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Dreams to Reality: Unraveling the Secrets of Youth Entrepreneurship in Adama City

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ABSTRACT

Youth unemployment is becoming a serious concern in the urban population of Ethiopia. With a focus on turning dreams into tangible ventures, the research aims to uncover the secrets behind the success of young entrepreneurs and identifies the main factors confining youth from self-employment. Utilizing primary data collected at the woreda level, the study analyzes both qualitative and quantitative data from a sample size of 384 respondents. Through factor analysis, composite variables are created to examine the impact of both local and youth-specific factors attributable to youth entrepreneurship. Finally, Poisson and Tobit regression models are used to estimate the likelihood of youth starting their own business and its determinant factors. The findings shed light on the pivotal role of entrepreneurial learning, network, & support system, family status, opportunity constraint, and dissatisfaction with current employment opportunities in driving youth towards self-employment. In the pursuit of self-employment in the city, personal factors hold greater significance than the business environment like macroeconomic and socio-political conditions of the country. Men are found to be voluntarily self-employed and choose self-employment as a career path while women engage in self-employment out of necessity rather than choice. The majority of women are largely involuntary and unemployed. Age prevails "U-shaped" self-employment tendency among youth. There is a low correlation between education and self-employment, youth with degrees and above have shown a lower tendency of starting their own business than their counterparts. The path to youth self-employment in Adama City involves interconnected stages: personal development, technical development, provision of economic incentives, institutional development, and market linkage. When these factors align, young individuals can turn their dreams into reality and contribute to the city's economic prosperity. This research provides valuable insights for policymakers, highlighting the need for targeted support and policies to nurture and empower young entrepreneurs

Keywords: Youth Entrepreneurship, Self-employment, Poisson model, Tobit regression, Adama

1. INTRODUCTION

Developing countries like Ethiopia have prioritized the development of investment that gives higher opportunities for young people. Economic growth and employment go hand in hand, making self-employment an area of focus for strategic politicians and planners, particularly in emerging countries, where the youth population (aged between 16 to 29) constitutes 28% of the population (Admassu et al., 2022). Ethiopia, with a population of 123 million, predominantly relies on rural farming as a significant source of income. However, urban areas face challenges such as high unemployment rates, especially among the youth, which has led to increased self-employment. Since 2010, however, the dominance of the service sector, which has increased opportunities for youth in the short run, has reduced long-run productivity and sustainable job growth compared to productive sectors, gradually increasing the unemployment problem over time (Admassie & Nuru, 2017).

A study by Poscheke (2022) indicates that self-employment in Ethiopia is higher in urban areas of the country, reaching 40% of the labor force and 87% of jobs available in urban areas (TRADING ECONOMICS, 2023). The availability of limited formal jobs, growth of the informal sector, high unemployment, the mismatch between the skill requirements of the job market, and the education/training skills of young people in urban areas contributes to the high rates of self-employment among adolescents (Rathelot & Van Rens, 2017; Kebede, 2022). Legislation and support for self-employed individuals can help them raise their incomes and reduce poverty and, government organizations and development practitioners need to consider these factors and promote self-employment and entrepreneurship.

Urban youth in developing countries including Ethiopia face various issues related to self-employment and the economy, including homelessness, drug abuse, violence, irregular migration to cities, and high unemployment rates. Promoting self-employment could be an effective strategy for tackling youth unemployment and it's derivate. Factors affecting youth self-employment are numerous, dynamic, inconclusive, and highly wired to each other demanding timely investigation. Men are more likely to be self-employed than women, and those with the highest levels of education are less likely to self-employ themselves (Saridakis et al., 2014).

For a long period, many researchers have been arguing over weather self-employment emanates from entrepreneurship choice or a livelihood coping mechanism. A study by Burchell & Coutts (2018) showed that entering into self-employment in developing countries is largely characterized as a practical means of coping strategy for livelihood, rather than as a sign of entrepreneurship and poverty reduction than wage employment. Unlike LDCs, in developed countries, self-employment leads to higher-wage work (Donovan et al., 2021). Contrary to this, a study by Ingemar et al (2015) suggests that income poverty is more prevalent among the self-employed than among the regularly employed people. Therefore, further research is needed to better understand the relationship between self-employment and its main drivers.

Although several studies were conducted in Ethiopia to understand the nature of self-employment, its determinants, and correlates, inconclusive results were reported (Dershem & Ali, 2019; Fekadu, 2023; Haile, 2021; Burchell & Coutts, 2018). Besides very little is known about the nature of self-employment in Adama city, the second largest city in Ethiopia, and therefore, further research is required to validate whether the theoretical framework of self-employment can apply to Adama and a country like Ethiopia, and further elaborate the complex nature of the subject area. This study, therefore, aims to explore the drivers of youth self-employment in Adama City and thereby identify a pathway for successful business endeavors.

2. CONCEPTUAL FRAMEWORK

Self-employment is a fascinating area of study that has attracted the attention of scholars who have explored various theories to understand the motivations and dynamics behind individuals choosing to work for themselves. Several sources have contributed to the theories of self-employment. For instance, Shane and Venkataraman (2000) developed the opportunity-based entrepreneurship theory, suggesting that individuals engage in self-employment when they identify and exploit opportunities in the market. On the other hand, the necessity-based entrepreneurship theory, proposed by Reynolds et al. (2004), emphasizes that individuals turn to self-employment out of necessity, often due to a lack of viable employment alternatives. Additionally, the social capital theory, as discussed by Aldrich and Zimmer (1986), highlights the role of social networks and relationships in facilitating self-employment. These theories, along with others from researchers like Evans and Jovanovic (1989) and Baumol (1993), provide valuable insights into the diverse factors influencing self-employment and pave the way for further exploration in this field.

Fairlie (1999) and Blanchflower and Oswald (1998) analyzed the liquidity constraint theory of entrepreneurship and found that individuals with better access to financial capital are more likely to establish new businesses. They found that receiving an inheritance or gift increases the odds of self-employment. Muchemwa & Odimegwu (2023) studied self-employability conditions in high youth unemployment areas and identified financial literacy playing a key role in raising the odds of youth self-employability. Household utility model (Becker, 1986) explains how households choose between self-employment and paid jobs based on the relative importance of key factors associated with decision-making. The households weigh factors like income, time, risk, social factors, and benefits that maximize the overall total utility associated with paid and self-employment of the decision-maker (Lévesque et al., 2002; Schoemaker, 1982).

These theories are relevant for examining determinants of self-employment in developing countries including Ethiopia, where youth unemployment is high. However, in many parts of the country, youth after their graduation, expect paid employment rather than starting their own jobs, and many research works showed inconclusive results on how urban youth are making optimum decisions.

The determinants of self-employment in Ethiopia are attributable to mixed factors. In many areas, like the central Ethiopia region, many youths start self-entrepreneurship based on social networks and social relationships (Samuel Gemechu, et al., 2020). The liquidity constraint theory explains the

reality of self-employment in urban areas of the country (Haile, 2008b). Largely self-employment is concentrated around cities, where market and economic opportunities are far better located (Haile, 2008a). The literature in Ethiopia shows mixed results and it is difficult to know which theory takes the dominant share in explaining the nature of self-employment in the country therefore, this research framework applied the household welfare approach (utility model) to select the most important factory-pushing youth into self-employment in Adama city.

