

| Dependent Variable: GDP   |             |                       |             |        |
|---------------------------|-------------|-----------------------|-------------|--------|
| Method: Least Squares     |             |                       |             |        |
| Sample: 1981 2018         |             |                       |             |        |
| Included observations: 38 |             |                       |             |        |
| Variable                  | Coefficient | Std. Error            | t-Statistic | Prob.  |
| C                         | 0.491       | 0.107                 | 4.596       | 0.0001 |
| CONS                      | 0.293       | 0.029                 | 10.193      | 0.0000 |
| INV                       | 0.552       | 0.072                 | 7.647       | 0.0000 |
| GEXP                      | 0.141       | 0.019                 | 7.360       | 0.0000 |
| EXPT                      | 0.032       | 0.038                 | 0.841       | 0.4068 |
| IMP                       | -0.019      | 0.055                 | -0.342      | 0.7342 |
| R-squared                 | 0.991       | Mean dependent var    |             | 3.711  |
| Adjusted R-squared        | 0.990       | S.D. dependent var    |             | 1.021  |
| S.E. of regression        | 0.030       | Akaike info criterion |             | -4.042 |
| Sum squared resid         | 0.028       | Schwarz criterion     |             | -3.784 |
| Log likelihood            | 82.803      | Hannan-Quinn criter.  |             | -3.950 |
| F-statistic               | 8663.20     | Durbin-Watson stat    |             | 1.955  |
| Prob(F-statistic)         | 0.000000    |                       |             |        |

The above result can be linearly expressed as:

$$GDP = 0.492 + 0.293CONS + 0.552INV + 0.141INV + 0.032EXPT - 0.019IMP$$

(4.60)      (10.19)      (7.65)      (7.36)      (0.84)      (-0.34)

The above result is a product of time series analysis concerning the values of gross domestic product (GDP), private consumption (CONS), private investment (INV), government expenditure (GEXP), export (EXPT) and import (IMP). The research seeks to

find the relationship between the dependent variable which is GDP and the independent variables of CONS, INV, GEXP, EXPT and IMP.

With the a priori expectation that there is a positive relationship between the dependent variable and the independent variables of CONS, INV, GEXP and EXPT. The independent variable of IMP is expected to have a negative relationship with the dependent variable. It was observed that the signs that came with the results are in conformity with the a priori expectation.

From the result, expressed in logarithm, a unit rise in private consumption means an increase in Gross Domestic Product by 0.29. For a unit rise in Investment, Gross Domestic product will rise by 0.55. For a unit rise in government expenditure, the gross domestic product is expected to rise by 0.14, while for a unit rise in export, the GDP is expected to rise by 0.03. The GDP-Import relationship is such that a unit rise in import brings about a decline in GDP by 0.02 unit.

It is noted  $R^2$ , which is a measure of overall goodness of fit in the analysis is very high. At a high level of 0.99 or what can be regarded as 99%, it means that the proportion explained by the independent variable is 99% while the remaining 1% was explained by error term. We equally see that the adjusted  $R^2$  that allows for degree of freedom is equally high. This  $R^2$  allows to compare equations with different explanatory variables and equally to determine that one-to-one relation between  $R^2$  and the residual variance. The  $R^2$  is most useful in a simultaneous equation with the best predictive ability.

Reported in parenthesis are t-values. The t-values are obtained by the ratio of the estimated parameters to the standard error of the parameters. Therefore the t test is a test to determine whether or not a given independent variable belongs to a particular equation. It is a good or reliable indicator of the dependent variable. From the result, it is seen that t -ratio of CONS, INV, GEXP, EXPT and IMP are (10.19), (7.65), (7.36), (0.84) and (-0.34) respectively. Using the rules of thumb that gives significance to the t-value higher than 2 at 5%, we may be forced to conclude that the t-values CONS, INV and GEXP are significant at both 1% and 5%. However, a proof of this is found that the t tabulated t values at 5% i.e.  $t_{5\%, 38} = 2.02$  and 1% i.e.  $t_{1\%, 38} = 2.42$ . Since t of 7.36 is higher than that of 2.42, it shows that the t value is significant for the three variables stated. However, for other variables EXPT and IMP, since the t from the table is higher than the calculated t values and so the values for those variables are not significant.

