Integrating Informal Economy into Official Economy in Southern Africa: Identifying Barriers and Possible Solutions

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Abstract

In the Lewisian model, the informal sector was thought to automatically formalise with time. This was known as the Lewis Turning Point. However, with time as industrialisation increased, the so-called informal sector was not diminishing, rather at times it was increasing. This tends to suggest the existence of structural barriers to formalisation, which the authorities should address. This study sought to identify these barriers basing on theoretical arguments by empirically testing the significance of the causes of the informal sector as they become barriers to formalisation. The structural equation modelling (SEM) approach was used in a multiple indicators, multiple causes (MIMIC) framework. This study presents the findings that barriers to formality are high tax burden, poor institutional quality (poor control of corruption), high government consumption, unemployment rate, and low trade openness. This argument has been built theoretically and has been suggested empirically by the results. This paper suggests the creation of Quasi-Lewis conditions through adopting the following possible solutions: reduce tax burden and resort to sovereign wealth fund (SWF) as a source of income, reduce government size, create more jobs, and provide credit and business development services to informal operators, introduce simplified bureaucratic procedures, and liberalise trade.

Keywords: *informality, economic growth, informal economy*

Introduction

In the recent past, issues of formalising the informal sector have been a policy issue. By its nature and the causes of its formation, agents in the informal sector strive to remain undetected (LO, 2015). This poses a challenge on policy makers who are in the bid to formalise it. This study seeks to identify barriers to a successful integration of the informal sector into the formal sector. In global literature, the informal sector first appeared in developmental issues in the 1970s as first identified in Ghana and Kenya as small enterprises owned by households operating outside the statutory of governments and tax authorities (World Bank Group, 2013). Traditionally, the sector was thought to provide a pool of surplus labour in developing countries by which the gradual industrialisation would absorb with time. However, as time went on with the increase in industrialisation, the so-called informal sector was not diminishing, rather at times it was increasing. According to Verick (2006), the informal sector continues to maintain its share, and at times expands its share of employment throughout the world. Therefore, the informal sector is now a global issue in both developed and developing countries.

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Contemporarily, many African countries have experienced significant growth rates (ADB, 2016), but without significant decent jobs. Unemployment remains a topical issue, especially among the youths in Africa. The informal sector has become the safety nets for educated youths where they start their entrepreneurial careers. Owing to that, very little attention has been directed towards the ability of the informal sector to create jobs and increase growth. Statistical accounts[1] have focused on the conventional (formal) approach of computing growth until recently when some governments started to be cautious about the possibility of formalising the informal sector, but efforts have not transformed much. In Sub-Saharan Africa, the informal sector accounts for about 80 percent of employment, and has the ability of contributing 55 percent to GDP, if accounted for. In Southern Africa, the contribution ranges from 40 to 50 percent of GDP, with Zimbabwe having a rate above 50 percent (Medina et al., 2017). This shows that the informal sector is actually a significant second economy of a nation.

Although the informal sector works as safety nets for workers who would have lost employment in the formal sector, or have failed to secure employment therein (Makochekanwa, 2012), some participants in the sector have no social security, employment benefits, and secure income. This is why some policy makers associate informal sectors with poverty. According to the ADB (2016), middle income countries have smaller informal sectors than poor countries. On the other hand, besides issues of poverty, the informal sector can be a reflection of weaknesses in regulation, taxation, and private property rights policies. High tax rates, cumbersome registration processes and inspection requirements discourages rational entrepreneurs to be formal.

In the light of these issues around the informal sector, it is important to note that reorganising the informal sector in a more profitable and formal way contributes towards economic development. This requires a study that enlightens on the barriers to formalisation that are embedded in its nature of existence. Identifying barriers to integrate the informal sector into the formal sector becomes the basis for developing possible solutions. This paper focused on Southern African countries which are members of the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI). These are: Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia, and Zimbabwe.

Overview of the Informal Economy in Southern Africa
The definition of the informal economy has been contested in literature because it is not a straightforward concept to define. The traditional definitions by authors such as MacGaffey (1991) define informal economy as a sector of the economy that has income-generating potentials to the poor without posing any threat to the rich. This makes this sector rely on less capital-intensive activities and technology, but with great autonomous potential for expansion. On the contrary, the informal sector has been viewed as bordering on illegality, exploitative, unhealthy,

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[1] Relating to the computation of Gross Domestic Product (GDP)

repressive, and a harbour of criminals (Portes et al., 2013).On a more comprehensive basis, Smith (1994) defines the underground economy as "… market-based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP." Feige (1989), confines underground activities to four forms: illegal, unreported, unrecorded, and informal. Factually, the informal sector has been known for several names such as: hidden, second, unrecorded, unofficial, shadow, underground, irregular, parallel, endogenous, and black economy. This economy exists concurrently with the official economy in most countries. In any of these definitions, one way or the other, the informal sector in Southern Africa can directly fit in part or in full. The informal sector exists in different forms and for different reasons.