3. RESEARCH METHODOLOGY

3.1 Sample and Sampling Procedure

The study aimed to investigate the factors influencing self-employment among young individuals in Adama City. It employed a cross-sectional survey design and utilized mixed approaches to select participants. The target population encompassed both employed and unemployed youth in Adama City, including self-employed individuals, paid employees in the government or private sector, and unemployed youth. To prevent sample selection bias, only managers or their representatives of firms established within the last ten years were considered. The identification of self-employed individuals was based on data obtained from the Adama City administration and MSE offices. Referral techniques were used to identify unemployed youth. Cochrane (1963) was used to determine the optimal sample size based on the desired level of precision, confidence, and the expected fraction of the characteristic in the population. A random sample of 384 respondents was randomly picked to partake in interview sessions to maintain the sample's integrity. Multi-stage stratified sampling techniques were used to select representative respondents from a mixed population. In the first stage, youth were stratified based on their job categories, location, and employment status. In the second stage, the sample size was proportionally allocated to each stratum. In the third stage, respondents were selected from each stratum with the help of a simple random sampling technique. Finally, to avoid selection bias, a fair percentage of representatives were purposively incorporated from gender, marginal groups, and income groups to raise the degree of sample inclusivity.

3.2 Methods of Data Analysis

Data received through questionnaires and interviews were organized in tabular form and then thoroughly analyzed using descriptive statistics, which was used to analyze data collected from primary sources using descriptive surveys. Furthermore, the researcher systematically employed factor analysis to critically investigate the root cause and nature of self-employment in Adama City.

3.2.1 Descriptive method

Descriptive analysis was used to compile the data into a summary format by tabulating (arranging the data in tabular format) and using measures of central tendency (frequency, mean, rank and percentile, and standard deviation). In addition, a histogram was employed to describe the basic characteristics of self-employment. Data derived solely from primary data using quantitative methods are believed to be biased, unscientific, and intended for exploratory purposes only. This increases the scientific rigor of the data and reduces bias by using secondary data simultaneously. The secondary data was taken from the Central Statistical Agency (CSA, 2023).

3.2.2 Econometrics method

Structural Equation Model Specification:

Structural equation modeling (SEM) is a statistical technique used to analyze the relationships between latent variables and observed variables within a theoretical model (Tiffany et al., 2022). In the context of examining determinants of self-employment, SEM was employed to understand the complex interplay of various factors influencing the decision to become self-employed. To utilize SEM in this context, researchers first develop a theoretical model that outlines the relationships between different latent constructs or factors associated with self-employment. Then, the researchers applied principal component analysis (PCA) to reduce the large dimensions into a few meaningful components. These components are checked for model fit, reliability, confirmatory indices, and modification indices using confirmatory factor analysis (Brown, 2015). After applying principal component analysis (PCA) and confirmatory factor analysis (CFA), the researchers constructed indexes such as entrepreneurial intention, perceived opportunities, risk-taking propensity, social support, behavioral factors, demographic factors, and the like.

SEM is used to estimate the relationships between self-employment and its determinants, as specified in the theoretical model. It allows researchers to assess the direct and indirect effects of different determinants on self-employment. This analysis provides insights into the significance and magnitude of each determinant, as well as how they interact and contribute to the overall decision to pursue self-employment. SEM also enables researchers to evaluate the goodness-of-fit of the model, indicating how well it aligns with the observed data (Hair et al., 2021). Additionally, researchers test for potential mediating or moderating effects, gaining deeper insights into the underlying mechanisms at play. By employing SEM, researchers gain a comprehensive understanding of the determinants of self-employment, identifying the most influential factors and their interrelationships. This approach provides a robust framework for analyzing complex datasets and advancing knowledge in the field of self-employment research. Accordingly, various indices of self-employment, in this research, are developed using the SEM method.

Self-employment, the state of working for oneself as the owner of a given business entity, has been chosen as the dependent variable in this study. It is measured as the likelihood of starting own business as a freelance. This is an unobserved latent variable that represents the likelihood or probability of an individual engaging in self-employment activities in Ethiopia. Various independent variables are used in this paper. The value of composite variables like demographic factors, Economic factors, and psychological and behavioral factors are developed using the SEM technique. Whereas the value of specific variables in each category of the composite is used, as defined in Table 1, in the regression model. In Table 1, the definition and the list of composite and specific variables used in the model are explained clearly.

Model Specification

The model provides a comprehensive structural equation analysis of self-employment determinants in Ethiopia, outlining relationships, significance levels, implications, and policy recommendations for

further research. The SEM analyzes the relationship between independent variables (demographic, social, economic, psychological, behavioral), dependent variable (self-employment), and control variables (marital status, urban-rural residence). The measurement model, utilizing Confirmatory Factor Analysis (CFA), following Gorsuch (2015) outlines the relationship between self-employment rate and independent variables such as education and experience, and access to finance can be represented as follows:

$$\text{Self-employment rate} = \beta_0 + \sum_{i=1}^{n} \gamma_i Z_i + \sum_{i=0}^{n} \beta_i X_i + \varepsilon_i \qquad (1)$$

Where Z_i represents sets of control variables, X_i's are sets of regressors. Equation (1) shall be estimated using linear regression models like GLS, OLS, Tobit, and Poisson distribution methods. For better comparison, the researcher has also estimated the determinants of self-employment using multinomial logit regression. In this case, the entrepreneurs are categorized into six sectors service, construction, manufacturing, trade, urban agriculture, and others. In the analysis, construction is used as a reference point to estimate the impact of exogenous independent variables on the probability of starting own business using Equation (2) and Equation (3).

$$\text{Self-employment category} = \beta_0 + \sum_{i=1}^{n} \gamma_i Z_i + \sum_{i=0}^{n} \beta_i X_i + \varepsilon_i \qquad (2)$$

Following Winkelman (2015), Equation (3) helps us to estimate the likelihood of a person to start own business relative to the construction sector, which in this case is used as a reference line (probability density).

$$\Pr\left(Y_i = k \mid z_i\right) = \begin{cases} \dfrac{1}{1+\sum_{l=2}^{k} \exp\left(z_i' b_l\right)}, & if\ k=1 \\ \dfrac{\exp\left(z_i' b_k\right)}{1+\sum_{l=2}^{k} \exp\left(z_i' b_l\right)}, & if\ k>1 \end{cases} \qquad (3)$$

All equations (1, 2, and 3) are estimated using STATA software and presented in the analysis section. The dependent variable is the latent variable whose value is determined using structural equation modeling. It is an indexed value, representing the likelihood of a person starting his own business. The structural model represents the relationships between the latent variable (self-employment rate) and the observed variables (independent, control variables). In this case, Path Analysis will be used to specify the structural model. This model will allow us to analyze the impact of various independent variables (demographic, social, economic, psychological, behavioral factors), controlled by specific control variables (marital status, urban-rural residence), on the self-employment rate in Ethiopia. Following Koster (2021; 2023). approach, for analytical purposes, the SEM result shown by equation 3 for self-employment can be clustered into four categories:

1. *Genuine self-employment*: This category includes individuals who have autonomy, control over work, and the ability to hire employees. Genuine self-employed individuals are characterized

by their ability to operate their businesses and have control over their work. A person is said to be genuinely self-employed if the probability of self-employment ranges between 75 percent and to100 percent.

2. *High probability of self-employment*: This category includes individuals who have a higher chance of being self-employed. A person is said to have a high probability of self-employed if the probability of self-employment ranges between 50 percent and to74 percent.
3. *Quasi-self-employment*: This category includes individuals who are dependent on a single client or employer, have limited control over work, and lack autonomy. A person is said to have quasi-self-employment if the probability of self-employment ranges between 25 percent to 49 percent.
4. *Low probability of self-employment*: This category includes individuals who have a lower chance of being self-employed. A person is said to have low self-employment if the probability of self-employment lies below 24 percent.

Similarly, based on the paper by Humphries (2017), the self-employment indices can be categorized into two voluntary and non-voluntary. According to this approach, voluntary self-employed individuals are those who have entered voluntarily for reasons such as independence, job satisfaction, and anticipated higher incomes, whereas, those who have been 'pushed' into self-employment because of the absence of any other attractive alternatives are called involuntary self-employed. In this paper, 0.5 is used as the cut-off point between the two categories.