The F ratio is an improvement over the t-ratio is a test of significant linear relationship between the independent variables taken together and the dependent variables. Whereas the t -ratio tests variable by variable in the equation, the F-ratio takes the whole independent variables in bulk and test. Using the F test, the tabulated F is equal to  $F_{38-1, 38-6}$  at 5% is 1.76 and as usual once the F estimated is greater than the tabulated F, we say the test is significant. And in this case, since our F calculated of 8663.2 is greater than 1.76, the test is

significant and the independent variables put together are good and reliable indicators of the dependent variables.

The standard error of regression is another test of goodness of fit and more importantly of reliability in prediction. The lower the SER, the better the predictive power of the equation. One important notice here is that there is no clear cut division between the small SER and large SER. However, econometricians consider it necessary to examine the ratio of SER to the Mean of Dependent variable. If the ratio is “small”, we consider it acceptable. In our result, the ratio of the which is  $\frac{0.03}{3.71} = 0.08$  is reasonably small to confer some degree of predictive power on the model.

The Durbin-Watson test statistics is used to test for serial correlation or auto-correlation in the data used to run a regression. The result which can be interpreted to mean that any regression with significance of autocorrelation means that the successive data in the series are dependent on one another and that some of the variables used in the data are dependent on one another and that some of the variables used in explaining the dependent variable are too related to the dependent variable. When such a thing happened, one of the assumptions of OLS is violated and the estimated parameters are found to be biased and a bad predictor. From the result the DW is 1.95 and the tabulated DW<sub>6, 38, 5%</sub> = 1.15 for lower value and 1.86 for upper value. And the test condition is such that if  $D_L > D_w$  there is evidence of positive first order serial correlation; if  $D_U < DW < D_L$ , there is inconclusive evidence and since  $D_L$  is less than the calculated DW, there is inconclusive evidence to suggest the presence of positive correlation and therefore the regression estimates are unbiased. Since our DW of 1.95 is higher than the upper value of Durbin Watson from the table, it shows that the model is devoid of serial correlation and hence the model is unbiased and good for policy making.

## 7.0. Conclusion and Policy Recommendations

An econometric estimation of investment multiplier is one of the many estimations that could be done when estimating the typical gross domestic product of country. As much as investment multiplier could be done, so also other multipliers which include the tax multiplier, government expenditure multiplier, export multiplier as well as import multiplier. The need for investment multiplier is born out of the fact that investment as a major component of GDP is very vital to a nation's economic growth and development. Data on the components of GDP were gathered, unit roots tests were conducted to determine the stationarity or otherwise of the series that make up the model. An autoregressive distributed approach to cointegration was adopted in an attempt to determine the long run relationship among the variables that make up the model. The approach showed that no long run relationship existed among the variables and thus the ordinary least square approach was used in estimating the investment multiplier. The results which

confirms economic theory and showed that a positive relationship such that a unit rise in investment leads to 0.55 unit rise in GDP existed between the two variables.

The policy implication of the result is that it confirms the imperativeness of investment in the equation of economic growth and development of Nigeria. And as such any policy directive that will drive investment and ultimately drive the nation's GDP should be rigourously pursued by the economic team of Nigeria.

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## WHAT FACTORS MOTIVATES THE SHADOW ECONOMY? EVIDENCE FROM LAGOS AND KANO STATES

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### ABSTRACT

*The shadow economy (SE) is made up of economic agents, avoiding relevant regulations on their activities. The avoidance of regulations constitutes a cost to the government, such as lost tax revenues which would have aided development. Over time, the shadow economy was supposed to fade away as the formal sector grew. Years of growth without development, however, have rendered this assumption an illusion. The sector has proceeded to flourish rather than decrease in magnitude. The prevalence, especially among micro-enterprises, has been a long term challenge for policymakers. This study examines the factors that motivate micro-enterprises to participate in SE activities in Nigeria. A survey was conducted in Lagos and Kano states to explore factors that influence participation. The purposive sampling technique was used to select 410 micro-enterprises, while the probit model was employed to evaluate the model. Non-registration of the enterprise was used as a proxy for shadow economy activities. Findings revealed that controlling for other factors, age, marital status, credit sources, and tax morale were not significant factors in explaining participation whereas lower educational levels, small business size, and shorter working hours were important factors motivating participation in the shadow economy. This study, therefore, suggests that the government focusses on providing opportunities that help encourage the growth of microenterprises.*