Informal sector activities in the Southern region of Africa are estimated to constitute a relatively high percentage of GDP, which is nearly 40% if they were to be captured properly. Countries such as Zimbabwe, Zambia and Lesotho are the ones with high levels of informality. Fig. 1 shows the development of informality from 2000 to 2015.
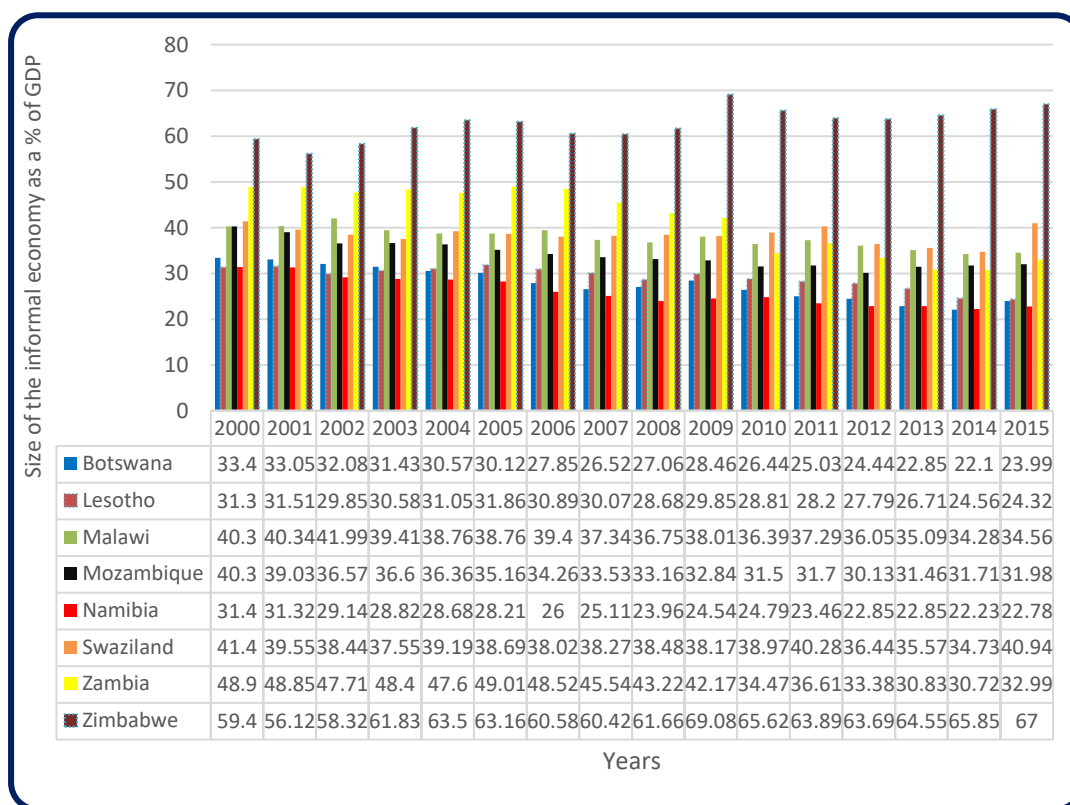

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Botswana	33.4	33.05	32.08	31.43	30.57	30.12	27.85	26.52	27.06	28.46	26.44	25.03	24.44	22.85	22.1	23.99
Lesotho	31.3	31.51	29.85	30.58	31.05	31.86	30.89	30.07	28.68	29.85	28.81	28.2	27.79	26.71	24.56	24.32
Malawi	40.3	40.34	41.99	39.41	38.76	38.76	39.4	37.34	36.75	38.01	36.39	37.29	36.05	35.09	34.28	34.56
Mozambique	40.3	39.03	36.57	36.6	36.36	35.16	34.26	33.53	33.16	32.84	31.5	31.7	30.13	31.46	31.71	31.98
Namibia	31.4	31.32	29.14	28.82	28.68	28.21	26	25.11	23.96	24.54	24.79	23.46	22.85	22.85	22.23	22.78
Swaziland	41.4	39.55	38.44	37.55	39.19	38.69	38.02	38.27	38.48	38.17	38.97	40.28	36.44	35.57	34.73	40.94
Zambia	48.9	48.85	47.71	48.4	47.6	49.01	48.52	45.54	43.22	42.17	34.47	36.61	33.38	30.83	30.72	32.99
Zimbabwe	59.4	56.12	58.32	61.83	63.5	63.16	60.58	60.42	61.66	69.08	65.62	63.89	63.69	64.55	65.85	67

Figure 1: *The Size of the Informal Sector in Southern African Countries from 2000 to 2015*
       Source: *Medina and Schneider (2018)*

Fig. 1 relates to the evolution of the informal economy from 2000 to 2015. In some countries such as Zimbabwe, it is fluctuating at exorbitant levels above 50 percent with no sign of falling. On the other hand, other countries such as Malawi and Botswana reflect considerable strides towards reducing the sector. For Malawi, it could be credited to the efforts of the Malawi Union for Informal Sector (MUFIS) for the sector to be recognised, counted and legitimised (MUFIS, 2012). Moffat and Kapunda (2016) show contributions towards revisions of the small and medium enterprises (SMEs) policy in Botswana towards formalising the informal sector. Shindondola-Mote and Ohlsonn (2013) suggest that increase in informality in Namibia is due to high unemployment, which is arising from those with less education and skills.