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Table 1: Definition of variables used in the model

Variables	**Definition**	**Expected sign**
Self-employment	Is the latent variable developed from the socio-economic and political environment of self-employment?	
Low probability of self-employment	This category includes individuals who have a lower chance of being self-employed	lies below 24 percent
Quasi self-employment	Have limited control over work, and lack autonomy	between 25 to 49 percent.
High probability of self-employment	individuals who have a higher chance of being self-employed	ranges between 50 to74 percent
Genuine self-employment	ability to operate their own businesses and have control over their work	ranges between 75 to 100 percent
	Demographic factors	
Age (AGE)	The age of an entrepreneur refers to the chronological age of an individual who starts and runs a business venture. It is a measure of the number of years since their birth. The age of an entrepreneur can vary widely, but research provides insights into the average age of entrepreneurs	+ve/-ve

Variables	**Definition**	**Expected sign**
Gender (GEND)	Gender inferred from cultural and societal conventions is that men are more likely than women to engage in self-employment activities.	+ve/-ve
Education (EDUC)	It is hypothesized that individuals with higher levels of education have more access to knowledge and resources, making them more likely to engage in self-employment.	+ve
Marital status (MS)	The marital status of an entrepreneur refers to whether they are married, single, divorced, or widowed. A paper that identified the causal effect of marriage on entrepreneurship found that marriage increases entrepreneurship	+ve/-ve
Skill (SK)	Entrepreneurial skills refer to the abilities and competencies that enable individuals to start, manage, and grow a successful business venture. entrepreneurial skills are a combination of technical, financial, communication, leadership, and other abilities that enable individuals to start, manage, and grow a successful business venture. The measurement of entrepreneurial skills can be done through the development and validation of instruments	+ve
	Social Factors	
ETHN (Ethnicity)	According to their hypothesis, people from ethnic groups with a long history of entrepreneurship or strong commercial relationships are more likely to work for themselves.	+ve/-ve
FB (Family background)	It is hypothesized that individuals with a family history of entrepreneurship are more likely to engage in self-employment.	+ve
	Economic factors	
Personal economic status (PES)	Personal economic status refers to an individual's financial position and access to resources. It is an important factor that can influence an individual's health, education, and overall well-being. It is measured by individual access to economic resources and credit	+ve
UN (unemployed)	It is hypothesized that unemployed individuals are more likely to engage in self-employment as a means of income generation and economic survival.	+ve
AC (Access to Credit)	It is hypothesized that individuals with better access to credit and financial resources are more likely to engage in self-employment.	+ve
The overall economic status of the city	Overall city income can have a significant effect on entrepreneurship in a city. Higher levels of entrepreneurship are	+ve

Variables	Definition	Expected sign
(AES)	closely correlated with city/local economic growth, and new products or services created by entrepreneurs can result in new wealth and higher government spending and tax revenue. National income can be measured by GDP, GNP, NNP, NDP, and income per capita.	
	Psychological factors	
SE (self-efficiency)	It is hypothesized that individuals with higher levels of self-efficacy believe in their ability to start and successfully operate a business, increasing their likelihood of engaging in self-employment.	+ve
RTP (risk-taking Propensity)	It is hypothesized that individuals with a higher risk-taking propensity are more likely to engage in self-employment as they are more willing to take chances and tolerate uncertainties.	+ve
	Behavioral factors	
EI (entrepreneurial intention)	It is hypothesized that individuals with a strong intention to become entrepreneurs are more likely to engage in self-employment.	+ve
	Institutional factors	
Institution (INS)	An institution is an established organization/corporation/social establishment, such as a bank or university, family, laws, enterprises, etc. Institutions can provide the necessary legal, regulatory, and financial frameworks that enable entrepreneurs to start and grow their businesses. The quality of institutions is a critical factor in determining the level of entrepreneurial activity, and institutions that provide a stable and predictable environment for entrepreneurs can lead to higher levels of entrepreneurial activity and economic growth.	+ve
	Control variables	
Urban residence	It is hypothesized that individuals living in urban areas are more likely to engage in self-employment due to better access to resources and market opportunities.	+ve/-ve
MS (marital status)	**MS**: It is hypothesized that individuals who are married or have dependents are more likely to engage in self-employment as a means of supporting their families	+ve/-ve
	Indices	

1. Indices constructed and used in the SEM model

A comprehensive survey questionnaire was used to collect information from different aspects that could contribute to employment creation. The responses of the respondents capture both their respective experiences (micro-determinants) and perceived overall socioeconomic performance of

the business environment (the aggregate macro-determinants) contributing to employment. Then, the respondents were asked to rate their degree of agreeability on a scale of 1 to 5 with 1 standing for the most less likely and 5 standing for the most likely outcome. Finally, the SEM technique was used to create indices, once the diagnostic tests and goodness of the fit of the model meet acceptable level. Based on Fan et al., (2016), the following indices were developed and used in model estimation.

Table 2: Latent variables constructed for the model

Cod 1	Observed Variables	Question	Latent variables
SE_1.1	Employment potential	What is the likelihood, on a scale of one to five, that you initiated self-employment to create jobs for others?	
SE_1.2	For economic independence and higher incomes	On a scale of one to five, how probable is it that you commenced self-employment to achieve economic independence and higher earnings?	Intrinsic personal motives
SE_1.3	Opportunity constraint	On a scale of one to five, how probable is it that you initiated self-employment because you had no other choice?	
SE_1.4	Entrepreneur interest	What is the likelihood, on a scale of one to five, that you started a self-employment job with the primary goal of becoming a business entrepreneur?	
SE_1.5	Government assistance motive	What is the likelihood, on a scale of one to five, that you initiated self-employment with the purpose of accessing government benefit packages aimed at supporting youth in starting their own businesses?	Incentive motive
SE_1.6	Entrepreneurial aptitude	On a scale of one to five, how much technical ability do you have to start your own business?	
SE_2.1	Self-employment as the disadvantaged path	On a scale of one to five, how much did the perception that only marginalized individuals and youth who failed to get paid jobs engage in self-employment influence your decision to start your own business?	Last resort motive
SE_2.2	family influence	On a scale of one to five, what is the likelihood that you failed to succeed in launching your own business due lack of support from your family?	External coercive motives (the

SE_2.3	Gender discrimination (systemic bias)	On a scale of one to five, how much did the experience of gender discrimination in the paid job market of your locality influence your decision to engage in self-employment?	Local Public motive
SE_2.5	Neighborhood perception influence	To what extent did negative feedback and suggestions from the local community, implying laziness and unemployment, influence your decision to pursue self-employment?	
SE_2.6	Entrepreneurial learning/imitation (entrepreneur influence)	To what extent did the lack of tolerance for hard work, combined with the fear of loss and risk, influence your decision to pursue self-employment?	
SE_2.7	Social class	To what extent did being from an ethnic minority and facing poor opportunities in the job market influence your decision to pursue self-employment?	
SE_2.4	Paid job dissatisfaction	To what extent did dissatisfaction with the current wage rates in traditional employment influence your decision to pursue self-employment?	
SE_3.1	Local economic influence	To what extent did the overall economic performance of businesses and other economic activities in your locality influence your decision to pursue self-employment?	
SE_3.2	Local socio-cultural influence	I did not succeed in starting my own business due to the poor overall economic performance and the political and psychological pressure on businesses and other economic activities in my locality.	
SE_3.3	Local demographic influence	To what extent did the success of peers or youth in starting their businesses influence your decision to pursue self-employment?	
SE_3.4	Local human capital influence	To what extent did the availability of sufficient human capital in your locality influence your decision to start your own business?	