*Keywords:* Shadow economy, micro-enterprises, probit model

JEL classification: E26, O17

### 1.0 Introduction

The shadow economy (SE) embraces economic activities performed by individuals and firms outside regulations of government. Most of these individuals and firms are found in micro-enterprises that make up more than 90% of firms in Nigeria. During the 1960s to 1970s, the formal sector was seen as a catalyst for economic development, while, the SE was a temporary abode for the unemployed (ILO, 1972; Meagher and Yunusa, 1996; Oni, 2006). Instead of a reduction in size, the latter has, over time, increasingly accounted for a

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significant proportion of employment, income generation and economic activities (Folawewo, 2006). On the other hand, the SE causes the government to lose tax revenue, making it difficult for it to fulfil its obligations towards citizens.

Nigeria is one of the world's largest shadow economies with estimates ranging from 68% to 78% of GDP for the 1990-1993 period to 59.4% for the 2002-2003 period and 56.7% for the 1991-2015 period (Medina and Schneider, 2018; Schneider, 2005; Schneider, 2000). The growth in magnitude from 1970 to date can be attributed to policy somersault, absence of a political will, and economic development that has failed to grow the formal sector.

Almost, all forms of economic activities are carried out in the shadow economy. These activities range from trading, manufacturing, transportation, accommodation to financial services. To avoid the costs of being in the formal economy, those engaged in such activities try to avoid detection at all costs (Schneider and Enste, 2002). Despite the visibility of the activities, the internal operations are hidden. For example, records that are required for official purposes in most cases are either non-existent or incomplete. Most participants in the SE commit details of their transactions to memory. Although key details are forgotten over time. Partial or non-existent records constitute, in addition to others, a dimension of the SE which includes, in particular, the use of cash-based transaction, non-registration of the business, non-contribution to any pension plan and even the resultant harassment that follows participation in the SE. These dimensions of the SE pose a challenge to policymakers.

In 1972, the International Labor Organization (ILO) started work on Africa's shadow economy. Their study showed that SE was a problem of development, in particular, urbanisation. Several surveys have since investigated the occurrence in Nigeria, particularly its determinants, magnitude and implications for economic growth. The CBN/FOS/NISER study of 2001 was an outcome of a national survey that covered the informal sector in the country. The study revealed important features that show informal sector activities were discovered mostly in the trade sector and that most participants had limited schooling.

The primary purpose of this paper is to determine the micro incentives for participation in the shadow economy of Lagos and Kano states. The study is restricted to sectors identified as those where most SE activities take place, namely manufacturing, wholesale and retail trade, accommodation and food services as well as transportation and storage activities (NBS, 2010). The choice of the urban areas was justified because a significant number of shadow economic activities took place there (Fapohunda, 1985).

The rest of this paper, apart from the introductory section, is divided into four sections that include literature review; model specification and estimation techniques; results; and conclusions and policy recommendations.



## 2.0 Brief Literature Review

The concept of the shadow economy emanated from studies carried out on Kenya and Ghana (Hart, 1973; ILO, 1972). These studies regarded the SE as a consequence of urbanisation and that it was the nature of development that caused the persistence of the informal sector. Before the emergence of the ILO views, the dualist school argued that informal activities persist because the surplus labour from the subsistence sector was not fully absorbed into the modern sector (Harris and Todaro, 1970; Lewis, 1954). Over time, the legalist school emerged and claimed that SE activities persist due to costs, time and effort of formal registration caused by government regulations (De Soto, 1989; Loayza, 1997).

The shadow economy consists of economic activities or economic units that deliberately avoid some or all of the required government regulations (De Soto, 1989). ICLS (1993), focusses on the characteristics of the activity and jobs. Activity-wise, the micro view of the shadow economy is characterized by ease of entry, one man or family-run business, utilization of indigenous resources, labour intensive and adopted technology, the small scale of operation, non-registration (which could lead to hidden activities and harassment if caught) and low income and covers almost every field of economic activity. Jobs are classified according to the contract entered into by the worker in the economic unit. These jobs lack social and legal protection, thereby making the workers vulnerable to exploitation.