Size of the Informal Economies Estimations for 2016
The informal sector in Southern Africa remains high, with most of the countries recording a percentage above 30%. Zimbabwe has the highest, which is above 60%; followed by Swaziland at 39%, then Malawi and Mozambique with percentages above 30%. At the bottom there is Namibia, which is then immediately followed by Botswana and Lesotho. These triad nations have their percentages below 25%. This means that a lot still needs to be done in Southern Africa focusing on barriers to formalisation.
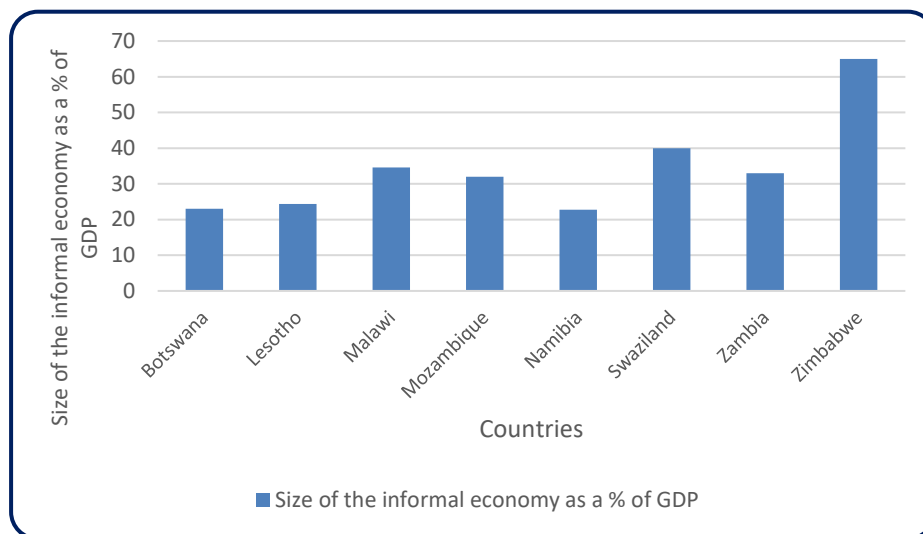

Figure 2: *Southern African countries Informal Economies*
Source: World Bank

Literature Overview
Traditionally, it was generally assumed that the informal sector automatically formalises. This was well elaborated by Lewis (1954) in his essay, '*Economic Development with Unlimited Supplies of Labour*,' which earned him a Nobel Prize in Economics. The predictions of this theory enable developing countries to

generate enough jobs for the surplus labour in the informal sector (the traditional economy) through economic development. An economy with enough resources and using right economic policies was then expected to transform into a modern economy. The process would automatically enable the informal (traditional) economy—characterised by small-scale production, casual jobs, and petty trade—be absorbed by the modern capitalist (formal) economy; and this would improve the traditional sector, hence its characteristics would disappear. The model has a point at which wages in the informal sector would rise above the subsistence level, thereby making the casual jobs formal. This is commonly known as the Lewis Turning Point (Lewis, 1954). It is in the Lewis model where emphasis is mainly on the informal sector more than the formal. However, Ranis and Fei (1961) developed the model further to conclude that both sectors would equally develop. Therefore, the informal sector would automatically be recognised as formal.

The Lewis model was a successful prediction for Japan and Europe after World War II, and it explained the massive production in North America and Europe in the 1950s and 1960s (Chen, 2012). However, there was widespread unemployment in developing countries in the mid-1960s, which led to a development economist, Singer (1970), pointing out the non-existence of the Lewis Turning Point in developing countries. This was against what had been observed in developed countries. In fact, underemployment and unemployment of different kinds were rising in developing countries, even in those that were economically growing.

To explain this, Singer (1970) pointed to the imbalance between extensive use of capital-intensive technology and the growth in population (translating into labour force) due to advancement in the ability of developing countries to control and manage health and diseases. This effect would result in more labour, which would not be absorbed in the formal sector as it would be substituted for capital. Most interestingly, he predicted an acute dangerous dualism in the labour markets with high levels of open (disguised) and casual unemployment. This prediction tends to be present in modern African economies. He also predicted the possibility of rising employment crisis in overcrowded farming and urban communities. Therefore, it is on this background that the International Labour Organisation (ILO) explored into a series of employment studies in developing countries—starting with 'The Kenya Mission of ILO' (1972) and subsequent ones—which gave rise to four schools of thought discussed in this paper. The four schools of thought are the *dualist, structuralist, legalist*, and the *voluntarist* approach.

