----------------------------|-----------|-----------|------------|--------------|--------------|-------------|
| <b>4</b> | <b>Credit accessibility</b> | <b>86</b> | <b>49</b> | <b>135</b> | <b>63.7%</b> | <b>36.3%</b> | <b>100%</b> |
|----------|-----------------------------|-----------|-----------|------------|--------------|--------------|-------------|

Source: Own survey

The data in Table 6: shows that firms with adequate infrastructural accessibility have an average current capital of 4414468.7 Birr, while those without such access have an

average of 1321832.1, indicating a direct relationship between infrastructural accessibility and current capital.

**Table 6. Relationship Between Infrastructure and Current Capital**

| Infrastructural Accessibility | Summary of Mean  | Investors Current Capital |            |
|-------------------------------|------------------|---------------------------|------------|
|                               |                  | Std. Dev.                 | Freq.      |
| <b>No</b>                     | <b>1321832.1</b> | <b>2993358.6</b>          | <b>50</b>  |
| <b>Yes</b>                    | <b>4414468.7</b> | <b>5812458.3</b>          | <b>85</b>  |
| <b>Total</b>                  | <b>3269047.7</b> | <b>5167394.6</b>          | <b>135</b> |

Source: Own survey

The data in Table 7, shows investors' perceptions of corruption and impact on private investment. Those facing corruption from government institutions have an average current capital of 1400141.1 Birr, while those without corruption face an average current

capital of 4634787.2 Birr. This disparity highlights how perceptions of corruption can potentially deter investment and reduce capital accumulation among private investors in Debre Markos.

Table 7, Relationship between current capital and corruption

| Corruption   | Summary of Mean  | Investors Current Capital |            |
|--------------|------------------|---------------------------|------------|
|              |                  | Std. Dev.                 | Freq.      |
| <b>no</b>    | <b>4634787.2</b> | <b>5990171.8</b>          | <b>78</b>  |
| <b>yes</b>   | <b>1400141.1</b> | <b>2898762.2</b>          | <b>57</b>  |
| <b>Total</b> | <b>3269047.7</b> | <b>5167394.6</b>          | <b>135</b> |

Source: Own survey

**3.2.4. Investor and Manager Experience**

The data as presented in Table 8 shows that 65% of the total investors have an average of

less than nine years of experience, while 35% have more than nine years of experience. Additionally, 61% of managers had less than 9 years of experience, while 39% had more than 9 years of experience.

Table 8. Distribution of investors and managers experience

| Years of Experience | Frequency |     |       |     |       | Percent |     |       |     |       |
|---------------------|-----------|-----|-------|-----|-------|---------|-----|-------|-----|-------|
|                     | 0-4       | 5-9 | 10-14 | >15 | Total | 0-4     | 5-9 | 10-14 | >15 | Total |
| Investor Experience | 23        | 65  | 38    | 9   | 135   | 17%     | 48% | 28%   | 7%  | 100%  |
| Manager Experience  | 21        | 62  | 44    | 8   | 135   | 15%     | 46% | 33%   | 6%  | 100%  |

Source: Own survey

### 3.3. Econometric Analysis

The study utilized STATA version 14 to analyze multiple linear regression coefficients and conduct tests to check the explanatory variables before running the regression.

#### 3.3.1. Test for Multicollinearity Assumption

The model has been evaluated for multicollinearity among discrete explanatory

variables using the Variance Inflation Factor (VIF). The VIF values for continuous variables are less than 10, indicating the absence of multicollinearity among the explanatory variables. The final analysis included seven explanatory variables, including two continuous, four dummy, and one discrete variable based on the VIF results, to estimate the multiple regression model and identify the factors influencing private investment.