Earlier studies by Barro and Sala-I-Martin (1995), De Soto (1989), Loayza (1997) and Rauch (1991) influenced the theoretical framework adopted for this work. The decision to operate in the formal sector takes into account its costs and benefits. If the cost outweighs the benefits, the firm or individual is motivated to participate in the SE in order to cut costs.

The shadow economy is measured in three major ways (Medina and Schneider, 2018). First, the direct approach employs surveys that capture compliance levels based on responses and tax audits. Its advantage lies in the comprehensiveness of information obtained, but, dishonest responses to sensitive questions can distort it. Besides, a limited aspect of the phenomenon is captured. Secondly, the indirect approach often called the indicator approach, makes use of macroeconomic data. The size of the shadow economy is determined by measuring traces it leaves in official statistics. The indicators include discrepancy between national expenditure and income statistics, the discrepancy between the official and actual labour force, use of physical inputs such as electricity (Kaufmann and Kaliberda, 1996; Lacko, 1996), the transactions approach and the currency demand approach (Cagan, 1958; Feige, 1979; Guttman, 1977; Tanzi, 1980, 1983). It gives a broad perspective of the incidence of the shadow economy and development of the shadow economy can be tracked over time. However, the problem of double counting arises. Thirdly, the model approach is associated with the Multiple Indicators Multiple Causes (MIMIC) model, which is a special type of the Structural Equation Model (SEM). Unlike the other methods that only consider one cause, the MIMIC model can evaluate several

causes of the SE. The technique was pioneered by Joreskog and Goldberger (1975), while Frey and Weck-Hannemann (1984) initiated its application to the shadow economy. Estimates from an exogenous indicator method are generally used to calibrate factor scores from the MIMIC model and estimate the magnitude of the shadow economy. Despite its advantages, its shortcomings as summarised by Schneider and Enste (2000) include; generation of relative coefficients, high sensitivity to data and specification changes, difficulty in selecting causes and indicators and impact of benchmarking/calibration procedures on results.

Various techniques applied to estimating the determinants of the shadow economy include the MIMIC model (Brambila and Guido, 2010; Loayza, 1997; Medina and Schneider, 2018), dynamic MIMIC model (Buehn and Schneider, 2009), Dynamic General Equilibrium (DGE) model (Vargas, 2015), descriptive statistics (Akerele, 1997; Fapohunda, 1985; Omisakin, 1999; Oni, 2006), probit model and logit model (Angel and Tanabe, 2012; Collins, Muhammad, and Alvaro, 2015; Sookram and Watson, 2008; Vargas, 2015).

The findings of survey-based studies on the shadow economy participation incentives depend on the aspect of the SE being studied. Sookram and Watson (2008), investigated the socio-economic, demographic, and attitudinal characteristics that influenced individuals to participate in the SE and their perception of the risk of detection by tax authorities. The results suggest that individual households are motivated to engage in SE activities because; taxes are too high, incomes are low, they have to support dependents, and they believe that the resulting tax evasion will go undetected. Angel and Tanabe (2012), assessed the micro determinants of SE employment. SE was described as the share of all employees without access to social security. Drivers of SE investigated included age, gender, education, marital status, employment sector, ownership status, activity, and urban dummy. The results of the probit regression analysis show that the main determinants are the size of the public sector and the agricultural sector. Henley, Arabsheibani and Caneiro (2006) investigated the factors that determined three recognised SE dimensions, namely employment contract, registration, and social security. The variables of interest were similar to those investigated by Angel and Tanabe (2012) with the exception of age squared, ethnicity, union member, an establishment with less than eleven employees, occupation and other family circumstances. The results revealed that the impact of demography, education and family circumstances on the likelihood of participating varies from one definition to the other. On the other hand, Collins, Muhammad and Alvaro (2015) were more detailed in their analysis as factors such as compliance climate, tax morality, reasons for operating informally, entrepreneurial attitudes, exclusion perspective, source of financing, business size, household income, and enterprise characteristics were considered. They found that the characteristics of the entrepreneur and enterprise were more important than the compliance environment in which they operated.