The Informal Economy Schools of Thought
In the *dualist* school, the informal economy is caused by the imbalance between the growth rate of the population and the growth in modern industrial development. It also emanates from a mismatch between the skills people have and the structure of economic opportunities. This makes some employable units excluded from the formal sector. These ideas are credited to the ILO (1972), Hart (1973), and Sethuraman (1976). These theorists view the informal sector as part of the economy with marginal activities that are different from those in the formal sector. These

marginal activities are the sources of income for the poor, and safety nets in times of crisis. Therefore, in this school of thought, the main cause of the informal sector is unemployment arising from the inability of the formal sector to absorb all labour units in the economy. This is directly contrary to the ideas of Lewis (1954). Policy prescriptions using this approach prove that there is no direct synergy between the informal and the formal sector activities. Agents in the informal sector are largely self-employed with the disadvantaged and segmented group of the labour market. There is no link between this sector and government regulations.

The *structuralist* school was developed soon after the dualist school by scholars such as Castells (1989). This school views the informal sector as a supplementary sector for the formal sector. It exists to provide services to the formal sector to reduce their costs and increase their competitiveness. As the formal economy (the capitalists) grows, they seek to reduce labour costs, especially those in relation to taxes and social legislation. This will force them to opt for subcontracting, off-shore industries, and flexible specialisation, which would be cheaper to do, and so spur competitiveness. This makes the link between the informal sector and the formal sector intrinsic. Thus, according to this school, the informal sector is a subordinated interest of a capitalist development to provide cheap products.

The *legalist* school views the informal economy as a sector comprising micro-entrepreneurs who opt to operate informally to avoid legal requirements such as formal registrations. Micro-entrepreneurs view the legal system as hostile, forcing them to operate in the informal sector. According to De Soto (1989), informal entrepreneurs exist to avoid time, costs and effort of registration. Therefore, they seek for incentives, such as property rights, to be formal. Without being given incentives they will remain informal. This implies that the legal framework is the cause of the informal sector. According to De Soto (1989), 'mercantilist' –i.e., formal firms—collude with the government to set up bureaucratic structures that discourage other firms to be formal. Ideally, this school of thought can explain the existence of informality in most African counties that are characterised by cumbersome registration processes.

The *voluntarist* ideas by Maloney (2004) are close to those of the legalist in that informal sector agents deliberately choose to avoid the legal framework such as taxation and regulations. The main difference between the two is that, unlike the legalists who blame cumbersome registration processes, the voluntarists try to rationalise between costs and benefits of formality and informality. This view argues that those who operate in the informal sector would have found the net benefits of operating in the informal sector being greater than the costs. Although this view pays little attention on the linkage between the informal and formal sectors, it argues that informal firms create unfair competition for formal sector firms because their costs of production would be low. This implies that in some cases, the nature of businesses in the informal sector would be the same as those in the formal sector, such that there will be competition between the two.

Ways of Measuring the Informal Economy in Literature
Formalising the informal sector requires the ability to detect the existence of the informal sector. The literature shows that the informal sector can be identified and measured using both direct and indirect approaches. The approaches are discussed below.

Direct Approaches
Direct approaches can enable researchers to identify the informal economy using samples and surveys based on voluntary replies and/or tax audits. If done successfully, the approach has a potential of providing great details about the structure of the informal sector. However, the results are highly sensitive to the way a questionnaire has been designed, and the willingness to respond by the agents. Resultantly, the approach tends to be subjective.

Indirect Approaches
Indirect approaches, also known as 'indicator' approaches, are basically macroeconomic related. They reflect on the discrepancy between official and actual labour force; the discrepancy between national expenditure and income statistics, the 'monetary transaction' approach by Feige (1979), the 'electricity consumption' approach by Kaufmann and Kaliberda (1996), the 'currency demand' approach by Cagan (1958), and the 'Multiple Indicators, Multiple Causes' approach.

Using the discrepancy between national income and expenditure statistics assumes that those in the informal sector can hide their incomes for tax purposes, but would not be able to hide their expenditures. Thus, the difference between the two would be the size of the informal economy. However, these approaches hold if—and only if—there are no measurement errors. On the other hand, the discrepancy between official and actual labour force implies total labour force participation is assumed to be constant. This indicates that a decline in official labour force participation can be directly related to an increase in informal economy activities. However, fluctuations in the participation rate can be related to various factors such as retirement decisions, difficulty in finding jobs, and business cycles.

Kaufmann and Kaliberda (1996) proposed the electricity approach. They relate the consumption of electricity as a single best indicator of both formal and informal economic activities. Having found that the elasticity of electricity consumption to overall GDP is close to one, they coined that the difference between the consumption of electricity and official GDP can be a good proxy for the informal economy. The method seems to be appealing principle-wise, but it is important to note that not all economic activities use electricity, especially in modern days where gas, solar, and coal are almost perfect substitutes.

The transaction approach as illustrated by Medina et al., (2017) uses the Fischer's quantity equation, *Money*Velocity = Prices*Transactions*, with the assumption that there is a constant relationship between money flows related to transactions and

official and unofficial value-added, that is, *Prices*Transactions = k (official GDP + informal economy),* therefore, the relationship can be reduced to: *Money*Velocity = k (official GDP + informal economy).* Given that the stock of money and official GDP estimates are known, and that money velocity can be estimated, then the informal economy for the sample can be calculated given that its size as a ratio of the official economy is known for a benchmark year. Despite its strong theoretical foundations, the model suffers from strong assumptions such as constant *k* over time, which is not realistic. In addition, the use of credit cards can reduce levels of cash holdings, thereby affecting velocity.