Source: own study (2023)

The rotated component matrix is a key output of Principal Component Analysis that helps to interpret the meaning of each component. The factor loadings in the matrix indicate the strength of the correlation between each variable and each component, and the interpretation of the components is based on the variables with the highest loadings (Fan et al., 2016). In Principal

Component Analysis (PCA), the components are ordered based on the amount of variance they explain in the original dataset (Gorsuch, 2015). The first component explains the most variance, followed by the second component, and so on. Therefore, the first component is the most important because it explains the most variance in the original dataset, followed by the second component, and so on. The components are uncorrelated and ordered based on the amount of variance they explain. The interpretation of each component depends on the variables with the highest loadings on that component.

b. Reliability check

The consistency of instruments is gauged by their reliability. A correlation coefficient is typically used to describe the dependability of standardized analysis. An internal consistency reliability test was carried out in sample areas with a selected pilot study. The reliability of the instrument was discovered to be 0.804 given the reliability threshold of an alpha value of 0.70 or higher (Fein, 2022). Five-point Likert scale questions and multiple-choice questions were both employed in the questionnaire. A continuous scale, ranging from strongly disagree to strongly agree, was used to rate the items on the instrument. The chosen tool assists in illuminating aspects that influence young people's self-employment.

4. RESULT AND DISCUSSION

4.1. Self-employability, opportunity and gender

The research findings shed light on an interesting gender disparity in self-employment. The study reveals that a significant proportion of women (22.14%) in Adama City are involuntarily self-employed, meaning they engage in self-employment out of necessity rather than choice. On the other hand, a substantial proportion of men (33.59%) are found to be voluntarily self-employed, indicating that they actively choose self-employment as a career path (Figure 1). Although the previous result showed mixed results, for example, Sara et al (2014) conform and Mery (2013) contradict this result and the self-employment over the gender disparity remains a dilemma in the literature. This disparity raises important questions about the underlying socio-economic factors that influence women's access to formal employment opportunities and their subsequent reliance on self-employment as a means of income generation. Further exploration is needed to understand the unique challenges faced by women in the labor market and to develop targeted interventions that empower and support their entrepreneurial aspirations.

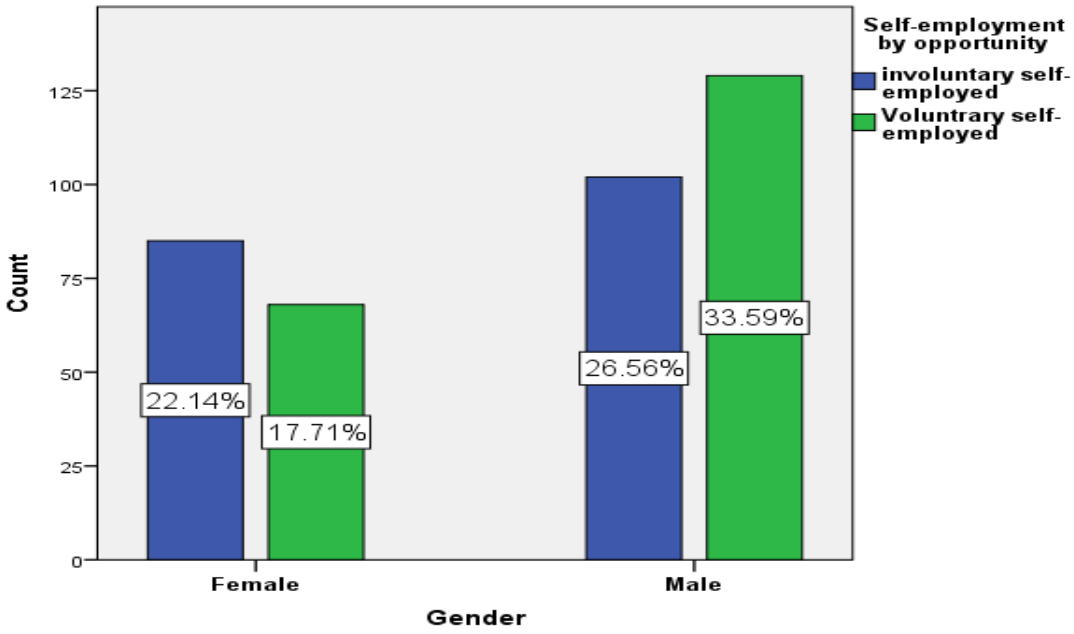


Figure 1: The relationship between self-employability, opportunity and gender

Source: Own analysis (2024)

4.2. Education and Self-employment

The research findings indicate that there is a low correlation between self-employment and education in Adama City (Figure). Surprisingly, highly educated youth with degree certificates exhibit a lower likelihood of starting their businesses. On the other hand, the study reveals that genuine entrepreneurs are often individuals with a diploma, completion of 12th grade, or even those who are illiterate. Intriguingly, youth with degrees and higher levels of education display a lower inclination towards self-employment. These findings challenge conventional assumptions about the relationship between education and entrepreneurship, suggesting that factors beyond formal education play a significant role in driving self-employment among the youth in Adama City. In connection to this, Wardana et al. (2020) found out that entrepreneurship education improves entrepreneur's attitudes rather than their mindset, but it could mediate associated benefits over time.