In 2001, the National Statistics Bureau (NBS), the Central Bank of Nigeria (CBN) and the Nigeria Institute for Social and Economic Research (NISER) carried out extensive work on the characteristics and determinants of the shadow economy in Nigeria. Fapohunda (1981), however, carried out one of the earliest works on Lagos. Meagher and Yunusa (1996) carried out studies on Zaria in Kaduna state in 1991, and Akerele (1997) and Omisakin (1999) on Ibadan Metropolis. These descriptive studies highlight the fact that gender, age, culture, economic opportunities, the overall regulatory burden and labour market status were crucial to understanding the dynamics of the shadow economy. However, these studies reviewed ignored an important dimension of the SE, which is non-registration of the enterprise. This paper also deviates by including hours of work which is a rational decision as a factor that determines SE involvement.

### **3.0 METHODOLOGY**

To realise the objectives of this study from a micro perspective, a survey was carried out in two states of the Federation namely; Lagos and Kano states, respectively. The state of Kano is located in North-West Nigeria and had a population of 9,401,288 million people according to the 2006 population census. The state has forty-four (44) Local Government Areas. Historically, Kano state has been a commercial and agricultural centre. Lagos State had a population of 9,111,605 million persons in 2006 and is located in the South-West part of the country. There are 20 Local Government Areas (LGAs) in the state. Incidentally, both Kano and Lagos states respectively, have one of the highest participants disaggregated by owners of microenterprises (NBS, 2010).

Purposive sampling technique was used to select four hundred and ten (410) owners of microenterprises. Microenterprises were defined as firms employing less than ten employees. The survey conducted was the source of data for the probit regression model used to assess the micro determinants of the shadow economy. The outcomes of the survey carried out in Lagos and Kano states were aggregated for analysis.

The theoretical framework for this paper is adopted from Loayza (1997). It is based on the assumptions that: agents are rational and endowed with different initial levels of capital. In addition, there are two sectors; namely formal and informal sectors, and there is free mobility between the sectors. The decision of the agent to participate in the SE is based on the assumption of rationality. The agent considers the twin costs of formality which includes the cost of accessing the formal sector and remaining in the formal sector (De Soto 1989). The costs of having access to the formal sector include the offering of bribes in a corrupt environment, time and cost to complete the registration process.

On the other hand, the cost of remaining in the formal sector consists of tax payments, regulations and bureaucratic requirements. These costs are high due to the time and effort in fulfilling those requirements, and participation in the SE reduces these costs substantially. However, there are costs associated with participation in the SE. The first is

the penalties paid when detected. This is why firms operating in the shadow economy operate on a small scale to avoid detection. Second, is the inability to take full advantage of goods and services provided by the government. The consequences are that the operators cannot exercise full property rights, thus creating uncertainty that increases transaction and monitoring costs. These costs give shadow economy firms their characteristics, namely labour intensiveness and the smallness of their operations.

Following this discussion, the drivers of the shadow economy are specified as;

$$Pr(\textit{Participation}) = f(\textit{gender, age, marital status, education, ownership status of business, source of finance, tax morale, size of business, hours worked}) \quad (1)$$

The probability (*Pr*) of participation is represented by non-registration. When businesses are not registered, it represents participation in the SE. This variable is represented by a dummy which is zero for registration and one for non-registration. The relationship between this indicator and factors influencing the SE are stated as follows; Gender is composed of male and female with females more likely to participate than their male counterparts. This is due to the culture and responsibility associated with childbearing and rearing that may hinder entry into the formal sector. For the age category, youths dominate, but as they grow older and obtain more education and experience, they get absorbed into the formal sector. In order to meet responsibilities, a married person is more likely to take part in the SE. The higher the educational attainment, the lower the probability of participation. A sole proprietorship is a dominant category for the ownership status of the business, and it is positively associated with participation in the shadow economy. Personal savings predominate the source of finance, and it is a reason why such businesses remain small. High tax morale lowers the incentive to participate in shadow economy activities. The size of the business is measured by the income generated, the smaller the size, the higher the incentive to participate. The higher the number of hours worked the more the likelihood of participation in order to make ends meet.

The estimation technique adopted is probit regression. In line with Folawewo (2006), the choice of the probit regression model is preferred because it allows for binary dependent variables. It is also advantageous for quantifying the relationship between the probability of participation in selected shadow economy indicators and its determinants.