The currency demand approach assumes that informal agents transact in ways that do not leave any records for ease of tracing. This makes them to transact on cash basis only. An increase in the informal economy would increase the demand for currency, and result in an 'excess' demand for currency. Tanzi (1983) suggests that to identify this 'excess' demand for currency, it should be isolated using a time series approach; whereby currency demand is a function of income, interest rate, and payment practices (as proposed by the theories of demand for money) (See, Keynes (1936), Friedman (1956), and Tobin (1958)). The model should be augmented by including factors that reflect the reasons for working in the informal economy such as government regulations and the complexity of the tax system. However, this approach does not consider the fact that some informal activities can be done without using cash, and also an increase in currency demand deposits can be due to decrease in demand deposits and not due to increase in informal activities per se.

Unlike these other approaches with a single indicator, the MIMIC approach explicitly considers several causes, as well as the multiple effects of the informal economy, thereby capturing the informal economy in different forms. The methodology makes use of the relationships between observable causes and the effects of an unobserved variable (the informal economy) using structural equations modelling (SEM), to estimate the variable itself (Loayza, 1996). The causes identified in this modelling can then be reliable when designing policy for formalising the informal economy. This paper adopts this methodology.

Methodology
Conceptual Framework
The methodology used in this study add value to the body of literature due its use of SEM simulations. Unlike other studies that use a single dependent variable, this study uses multiple dependent variables; referred to as multiple indicators. Using the voluntarist approach, economic agents are rational decision makers who weigh costs and benefits of operating in the informal sector, which is generally considered to be illegal. This decision-making is associated with uncertainty of being caught or not, and the penalties associated with being caught. The costs are in line with the fines, while the gains are associated with the avoided and evaded tax burden, high labour costs, and other labour market regulations. This brings about a structural equation which can be presented:

$$IE = f\left[\overset{-}{d}\begin{pmatrix}+&-\\E,&A\end{pmatrix}; \overset{-}{p}; \overset{+}{C}\begin{pmatrix}+&+\\T,&M\end{pmatrix}\right]$$

This means that the informal economy (*IE*) is a function of the probability of detection (*d*), penalties (*p*) and the opportunity cost of remaining formal (*C*). In which case, *d* is a function of enforcement (*E*) actions by authorities, and the ability (*A*) by agents to remain undetected. *C* is a function of tax burden (*T*) and income (*M*) from the shadow economy. This proposes that the informal economy covers activities that evade and avoid taxation, government regulation, and observation.

Following the growing literature, the study used the MIMIC model by Schneider and Enste (2000). The MIMIC has the following desirable characteristics:

(a) It considers various causes of the existence and growth of the informal sector, as well as various effects of it, while other methods mainly use a single indicator (that is, consumption).
(b) It uses unobservable variables that take into account indicators and causes of the unobserved informal economy.
(c) Unlike other MIMIC models where GDP per capita and growth of GDP per capita are used as cause and indicator variables, respectively (which would result in the endogeneity problem), this study only used GDP as an indicator, and unemployment rate as a proxy for income issues.

The MIMIC Approach
The MIMIC model, which uses the SEM, was specified as follows:

$$y = \eta IE + \varepsilon \qquad (1)$$

$$IE = ɥ'x + v \qquad (2)$$

where *IE* is the informal economy, which is an unobservable latent variable,[2] $y' = (y_1, \ldots \ldots \ldots y_i)$ is a vector of indicators for *IE*, $x' = (x_1, \ldots \ldots \ldots, x_j)$ is a vector of causes of *IE*, η and $ɥ$ are the $(i x 1)$ and $(j x 1)$ vectors of the parameters, and ε and v are the $(p x 1)$ and scalar errors.

Equation (1) expresses the informal sector in terms of its observable indicators, while equation (2) expresses the informal sector in terms of observable causes.

Posing the assumption that errors are normally distributed and mutually uncorrelated with $\text{var}(v) = \delta_v^2$ and $\text{cov}(\varepsilon) = \theta_\varepsilon$, presenting the equation in reduced form gives the model as a combination of equations (1) and (2), expressed as function of observable variables as follows:

$$y = \tau x + \mu \qquad (3)$$

Where, $\tau = \eta ɥ', ɥ = \eta v + \varepsilon$ and $\text{cov}(\mu) = \eta \eta' \sigma_v^2 + \theta_\varepsilon$.

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[2] This is in line with the assertion that participants in the informal economy aim to remain undetected thus their activities are treated as unobservable in the sense that they cannot be easily quantified.