Table 9. VIF of the Explanatory Variables used in the study

| Variable | VIF  | 1/VIF    |
|----------|------|----------|
| Mexp     | 5.32 | 0.188018 |
| Iexp     | 4.13 | 0.242054 |
| Ifst     | 3.96 | 0.252341 |
| Burea    | 3.43 | 0.291871 |
| Credit   | 3.10 | 0.322782 |
| Educ     | 2.81 | 0.355826 |
| Corr     | 1.7  | 0.582393 |
| Mean VIF | 3.49 |          |

Source: Own Computation

A VIF value greater than 10 indicated multicollinearity within the continuous variables. From the above Table 9. The study found that no categorical or dummy explanatory variables had a VIF near 10, indicating no severe multicollinearity problems.

#### 3.3.2. Econometric Result

This study analyzes the determinant factors influencing private investment using a multiple linear regression model and the result presented in below Table10.

Table 10. Result from Multiple Linear Regression Model

| <b>Linear regression</b> |                 | <b>Number of obs = 135</b>     |              |                 |
|--------------------------|-----------------|--------------------------------|--------------|-----------------|
|                          |                 | <b>F(8, 126) = 14.83</b>       |              |                 |
|                          |                 | <b>Prob &gt; F = 0.0000</b>    |              |                 |
|                          |                 | <b>R-squared Root = 0.7132</b> |              |                 |
|                          |                 | <b>MSE = 2.9e+06</b>           |              |                 |
| <b>Capital</b>           | <b>Coef.</b>    | <b>Robust Std. Err.</b>        | <b>t</b>     | <b>P&gt; t </b> |
| <b>Iexp</b>              | <b>1675121</b>  | <b>221904.3</b>                | <b>7.55</b>  | <b>0.000***</b> |
| <b>Educ</b>              |                 |                                |              |                 |
| <b>Grade 12-Degree</b>   | <b>-2706331</b> | <b>708783.6</b>                | <b>-3.82</b> | <b>0.000***</b> |
| <b>MSc &amp; above</b>   | <b>-4182785</b> | <b>1080593</b>                 | <b>-3.87</b> | <b>0.000***</b> |
| <b>Mexp</b>              | <b>265407.1</b> | <b>180496.1</b>                | <b>1.47</b>  | <b>0.144</b>    |
| <b>Credit</b>            | <b>-2552764</b> | <b>861319</b>                  | <b>-2.96</b> | <b>0.004***</b> |
| <b>Infst</b>             | <b>-1017391</b> | <b>728712.7</b>                | <b>-1.40</b> | <b>0.165</b>    |
| <b>Burea</b>             | <b>419207.3</b> | <b>622323.1</b>                | <b>0.67</b>  | <b>0.502</b>    |
| <b>corr</b>              | <b>1036798</b>  | <b>467033.3</b>                | <b>2.22</b>  | <b>0.028**</b>  |
| <b>_cons</b>             | <b>-8704981</b> | <b>1212028</b>                 | <b>-7.18</b> | <b>0.000</b>    |

Note: \*\*\* and \*\* indicate statistical significance at the 1% and 5% level, respectively.

Source: Own Computation

The model is significant with a p-value of 0.000, meaning that the probability of obtaining such results by chance is virtually zero, thus confirming the model's overall statistical significance. An  $R^2$  value of 0.71 signifies that approximately 71% of the variability in the dependent variable, which is the private investors' current capital, can be explained by the set of explanatory variables included in the model. This high  $R^2$  value demonstrates that the model has strong explanatory power, effectively capturing the relationship between the dependent variable and the independent variables. Moreover, the overall goodness of fit of the model is indicative of its robustness and reliability,

suggesting that the model is well-specified and the included predictors are relevant and contribute significantly to explaining the variance in private investment. This implies that the model is statistically sound and the findings can be considered dependable for drawing conclusions and making policy recommendations.

Investor experience: Experience significantly influences private investment and predicts current capital at the 5% significance level. Well-experienced investors are considered effective and have higher capital. On average, a one-year increase in experience leads to an increase in current capital of Birr 1,675,121,

indicating a positive relationship between investor experience and capital.