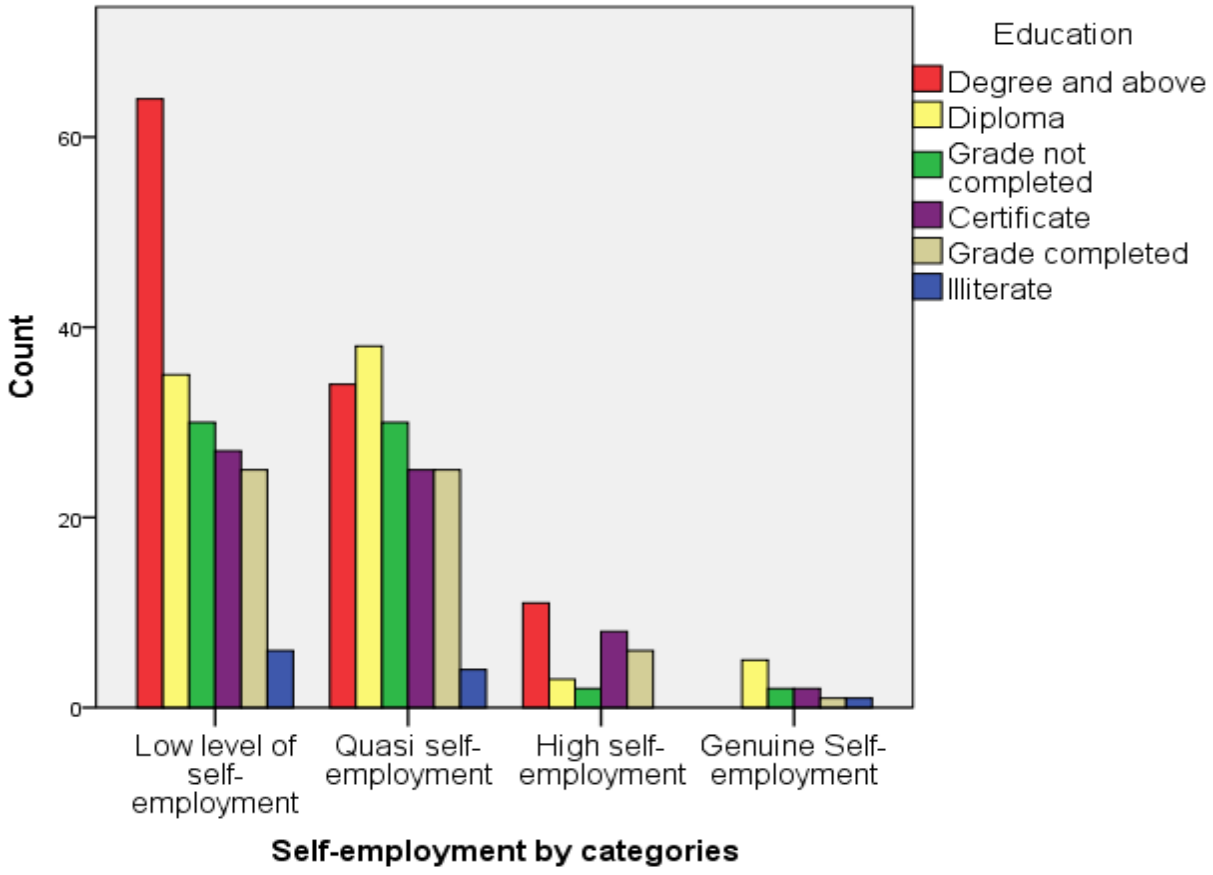


Figure 2: Self-employment by education categories

4.3.The Path to Self-Employment

Figure shows the structural equation model (SEM) result of self-employment in Adama city. The yellowish variables are identified codes based on the description of Table 2. The greened values are factor loadings observed significant in influencing each latent variable (L1 to L5). The golden values represent commonalities explained by each component. Youth in the city are initiated to start their own business mainly due to the absence of another alternative with a factor loading of 0.74. Although opportunity constraint is the main leading factor for entrepreneurship in Adama city, the entrepreneurial passion of becoming a successful business person incentivizes the youth in the city to open their own business with a factor loading of 0.65.

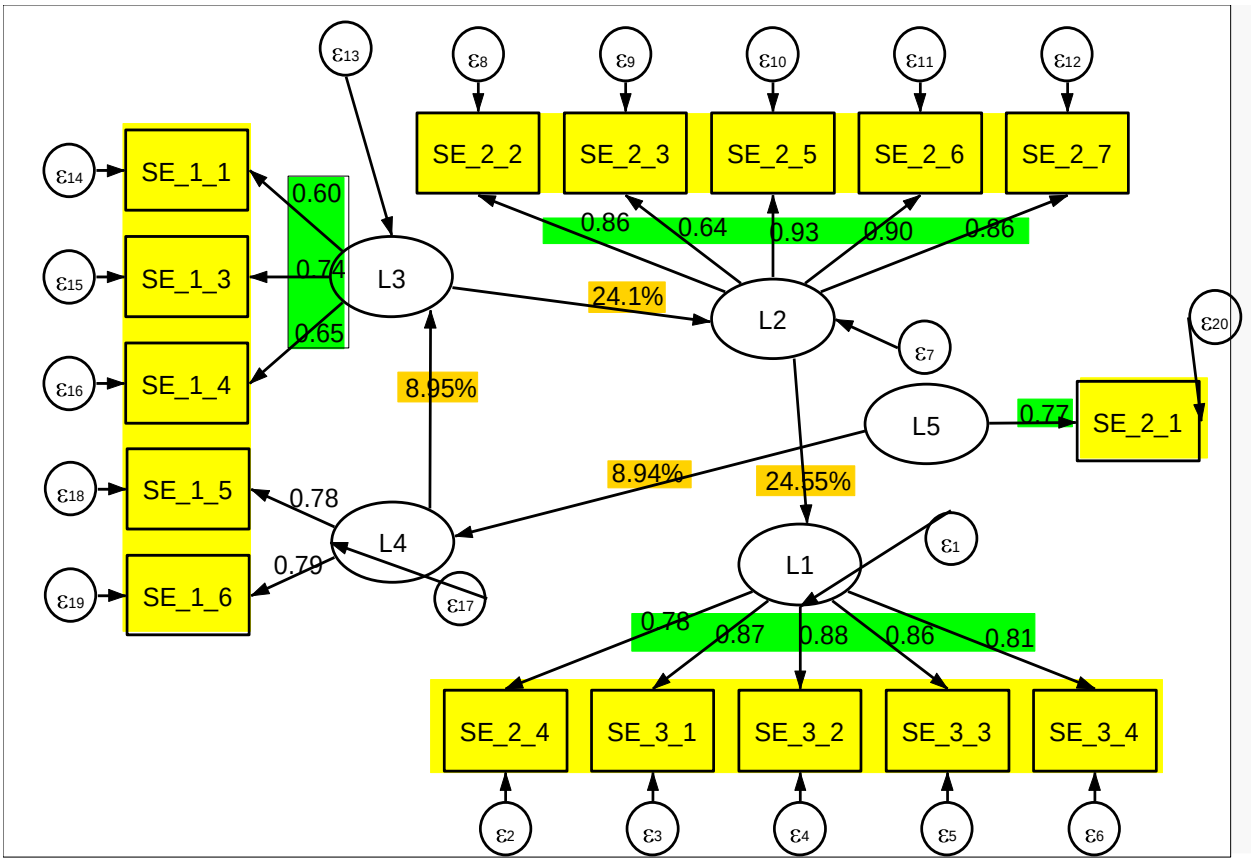


Figure 3: Factor loadings and the relationship between different determinants of self-employment

Public pressures (L1), such as market dynamics and the overall economic performance of a region, coupled with dissatisfaction with the existing paid job infrastructure, play a major role in the creation of self-employment opportunities (explaining 24.56 % of loading variation). Market conditions (SE_3.1) play a crucial role in motivating individuals to explore self-employment. A thriving market with demand for specific goods or services can inspire aspiring entrepreneurs to take the leap and establish their businesses. The presence of untapped market niches or gaps can present attractive opportunities for self-employment.

The overall economic performance of a region (L1) also influences the inclination towards self-employment. In regions with limited job prospects or high unemployment rates, individuals may be compelled to seek alternative means of income generation. Self-employment offers a potential solution, allowing individuals to take control of their financial destiny and create opportunities in the absence of traditional job options. For example, a study by Fields (2014) showed that self-employment is a major mode of life for the world's poor in developing countries as there are fewer chances for them to live a decent life. Dissatisfaction with the existing paid job infrastructure (SE_2.4) is another factor that motivates individuals to pursue self-employment. Issues such as limited growth prospects, lack of job security, or unsatisfactory work environments can drive individuals to seek independence through self-employment, by acting as catalysts for the creation of

self-employment opportunities, empowering individuals to forge their path and shape their professional destinies. This result confirms Donovan et al. (2021) that people join self-employment as a means to dissatisfaction with low-paying jobs. Overall, the literature showed that the relationship between local economic development and self-employment in the least developing countries is controversial, with mixed results. For instance, the study by Yerrabati et al (2021) revealed that self-employment and economic growth have a U-shaped and non-linear relationship in developing countries, implying local economic development does not necessarily promote self-employment as it does not let them live a decent life.

In the context of creating self-employment opportunities in Adama City, institutions (L2) play the second most important role in fostering youth entrepreneurship (explaining 24.01 % of loading variation). When we talk about institutions, we refer to the structures and organizations that are designed to meet the social needs of both organizations and society as a whole. These social institutions act as valuable resources, providing knowledge, information, skills, and values that influence individuals and shape their behavior within society. Examples of social institutions include family, government, religion, economy, education, media, marriage, holidays, culture, and norms (SE_2.2, SE_2.5, & SE_2.6).

In Adama City, the likelihood of individuals starting their businesses is primarily influenced by the impact of these existing social institutions. Factors such as pressure from neighbors (SE_2.5), entrepreneurial learning in terms of work and employment culture (SE_2.6), family support (SE_2.2), social class (SE_2.7) and socioeconomic status (SE_3.3) all play a significant role in the creation of self-employment opportunities. Besides social institutions, the success of institutions also relies on organizational institutions (SE_2.3 and SE_2.7), which encompass the rules, regulations, and operations of existing organizations. These include established systems within paid jobs, such as finance, human resource management, and administrative and management structures. While social institutions play a significant role in encouraging youth entrepreneurship, the impressive success of existing entrepreneurs (SE_2.6) in the city is largely attributed to the appealing outcomes of these organizational institutions. More importantly, youth in Adama City are brought to self-entrepreneurship mainly due to positive pressure from the neighborhood (SE_2.5) and entrepreneurial learning from successful entrepreneurs (SE_2.6). Many papers, including the one made by Fritsch et al (2019) proved that institutions like labor regulations, and entrepreneurship facilitating entry conditions foster an entrepreneurial society. As indicated by Mesfin (2017) perceived entry barrier reduces the likelihood of a person joining self-employment, and therefore targeted awareness creation is important.