Equation (3) can be estimated using the maximum likelihood technique by the SEM in stata, since y and x are data vectors, and restrictions are implied in the covariance matrix of errors μ and the coefficient matrix τ. Figure 3 presents the diagrammatic the SE estimation procedure done in stata.
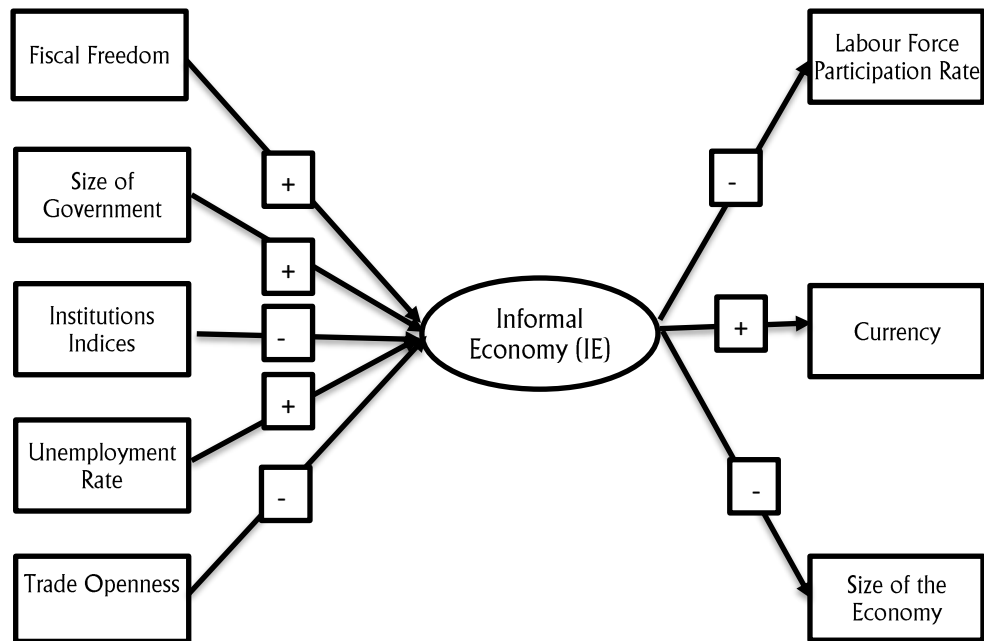

Figure 3: *Empirical Framework for Structural Equation Modelling (SEM)*
Source: Author's Own Construction

The informal economy can be increased by high unemployment rate, size of government, fiscal freedom, weak institutions, and high international trade restrictions. These are the observable causes in the model. The informal sector can be reflected by labour force participation rate, currency, and size of the economy. These are the observable indicators. The informal economy (*IE*) is the latent unobservable variable.

Justification of Variables
The MIMIC derives the size of the informal sector (unobservable) form indirect measures of the whole economy that are observable. It then estimates this unobservable sector by considering various causes for the existence and growth of the unobservable sector. In literature, labour rigidities, tax burden, weak institutions, government distortionary policies, and financial market rigidities are some of the highlighted causes and effects. The variables included are causes and indicators which are outlined as follows:

Causes as Barriers

1. *Fiscal freedom as a measure of tax burden.* Ceteris paribus, high tax burden encourages the informal sector. Efforts to formalise the informal sector in the presence of high tax burden might be unsuccessful. Makochekanwa (2012) includes tax burden as one of the major causes of informality. This is supported by both the legalists and the voluntarists who view high tax burden as a barrier to formalisation. Data on fiscal freedom were obtained from the Heritage Foundation, where the tax burden as a percentage of GDP was adopted.

2. *Size of government.* The level of consumption done by the government can discourage some economic agents from being formal. In the legalist and voluntarist views, economic agents would view the consumption burden being transferred to them so they would seek to avoid it by being informal. Government and most civil service departments are sunk costs. Thus, this expenditure should not constitute a high proportion of GDP. Government consumption as a percentage of GDP was used as adapted from Medina et al., (2017).

3. *Institutions indices.* Weak institutions encourage the growth of the informal sector. If institutions are weak, formalisation becomes difficult as agents would view the benefits of being formal as insignificant. Two indices were used to measure institutional quality: corruption perception index, and the rule of law index. In a country where institutions are strong, there is low corruption. Hence, the corruption perception index was used to proxy institutional quality. According to the legalists, weak institutions are barriers to formalisation. Data on the corruption perception index were collected from the World Bank website. The rule of law was proxied by the judicial effectiveness index from the Heritage Foundation. Hence, two models were estimated: one with the corruption index, and the other with the rule of law to control for multicollinearity.

4. *Unemployment.* High formal unemployment encourages informal sector employment. Several theoretical and empirical studies (see, e.g., Tokman, 1992; Makochekanwa, 2012; Spiegel, 2012; Chidoko, 2013; ILO, 2015; Medina et al., 2017) view unemployment as a source of informality. The dualistic approach views unemployment as a cause of informality, and a barrier to formalisation. Unemployment rates from the World Bank website were used in this study.