Education level of investors: The regression Table 10 reveals that education significantly impacts the dependent variable, indicating a negative correlation between investor education level and current capital. This interpretation of categorical variables differs from that of dummy and continuous variables. The interpretation suggests that the education level between grade 12 and degree, which is -2706331, reduces current capital by 2706331Birr compared to the benchmark variable below grade 12, indicating a relative reduction in education. The -4182785 Birr for MSc and above investors indicates a reduction in their current capital compared to those with lower education levels below grade 12. The negative relationship observed between the education level of investors and their current capital can be attributed to several factors. Higher education levels often correlate with increased opportunity costs and time spent on academic pursuits, potentially diverting resources away from immediate capital accumulation. Moreover, individuals with advanced degrees may prioritize knowledge-intensive ventures or sectors that require substantial research and development, which typically involve longer gestation periods and higher initial investment outlays. Thus, while education enhances long-term capabilities and strategic decision-making, it may temporarily constrain liquid capital available for immediate investment, resulting in a negative relationship between education level and current capital among investors.

This negative relationship can be further justified by considering the financial commitments associated with higher education. Investors who pursue advanced degrees often incur significant costs for tuition, living expenses, and potential earnings forgone during their studies. These financial burdens can limit their immediate capacity to accumulate capital compared to

investors with lower education levels who may enter the workforce earlier or engage in entrepreneurial activities sooner. Additionally, investors with higher education levels might prefer less capital-intensive sectors or investment strategies that prioritize intellectual capital over financial liquidity in the short term. Therefore, the observed negative relationship underscores the complex interplay between education, financial resources, and investment decisions among private investors.

Credit accessibility: The regression analysis revealed a significant negative relationship between lack of credit access and current capital, with a decrease of 2552764 Birr. However, there is a positive relationship between credit access and investors' current capital because credit is a significant source of capital formation. This finding highlights the importance of credit accessibility in capital formation.

Corruption: The model's last significant explanatory variable, corruption, has a 5% level of precision significance, with a coefficient of 1036798, indicating a positive relationship between the current capital amount and the absence of corruption.

#### 4. Conclusion and Recommendation

In conclusion, this research has provided comprehensive insights into the determinants of private investment in Debre Markos Town, Ethiopia, utilizing a census approach to include all eligible investors identified by Proclamation number 37/1996 with a capital of Birr 100,000 or higher. The methodological framework employed rigorous data collection through structured interviews, capturing cross-sectional data from 135 investors. Utilizing multiple linear regression analysis, the study identified several critical factors influencing private investment. Specifically, investor experience and access to credit emerged as significant

positive predictors of current capital, highlighting their pivotal role in capital accumulation and business expansion. Conversely, higher levels of education among investors and instances of corruption were found to negatively impact private investment, underscoring the barriers these factors pose to economic development in the region. Generally private sector in Debre Markos is affected by different factors as stated above and the level of investment is not as enough as the town is belonging to zonal town with high population.

Based on the findings, several targeted recommendations can be proposed to enhance the local business environment and attract more investment. Firstly, there is a clear need to expand access to credit facilities for private investors. The study identified limited access to credit as a significant barrier to investment, negatively impacting capital accumulation and business expansion. By increasing access to affordable credit and financial services tailored to the needs of small and medium enterprises (SMEs), policymakers can stimulate investment activities and foster economic growth in the region.

Secondly, streamlining and simplifying the business licensing processes is crucial. The research highlighted bureaucratic red tape as a deterrent to investment, with complex procedures and delays hindering business operations. Simplifying licensing requirements, reducing administrative burdens, and implementing transparent and efficient approval processes can encourage more entrepreneurs to formalize their businesses and invest in Debre Markos. This reform would create a more conducive environment for startups and existing businesses alike, promoting economic dynamism and job creation.

Lastly, addressing corruption is paramount to improving the investment climate. The study

underscored corruption as a significant factor negatively influencing private investment, deterring investors due to uncertainty, additional costs, and unfair business practices. Implementing strict anti-corruption measures, enforcing transparency in government transactions, and holding accountable those engaged in corrupt practices can restore investor confidence and integrity in the business environment. By fostering a corruption-free environment, policymakers can attract ethical investors and promote sustainable economic development in Debre Markos.

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### Data Availability statement

Data supporting the findings of this study are available from the corresponding author upon reasonable request.

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