Table 3: Rotated component matrix

Rotated Component Matrix[a]

Variables	Component				
	Public experience motive	Institutional coercive pressure	Intrinsic personal motive	Incentive motive	Last resort
Employment potential			.605		
Opportunity constraint			**.743[b]**		
Entrepreneurial interest			.650		
Government assistance motive				.783	
Entrepreneurial aptitude				**.789[b]**	
Self-employment as disadvantaged path					**.771[b]**
Family support		.858			
Systemic bias (Gender discrimination)		.642			
Paid job dissatisfaction	.781				
Neighborhood perception influence		**.932[b]**			
Entrepreneurial learning		.904			
Social class		.864			
Local economic influence	**.866[b]**				
Local socio-cultural influence	.882				
Local demographic influence	.861				
Local human capital influence	.812				

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.
b. Lemon-shaded values are the most important driving force among each component

The third most important factor in self-employment creation is intrinsic personal motives, capturing 8.96% of loading variation. In this context, it is observed that youth started self-employment mainly because of economic reasons. In relative terms, the absence of paid jobs in the labor market forced youth to pursue alternative income-generating self-employment opportunities (SE_1.3). Nevertheless, entrepreneurial interest still holds a big role in igniting youth to self-employment. There is a strong relationship between the level of personal skill and entrepreneurship as shown in the rotated component matrix (SE_1.6), with a loading rate of 0.789. In addition, there is a strong relationship between government incentive packages and the innovative skills of entrepreneurs (SE_1.5) with a loading rate of 0.783. More surprisingly, however, youth are more likely inclined to start self-employment involuntarily (SE_1.3), because of the absence of paid job opportunities than their intrinsic entrepreneurship interest (SE_1.4). The family's economic condition (SE_2.2) is

deemed more important in crowning the youth to self-employment than the youth's economic condition (SE_1.2). In this research personal economic condition (SE_1.2) is observed as insignificant, and hence dropped from analysis.

Market incentives such as entrepreneurship skills and government investment support are all key factors in motivating and encouraging young individuals to embark on the path of self-employment (explaining 8.93 % of loading variation). Not only do market incentives provide attractive opportunities for young entrepreneurs, but they also serve as a driving force for innovation and economic growth. Accordingly targeted entrepreneurship aptitude (Table 3), with a loading of 0.789, is observed more important than formal education (Table 4), which is insignificant, in driving youth to self-employment. Entrepreneurship skills (SE_1.6) are vital in helping the youth navigate the complexities of starting their businesses. By equipping them with the necessary knowledge and tools, they become better prepared to face challenges and seize opportunities. With a loading of 0.789, entrepreneur skills empower young individuals to take risks, pursue their passions, and turn their innovative ideas into successful ventures.

Additionally, government investment support (SE_1.5) plays a pivotal role in fostering an entrepreneurial ecosystem. Governments that provide financial assistance, grants, and tax incentives create an environment where aspiring young entrepreneurs can thrive. This support helps reduce the financial burden of starting a business and encourages more young people to leap into self-employment. With a loading of 0.783, a government investment support package for the youth is crucial in taking youth to the business success. By combining market incentives, entrepreneurship skills, and government investment support, we can create a fertile ground for the youth to explore their entrepreneurial aspirations. This not only benefits individuals by offering them the opportunity to shape their destinies but also contributes to economic development and job creation.

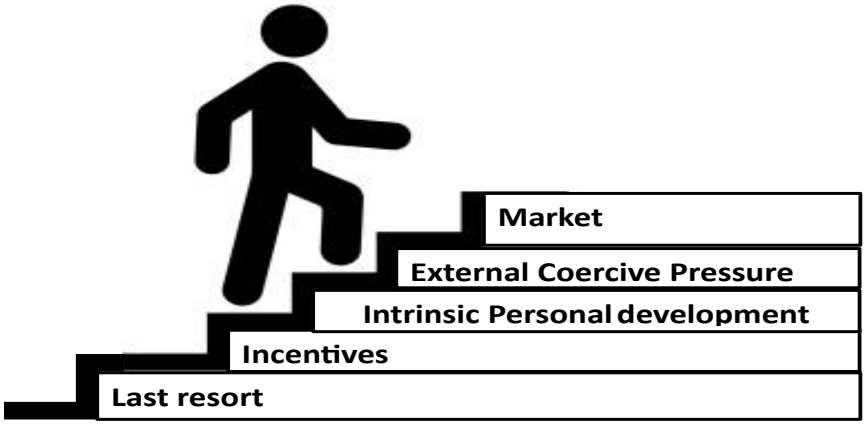


Figure 4: The Path to Self-employment in Adama City
Source: own analysis (2023) based on SEM, Principal component matrix result (ordered from least to most important conditions)

The journey towards youth self-employment in Adama City involves several interconnected stages that are essential for achieving success. The path diagram, as it can be seen on Figure , follows supply it all begins with the process of self-persuasion, where young individuals come to accept self-employment as a viable option, often viewing it as a last resort. Starting a self-employed venture may seem challenging and demanding, particularly for those with higher education degrees. However, they must recognize the potential rewards and benefits that can come with such a path.

The next critical step is acquiring the knowledge and skills necessary for entrepreneurship. Education and training play a pivotal role in laying the foundation for entrepreneurial endeavors. By equipping themselves with relevant expertise, aspiring entrepreneurs can enhance their chances of success and navigate the complexities of running a business effectively. Moreover, it is vital to provide additional incentives and support to foster youth self-employment. This includes facilitating access to workspaces, offering tax relief measures, and providing financial assistance, such as loans, to help young entrepreneurs establish and grow their businesses. These incentives can alleviate some of the financial burdens and create a conducive environment for self-employment to flourish. This result also confirms Roman et al (2013) who concluded incentives shape entrepreneurial decisions.

Alongside their journey, young individuals are encouraged to invest in their personal economic development, which involves efforts to enhance their financial situation, develop entrepreneurial skills, and actively seek growth opportunities. Simultaneously, it is crucial to establish comprehensive entrepreneurship institutional setups that encompass government policies and business support mechanisms. This creates an enabling ecosystem that nurtures and supports youth self-employment. Additionally, the presence of a competitive and stable market is vital. The macroeconomic status of the country plays a significant role, as a stable and supportive economic environment fosters entrepreneurship and encourages investment. When these essential elements align and work in harmony, the path towards youth self-employment becomes clearer. This empowers young individuals to turn their aspirations into reality and contribute to the economic prosperity of Adama City.

4.4.Determinants of self-employment

As observed on Figure shows the development of self-employment necessitates the availability and functionality of conducive self-employment-based institutional framework like improved self-employment rules (SE_2.3), strengthened social organizations (SE_2.2, SE_2.7), and push factors like strengthened education and entrepreneurship capacity development activities (SE_2.5, SE_2.6). Robust self-employment (Figure) based institutional setup raises individual incentives for self-employment by 69%. Similarly, local economic development is expected to raise personal entrepreneurship capacity development by 32%. Therefore, it is vital to give the main focus to economic growth and institutional development. Both factors are crucial for the market development required for entrepreneurship.