5. *Trade openness.* As international trade increases, it becomes difficult to hide from authorities of trade institutions. The need to trade with international market forces them to be formal and be visible on the international market, thereby making it difficult to hide from authorities. Therefore, countries with more closed boarders than others are expected to have high informality, but opening boarders tends to reduce informality. Restricting trade is posed as a barrier to formality since it encourages smuggling activities. Trade growth rate was used to indicate the country's openness to the world.

Indicators

6. *Currency as a fraction of broad money*(M_0/M_1), as most informal activities are on cash basis. This is an indicator variable for the informal economy since most informal transactions are done using cash to avoid detection.

7. *Labour force participation*: As some people become discouraged, they give up searching for work in the formal sector and resort to the informal one. This is an indicator variable for the existence of an informal economy.

8. *The size of the economy*. This was measured using GDP per capita growth as indicator variable.

Data Sources

The MIMIC model in this paper covers 8 countries (Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia, and Zimbabwe) in Southern Africa, which are members of the Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) over the period from 1990-2016. Panel data were collected from the World Bank website and the Heritage Foundation.

Presentation of Results
Descriptive Statistics

Table 1 presents descriptive statistics for the variables used in the model for a panel of 8 countries over the study period. The mean statistics are a reflection of developing counties with high government expenditure (73.2), high corruption (63.5), low trade openness (40.1), high unemployment rate (35.60), low per capita incomes (343.5), low rule of law (38.4), and high demand for cash currency (70.1).

Table 1: Descriptive Statistics

Variable	Obs	Mean	Min	Max
Fiscal Freedom	216	33.6	22.1	42.5
Size of Government	216	73.2	40.2	85.5
Rule of Law (Corruption Index)	216	38.4	28.1	53.6
Control of Corruption	216	63.5	50.4	80.3
Unemployment Rate	216	35.6	20.3	54.8
Trade Openness	216	40.1	33.3	64.3
Currency (M_0/M_1)	216	70.1	30.2	80.0
Labour Force	216	74.2	68.4	78.2
GDP/ Capita	216	343.5	106.3	1 003.5

Source*: Author's Computations*

Using the standard model specification in Fig. 3, the estimation results for SEM simulations are represented in Table 1. Cause variables are fiscal freedom; size of government; institutional quality (rule of law and control of corruption); unemployment rate, and trade openness while indicators are currency, labour force participation and size of the economy. Most coefficients are statistically significant at levels 0.1 and 0.5, and have the expected signs.

Table 2: MIMIC Estimation Results

Model – SEM	1	2
Causes as Barriers		
Fiscal Freedom	0.028***	0.039***
Std. Err.	0.009	0.008
Z	(3.111)	(4.875)
Size of government	0.078**	0.083**
Std. Err.	0.031	0.038
Z	(2.540)	(2.156)
Rule of law	-0.0003*	-
Std. Err.	0.0002	
Z	(2.005)	
Control of Corruption	-	-0.062**
Std. Err.		0.020
Z		(3.061)
Unemployment rate	0.0002*	0.011*
Std. Err.	0.00009	0.006
Z	(2.112)	(1.913)
Trade Openness	-0.189***	-0.2001***
Std. Err.	-0.048	-0.051
Z	(3.976)	(3.891)
Indicators		
Currency[3]	1	1
Labour Force Participation rate	-0.238***	-0.219***
Std. Err.	-0.034	-0.040
Z	(6.982)	(5.456)
GDP per capita growth rate	-0.153***	-0.682***
Std. Err.	-0.038	-0.042
Z	(4.011)	(4.291)
Statistical Tests		
RMSEA	0.002	0.0001
Chi^2	73.27	71.36
Countries	8	8

*** denotes significance at 1%, ** at 5% and * at 10%

Source: Author's Computations in Stata 13

Considering fiscal freedom, both models have results which show that high tax burden tends to increase the size of the informal sector. An increase in tax burden increases the shadow economy by 0.039 deviations in model 2. Similarly, an increase by a unit in size of government and unemployment increase the size of the underground economy by 0.083 and 0.011 percentage units, respectively. On the other hand, an increase in control of corruption and trade openness reduces the shadow economy by 0.062 and 0.2001 percentage points, respectively. Labour force participation rate and the size of the economy are the main indicators of informality; but currency can also be an indicator of informality as pegged at unitary.