#### 4.0 Results

The summary statistics of the variables used in the analysis is presented in Table 1. The table shows that males, those aged 25 to 34 years, married individuals, those with a secondary education, sole proprietors, informal savings, firms that are not registered, individuals with no tax morale, individuals earning less than N30,000 monthly and who work for between 20 to 35 hours per week dominate the SE.

**Table 1: Summary statistics**

| <u>Variable</u>                  | <u>Observations</u> | <u>Mean</u> | <u>Standard Deviation</u> | <u>Minimum</u> | <u>Maximum</u> |
|----------------------------------|---------------------|-------------|---------------------------|----------------|----------------|
| <b><u>Gender</u></b>             |                     |             |                           |                |                |
| <u>Male</u>                      | <u>410</u>          | <u>0.68</u> | <u>0.47</u>               | <u>0</u>       | <u>1</u>       |
| <u>Female</u>                    | <u>410</u>          | <u>0.32</u> | <u>0.47</u>               | <u>0</u>       | <u>1</u>       |
| <b><u>Age</u></b>                |                     |             |                           |                |                |
| <u>15-24years</u>                | <u>410</u>          | <u>0.24</u> | <u>0.43</u>               | <u>0</u>       | <u>1</u>       |
| <u>25-34years</u>                | <u>410</u>          | <u>0.39</u> | <u>0.49</u>               | <u>0</u>       | <u>1</u>       |
| <u>35-44years</u>                | <u>410</u>          | <u>0.27</u> | <u>0.45</u>               | <u>0</u>       | <u>1</u>       |
| <u>45-64years</u>                | <u>410</u>          | <u>0.09</u> | <u>0.28</u>               | <u>0</u>       | <u>1</u>       |
| <u>Over64years</u>               | <u>410</u>          | <u>0.01</u> | <u>0.09</u>               | <u>0</u>       | <u>1</u>       |
| <b><u>Marital Status</u></b>     |                     |             |                           |                |                |
| <u>Single</u>                    | <u>410</u>          | <u>0.41</u> | <u>0.49</u>               | <u>0</u>       | <u>1</u>       |
| <u>Married</u>                   | <u>410</u>          | <u>0.52</u> | <u>0.50</u>               | <u>0</u>       | <u>1</u>       |
| <u>Separated/divorced</u>        | <u>410</u>          | <u>0.04</u> | <u>0.19</u>               | <u>0</u>       | <u>1</u>       |
| <u>Widowed</u>                   | <u>410</u>          | <u>0.04</u> | <u>0.20</u>               | <u>0</u>       | <u>1</u>       |
| <b><u>Education</u></b>          |                     |             |                           |                |                |
| <u>No formal education</u>       | <u>410</u>          | <u>0.07</u> | <u>0.26</u>               | <u>0</u>       | <u>1</u>       |
| <u>Primary</u>                   | <u>410</u>          | <u>0.15</u> | <u>0.35</u>               | <u>0</u>       | <u>1</u>       |
| <u>Secondary</u>                 | <u>410</u>          | <u>0.49</u> | <u>0.50</u>               | <u>0</u>       | <u>1</u>       |
| <u>Vocational</u>                | <u>410</u>          | <u>0.05</u> | <u>0.22</u>               | <u>0</u>       | <u>1</u>       |
| <u>Tertiary</u>                  | <u>410</u>          | <u>0.24</u> | <u>0.43</u>               | <u>0</u>       | <u>1</u>       |
| <b><u>Status of Business</u></b> |                     |             |                           |                |                |