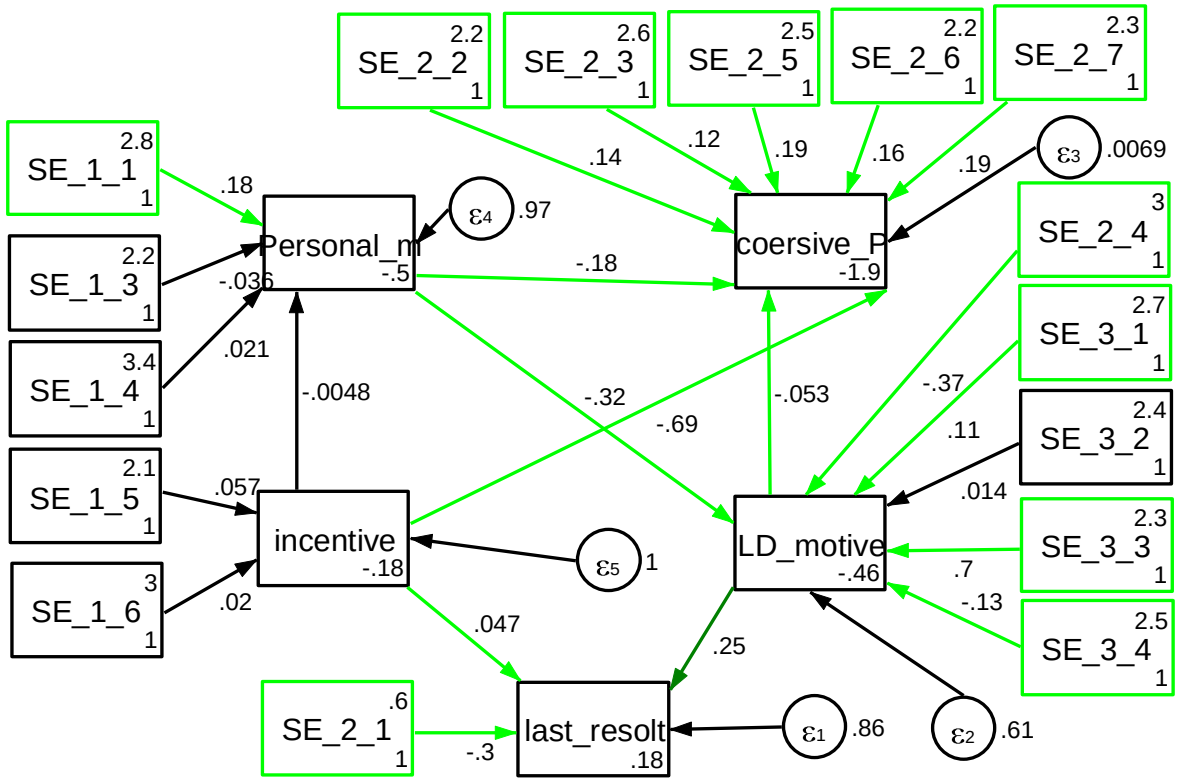


Figure 5: SEM results for self-employment in Adama City

Based on the result shown in Table 4 intrinsic personal motive is crucial in raising the likelihood of youth joining self-employment. One percent improvement in personal development is related to a 27.9 % increase in self-employment. In line with this result, a study by Ogba et al (2022) discovered that initiative helps youth become successful entrepreneurs by moderating the link between self-efficacy and entrepreneurial intention. Engaging in self-employment as a last resort is associated with a 7.3% increase in the likelihood of individuals pursuing self-employment. This finding suggests that many young people turn to self-employment when traditional wage employment opportunities are not readily available. The result of this finding confirms Frith (2015) which states that some individuals, move into self-employment not through choice but as a last resort, possibly representing a form of disguised unemployment, which is prevalent among youth who have a low opportunity of getting paid jobs or use as a stepping stone for better-paying jobs.

Table 4: Poisson and Tobit model result of self-employment

VARIABLES	(Poisson) Pr(self-employment)	(Tobit) Pr(self-employment)	(Tobit) sigma
Male	-0.0526	-0.0577	
	(0.0924)	(0.184)	
Age	-0.00246	-0.0129	
	(0.0153)	(0.0302)	
Age^2	0.000131	0.000393	
	(0.000258)	(0.000505)	
Married	-0.00155	0.00439	
	(0.0255)	(0.0556)	
Intrinsic personal motive	0.279***	0.394***	
	(0.0120)	(0.0226)	
Incentive motive	0.289***	0.465***	
	(0.0106)	(0.0244)	
Last resort motive	0.0731***	0.122***	
	(0.0108)	(0.0219)	
External (Coercive motive (est. institutions)	0.0683***	0.109***	
	(0.00931)	(0.0197)	
Local public (macro) motive	0.0444***	0.0810**	
	(0.0145)	(0.0346)	
Education	.0138877	.061318	
	(.0138877)	(.1100313)	
$Education^2$	-.0021756	-.0083722	
	(.0053972)	(.0138366)	
Constant	0.553***	2.015***	0.396***
	(0.208)	(0.408)	(0.0151)
Observations	384	384	384

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

The study also underscores the significance of youth-based incentives as a policy tool for fostering entrepreneurship. Specifically, a 1% rise in incentives is linked to a substantial 28.9% increase in self-employment. Moreover, both institutional and local development are shown to enhance the probability of young individuals entering self-employment by 6.8% and 4.4%, respectively. Although the age coefficient is not statistically significant, the study reveals a U-shaped learning curve,

indicating that young people are more inclined to pursue self-employment as they grow older. The tendency for youth self-employment creation is at its lowest at the age of 26, and it is more prevalent during the early 20s and late 30s (Figure). These insights highlight the importance of understanding the factors that drive young individuals to pursue self-employment and the potential impact of policy measures on entrepreneurship.

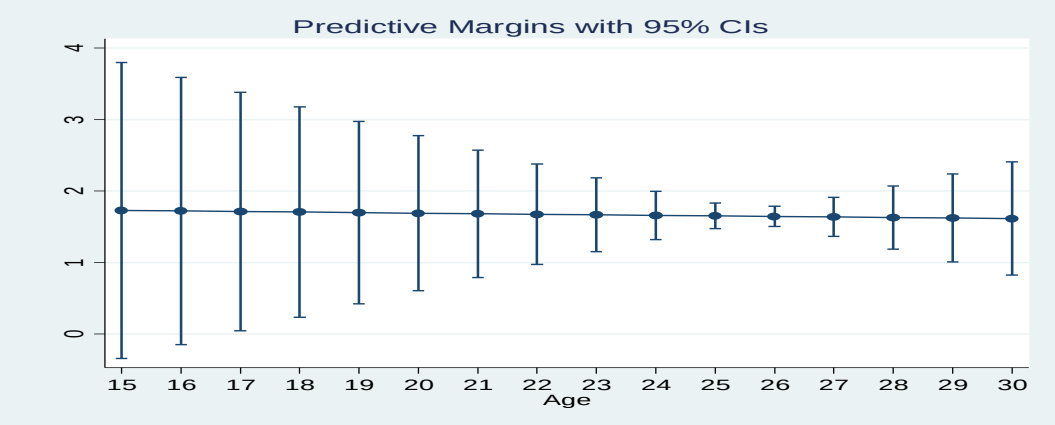
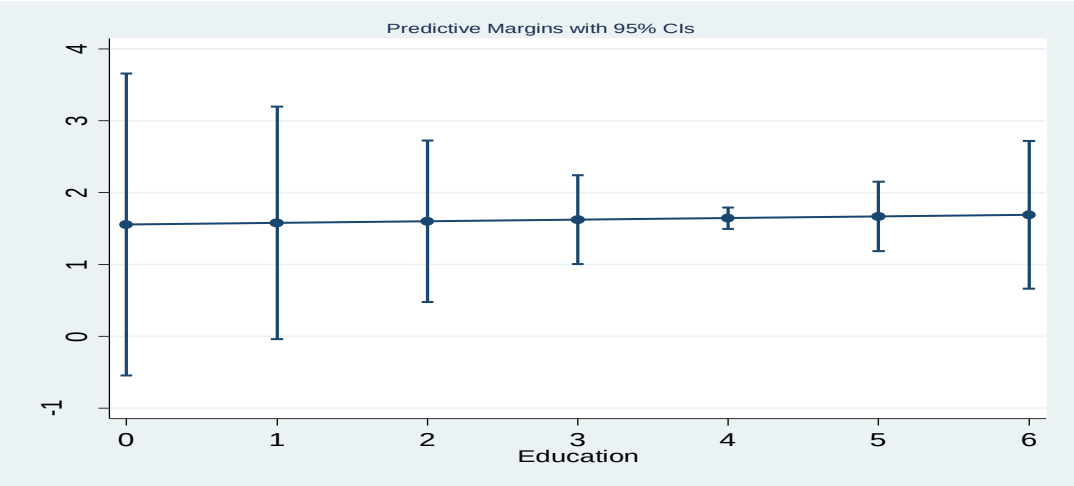