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[3] The coefficient on currency was standardised to be 1, as in line with the literature (Schneider, 2010).
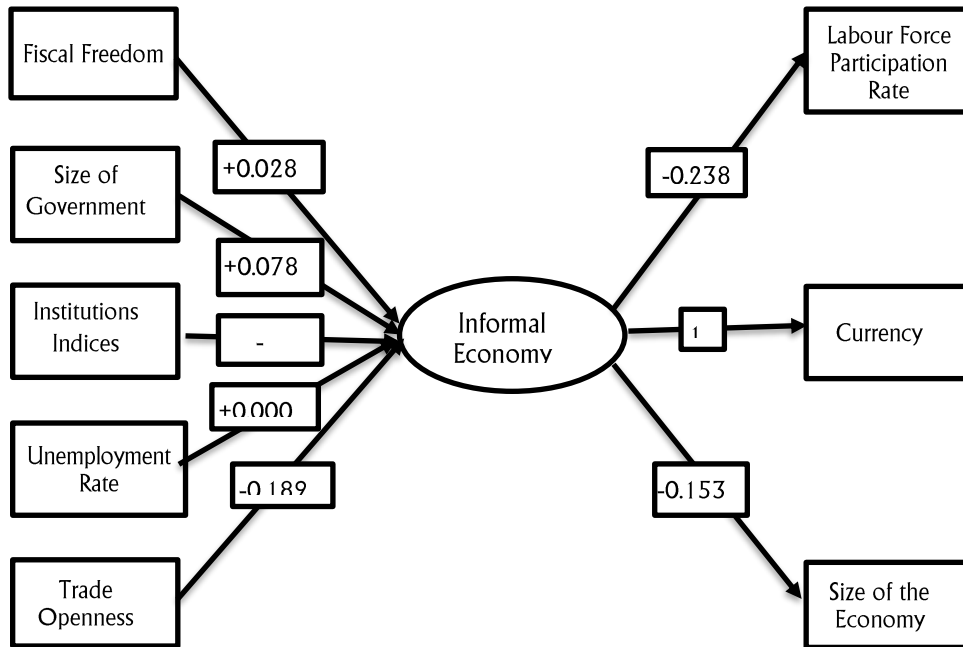
Figure 4: *Diagrammatic Representation for Model 1 of SEM Output in Stata*
Source: Stata 13 Model 1 Estimation Output

This study presents the findings that the barriers to formality are high tax burden, poor institutional quality, high government consumption, unemployment rate, and low trade openness. This argument has been built theoretically, hence has been suggested empirically by the results. When there is high tax burden, rational economic agents tend to evade and avoid taxation. Hence, they avoid all necessary legal procedures to formality. Corruption discourages cooperation by entrepreneurs. Economies with high levels of corruption would have more activities being done informally. In the same vein, if the size of a government is large, then economic agents do not support its activities Whereas, high complementarity between unemployment and the labour force participation rate in a normal economy would be expected, the opposite is evident. This is because if people become unemployed for a long time without hope of securing a job soon, they resort to the informal sector. With trade openness it is evident that countries with more trade have more of their economic activities recorded by national authorities and included in the formal sector with all accompanying regulations and taxes. But the opposite happens where there is more of smuggling and related activities.

Conclusion and Policy Implications
The thrust to formalise the informal sector requires both a theoretical and empirical follow-up on the factors rallying behind its setbacks. The theoretical background gives the basis of the origination of the informal sector upon which policy should focus. The literature reviewed in this paper unveils the fundamental causes of the

informal sector, some of which have never been attended to by policy makers in a bid to reduce its eminent growth. One of these is the size of government. Such factors that have not been given enough attention have grown into structural barriers to formalisation. The traditional Lewis model predicts an informal sector that automatically formalise at the turning point. However, this failed to work because the Lewis model assumed competitive neo-classical conditions. The absence of the neo-classical conditions implies the presence of structural barriers to formalisation. This paper discussed the causes of informality as the barriers to formality. A SEM approach was used in a MIMIC framework to analyse these factors. The results suggest that the barriers to formality are high tax burden, poor institutional quality, high government consumption, unemployment rate, and low trade openness.

Agents who engage in the informal economy are not merely criminals, they seek to be part of the economy but the conditions set by the governments work as barriers to formalisation. Hence, the solutions suggested in this paper require a holistic approach of implementation, and mainly focus on the government. There is need to increase fiscal freedom by reducing the tax burden. Whereas we note that most governments in developing countries depend on tax revenue as the main source of income, new income strategies must be devised. Governments can use the SWF to finance their budgets. Also, the sizes of governments should be reduced: a government is just a sunk cost as there is less production here than in the manufacturing sector. Therefore, its size should be small and effective. Similarly, expenditure for recurrent consumptions should be minimised.

The high formal unemployment rates call for governments to create more jobs and provide credit and business development services to informal operators, as well as basic infrastructure and social services. A government has a general dual role: to create employment in the civil service, and to facilitate development in the informal sector so that it becomes a growing sector that will automatically formalise.

Poor institutional quality requires governments to introduce simplified bureaucratic procedures to encourage informal enterprises to register and extend legal property rights for assets held by informal operators. This will enable them to unleash their productive potential and convert their assets into real capital. In the same manner, it controls corruption by removing procedures that can encourage bribing. Thus, governments should shun policies that supress and side-line the informal sector.

Also, international trade policies should be liberalised. Economies should be opened for trade. Policies that close boarders and restrict trade should be revised. As trade is liberalised, more transactions will be done in high volumes, rendering it difficult for traders to hide such transactions. In addition, the need to trade with the international market will force them to be formal to be visible, thereby making it difficult to hide from authorities. Generally, economies should return to the Lewis model, though not attainable. However, a quasi-Lewis condition can be attainable. This is a condition of an economy with some neo-classical conditions but not perfectly competitive as it is characterised by liberal markets with minimum regulations.

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