|   |                     |                      |                      |                   |                   |
|---|---------------------|----------------------|----------------------|-------------------|-------------------|
| <a href="#">Sole-proprietorship</a>     | <a href="#">410</a> | <a href="#">0.75</a> | <a href="#">0.43</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Partnership</a>             | <a href="#">410</a> | <a href="#">0.07</a> | <a href="#">0.26</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Family-owned</a>            | <a href="#">410</a> | <a href="#">0.09</a> | <a href="#">0.28</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Cooperative</a>             | <a href="#">410</a> | <a href="#">0.02</a> | <a href="#">0.13</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Registered business</a>     | <a href="#">410</a> | <a href="#">0.03</a> | <a href="#">0.17</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Other business</a>          | <a href="#">410</a> | <a href="#">0.04</a> | <a href="#">0.20</a> | <a href="#">0</a> | <a href="#">1</a> |
| <b><u>Source of finance</u></b>         |                     |                      |                      |                   |                   |
| <a href="#">Deposit money bank</a>      | <a href="#">410</a> | <a href="#">0.01</a> | <a href="#">0.11</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Microfinance bank</a>       | <a href="#">410</a> | <a href="#">0.04</a> | <a href="#">0.21</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Association support</a>     | <a href="#">410</a> | <a href="#">0.07</a> | <a href="#">0.25</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Informal savings</a>        | <a href="#">410</a> | <a href="#">0.19</a> | <a href="#">0.39</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Money Lenders</a>           | <a href="#">410</a> | <a href="#">0.01</a> | <a href="#">0.10</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Family and friends</a>      | <a href="#">410</a> | <a href="#">0.09</a> | <a href="#">0.28</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Remittances from abroad</a> | <a href="#">410</a> | <a href="#">0.01</a> | <a href="#">0.10</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Personal savings</a>        | <a href="#">410</a> | <a href="#">0.43</a> | <a href="#">0.50</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Government/NGO</a>          | <a href="#">410</a> | <a href="#">0.01</a> | <a href="#">0.09</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Others</a>                  | <a href="#">410</a> | <a href="#">0.15</a> | <a href="#">0.36</a> | <a href="#">0</a> | <a href="#">1</a> |
| <b><u>Registration</u></b>              |                     |                      |                      |                   |                   |
| <a href="#">Registration (Yes)</a>      | <a href="#">410</a> | <a href="#">0.15</a> | <a href="#">0.36</a> | <a href="#">0</a> | <a href="#">1</a> |
| <a href="#">Registration (No)</a>       | <a href="#">410</a> | <a href="#">0.85</a> | <a href="#">0.36</a> | <a href="#">0</a> | <a href="#">1</a> |
| <b><u>Tax morale</u></b>                |                     |                      |                      |                   |                   |
| <a href="#">Support</a>                 | <a href="#">410</a> | <a href="#">0.29</a> | <a href="#">0.45</a> | <a href="#">0</a> | <a href="#">1</a> |

|                                  |            |             |             |          |          |
|----------------------------------|------------|-------------|-------------|----------|----------|
| <u>Indifferent</u>               | <u>410</u> | <u>0.34</u> | <u>0.47</u> | <u>0</u> | <u>1</u> |
| <u>Oppose</u>                    | <u>410</u> | <u>0.37</u> | <u>0.48</u> | <u>0</u> | <u>1</u> |
| <b><u>Income earned/size</u></b> |            |             |             |          |          |
| <u>Less than N30000</u>          | <u>410</u> | <u>0.62</u> | <u>0.49</u> | <u>0</u> | <u>1</u> |
| <u>30,001-50,000</u>             | <u>410</u> | <u>0.17</u> | <u>0.37</u> | <u>0</u> | <u>1</u> |
| <u>50,001-100,000</u>            | <u>410</u> | <u>0.14</u> | <u>0.34</u> | <u>0</u> | <u>1</u> |
| <u>100,001-500,000</u>           | <u>410</u> | <u>0.03</u> | <u>0.17</u> | <u>0</u> | <u>1</u> |
| <u>500,001-1,000,000</u>         | <u>410</u> | <u>0.01</u> | <u>0.10</u> | <u>0</u> | <u>1</u> |
| <u>1,000,001 and above</u>       | <u>410</u> | <u>0.04</u> | <u>0.19</u> | <u>0</u> | <u>1</u> |
| <b><u>Hours worked</u></b>       |            |             |             |          |          |
| <u>Less than 20 hours</u>        | <u>410</u> | <u>0.09</u> | <u>0.29</u> | <u>0</u> | <u>1</u> |
| <u>20 to 35 hours</u>            | <u>410</u> | <u>0.31</u> | <u>0.46</u> | <u>0</u> | <u>1</u> |
| <u>36 to 40 hours</u>            | <u>410</u> | <u>0.31</u> | <u>0.46</u> | <u>0</u> | <u>1</u> |
| <u>Over 40 years</u>             | <u>410</u> | <u>0.29</u> | <u>0.45</u> | <u>0</u> | <u>1</u> |

Source: Author's computation from survey outcomes