Figure 6: Predicted self-employment by age

Education plays a lesser role in youth self-employment creation (Figure), being insignificant, and some minimum targeted entrepreneurship and other skill training are sufficient. Interestingly, individuals with higher education levels tend to engage in paid employment more frequently, reducing self-employment opportunities. The sign of education and education square is observed to change from positive to negative or 'L shape' representing that a lower level of education and targeted training would raise entrepreneurship and vise versa. This finding suggests that the focus on entrepreneurship education and training programs should be tailored to the specific needs and preferences of young entrepreneurs to encourage self-employment. In connection to this, a recent study conducted by Tamvada et al. (2022) found that education goes side by side with the development of the nation where it reduces the likelihood of self-employment in developing countries and vise versa for developed countries. The study also revealed the fact that in the least developing countries education serves as a steppingstone for better paying jobs. Contrary to the result of this paper, the finding by Muchemwa et al (2023) proved financial literacy increases the likelihood of youth self-employability in South Africa. This goes in line with Tamvada et al. (2022) who proved education, self-employment, and economic growth move in the same direction for high-income countries.



Note: education labels 0 to 6 stand for: illiterate, grade 12 incomplete, 12 grade complete, certificate, diploma, degree, master, and above respectively

Figure 7: Predicted self-employment by education level

4.5.Self-employment by sectors

The results from Table 5 indicate a significant gender gap in the manufacturing sector, with females being more likely to be self-employed in this sector compared to males. However, no significant gender difference is observed in other sectors. Additionally, the impact of age is more pronounced in the trade and manufacturing sectors. As young individuals age by one year, the likelihood of them entering the trade sector increases, while the probability of them joining the manufacturing sector decreases. Furthermore, academic skills are found to be crucial in both the manufacturing and trade sectors. Moreover, the trade sector demands a significant initial income, making the income status of young individuals particularly important in this sector compared to others.

Table 5: Determinant of self-employment by sectors

VARIABLES	(1) Services	(2) Construction	(3) Trade	(4) Urban Agri.	(5) Manufacturing	(6) Other
Gender	-0.605		0.336	-16.87	-1.012**	1.098
	(0.441)		(0.310)	(22,128)	(0.426)	(0.681)
Age	0.0108		-0.0499*	0.553	-0.101**	-0.0106
	(0.0398)		(0.0281)	(238.2)	(0.0430)	(0.0547)
Male	-0.0416		0.415	-44.12	0.380	-0. 290
	(0.517)		(0.355)	(10,891)	(0.471)	(0.703)
Academic	0.329		0.595**	52.79	1.568***	-0.0847
	(0.442)		(0.299)	(17,422)	(0.533)	(0.526)
Institution	-0.365*		0.0248	22.30	0.139	0.358
	(0.211)		(0.135)	(4,431)	(0.196)	(0.274)

Overall Economic performance	0.0300		0.262*	4.186	-0.375*	-0.0586
	(0.203)		(0.147)	(902.8)	(0.198)	(0.292)
Skill	0.383*		0.0889	43.64	-0.00953	-0.275
	(0.220)		(0.140)	(5,258)	(0.196)	(0.248)
Personal economic status	0.337		).379**	-19.92	0.0853	0.150
	(0.226)		(0.149)	(4,283)	(0.201)	(0.266)
Constant	-2.913***		-1.323*	-144.4	-1.325	-2.454*
	(1.060)		(0.715)	(30,099)	(1.062)	(1.344)
Observations	384	384	384	384	384	384

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

It is also important to notice from Table 5, older youth are more tended to self-employ in trade in comparison to the contraction sector. Young people are inclined to self-employ in the construction sector rather than in manufacturing ones.

5. CONCLUSIONS AND POLICY IMPLICATIONS

Youth unemployment poses a significant challenge in urban Ethiopia, and it stems from various factors such as a high number of unemployed graduates, urbanization, and limited opportunities for young people. While the government is actively promoting self-employment among youth, the actual rate of youth engaging in their businesses falls short of expectations. The reasons behind this discrepancy remain unclear, as there has been limited research conducted on the driving and constraining factors of self-unemployment. This paper aims to fill this knowledge gap by analyzing and recommending successful paths for youth self-employment in Adama City, the second largest and most urbanized city in Ethiopia.

To achieve this, we have collected cross-sectional data from youth aged between 16 to 29 years. By examining this data, we hope to shed light on the factors influencing youth self-employment and provide valuable insights for promoting entrepreneurship among the youth in Adama City. This study focuses on three specific groups: unemployed youth, self-employed youth, and paid employees. We collected information from 384 respondents and employed various statistical models such as structural equation modeling (SEM), Poisson, and Tobit models. By utilizing SEM techniques, we developed indices and assessed the likelihood of youth engaging in self-employment using non-linear models. We also conducted diagnostic testing and evaluated the goodness of fit of the model.

The study revealed interesting findings regarding the motives behind self-employment in different gender categories. It was observed that women tend to start self-employment involuntarily, whereas men exhibit the opposite trend. Surprisingly, the motivation for entrepreneurship outweighs the

significance of formal education. Even individuals with lower levels of education are more likely to engage in youth self-employment compared to those with higher university degrees. These insights challenge conventional notions and provide valuable information for understanding the dynamics of youth self-employment.

In the context of youth self-employment, the study identified an interesting pattern with age and education. It was observed that youth follow a U-shaped learning curve, with self-employment reaching its lowest point at the age of 26. Additionally, education has an L-shaped effect, meaning that lower levels of education increase the likelihood of self-employment, while higher levels of education reduce it. Furthermore, the study highlighted several crucial factors influencing youth self-employment. Neighborhood effects, local economic growth, entrepreneurship aptitude, and opportunity constraints were identified as the most significant motives for youth engaging in self-employment, respectively. Besides, the availability of financial liquidity in the form of family support, entrepreneurial learning from local business owners, public investment experiences, entrepreneurial aptitude and the like play significant driving for youth self-employment factors. These findings shed light on the complex dynamics of youth self-employment and provide valuable insights into the role of personal, incentive, institutional, and market-based motives, demographic factors like age, education, income, and various motivating factors.

To foster successful youth self-employment, governments should follow these key steps:

1. Ensure that self-employment is considered a last resort for young people, after exploring other employment options and education paths.
2. Encourage programs that focus on personal growth, skill development, and entrepreneurship education.
3. Offer financial and non-financial incentives to motivate young entrepreneurs, such as tax breaks, subsidies, and access to resources.
4. Support the establishment and growth of youth-focused entrepreneurship organizations, incubators, and accelerators.
5. Promote policies that stimulate economic growth, creating market opportunities and another conducive environment for young entrepreneurs to thrive.

By following these steps, governments can help young individuals overcome barriers to self-employment and contribute to the overall economic development of their communities.

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