

Taxation of the informal sector in Zambia

Sydney Chauwa Phiri and Pamela Nakamba-Kabaso



Working Paper No. 5

January 2012

© Zambia Institute for Policy Analysis & Research 2012

Zambia Institute for Policy Analysis & Research (ZIPAR)

CSO Annex Building

Cnr John Mbita & Nationalist Roads

PO Box 50062

Lusaka

Zambia

Tel: +260 211 252559

Fax: +260 211 252566

Email: info@zipar.org.zm

Web: www.zipar.org.zm

Contents

1	Introduction.....	6
2	Defining and Measuring Informality	9
2.1	Defining the informal sector	9
2.2	Overview of the methods for measuring informality.....	9
2.2.1	Direct estimation procedures	9
2.2.2	Indirect methods.....	10
3	Review of Empirical Literature	12
4	Methodology and Data Description	14
5	Results.....	15
5.1	Informality and its tax potential.....	16
5.2	Insights for tax policy.....	17
5.2.1	Short run implications	17
5.2.2	Implications for the long run.....	18
6	Conclusion	20
	References.....	21

Tables

Table 1.	Trends in informal sector tax collection since 2004 (ZMK billions).....	7
Table 2.	Informality (% of GDP) for selected African economies.....	12
Table 3.	Average period estimations of the informal sector as percentage of formal GDP.....	15
Table 4.	Informality as percentage of GDP, Schneider 2004 and this study	16
Table 5.	Average growth trends in the formal and informal sector	16

Figures

Figure 1.	Tax revenue to GDP ratio	6
Figure 2.	Evolution of the informal economy in Zambia (1973–2010)	15
Figure 3.	Tax evasion due to informality	17

Acronyms

GDP

Gross Domestic Product

MSMEs

Micro, Small and Medium Enterprises

EXECUTIVE SUMMARY

This paper attempts to establish whether significant scope exists for informal sector taxation in Zambia. It reviews the methods available for measuring informality and compares the results these methods have achieved in different contexts. Applying the Currency Demand Approach to Zambia for the period 1973–2010, it finds that informal GDP averaged 47.7% of official GDP per annum and that the informal sector's tax potential averaged 42% of total tax revenues per annum.

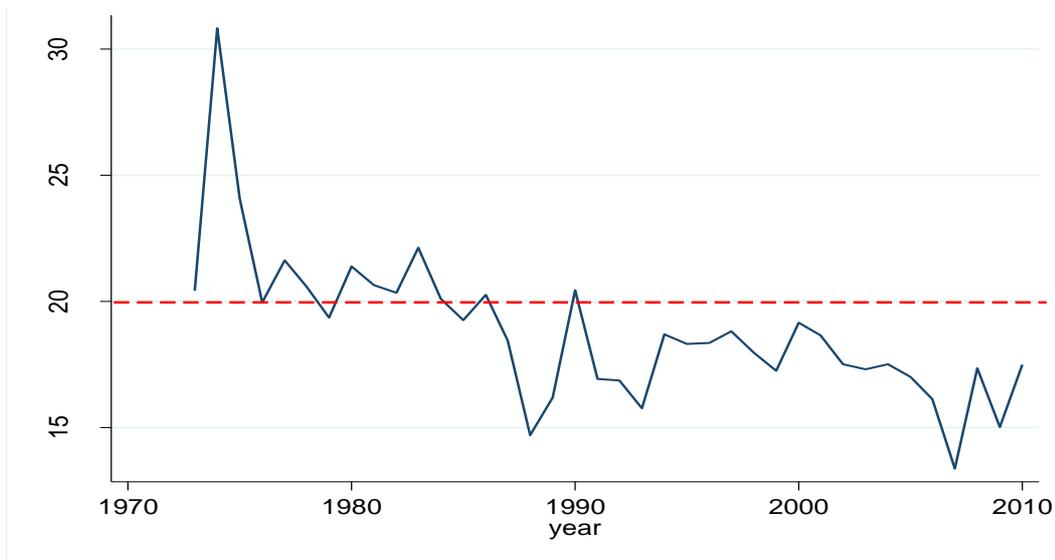
This seemingly large tax potential was found to be thinly spread among the 4 million plus participants in the informal sector, implying that devoting more resources to tax this potential would not be prudent in terms of either equity and efficiency considerations – at least not in the short-to-medium term. Short-to-medium term measures should focus on strengthening existing taxes and mechanisms for fostering the formalisation of the informal sector. This would entail, among other things, exploiting personal income taxes other than PAYE and also strengthening the administration of VAT, the most broad-based tax. In the long term, the informal sector's tax potential cannot be ignored, so the tax system should be simplified and designed in such a way that it encourages informal MSMEs to graduate into the standard tax regime, while also increasing the costs of non-compliance.

Put succinctly, what would be most prudent in both the short-to-medium and long run is not the introduction of more taxes, but rather the strengthening of existing taxes and mechanisms that foster the formalisation of the informal sector.

1 INTRODUCTION

Zambia, like most developing countries, has undertaken tax reforms in a bid to raise more revenue from its tax system. Though tax reforms in Zambia began in the early 1990s, tax revenue has grown only marginally from its sharp decline prior to the reforms. Measured by the Tax-to-GDP ratio, revenue performance has ranged between 15% and 20% of GDP (see Figure 1).

Figure 1. Tax revenue to GDP ratio



Source: Constructed from World Development Indicators

The debate on how best to mobilise more domestic revenue remains ever topical. The two areas of economic activity most frequently identified in public debates as major potential sources of tax revenue are the mining sector and the informal sector. As regards the latter, there have been calls for been for a clear policy direction on collecting tax from this sector (JCTR, CSPR, & CARITAS, 2009).

Of course, the informal sector is not entirely without taxation. Informal sector taxation was introduced in 2004, beginning with the Presumptive Tax on taxis and minibuses and the Turnover Tax on small-scale enterprises. Later, a Base Tax on marketeers (2005) and an Advance Income Tax (AIT) (2007) for cross-border traders were introduced.

The Turnover Tax rate is currently at 3% of the total sales of all firms with gross turnovers of up to ZMK 800 million. The Base Tax is charged at ZMK 500 per day for all marketeers. The AIT rate is 6% of the value of imports exceeding \$500 in value for all unregistered and partially compliant firms.

Revenues from these taxes as a proportion of total income taxes have generally been poor as shown in Table 1 below.

Table 1. Trends in informal sector tax collection since 2004 (ZMK billions)

	2004	2005	2006	2007	2008	2009
Turnover tax	4.4	9.86	13.11	18.75	23.12	24.1
Base tax	-	0.07	0.09	0.04	0.03	0.03
Advance income tax	-	-	-	12.3	60.8	64.6
Presumptive tax on minibuses & taxis	1	1.05	1.76	1.82	2.29	2.15
Total informal sector tax	5.4	10.98	14.96	32.9	86.2	90.88
Total formal income tax	2038	2462	2967	3841	4699	5072.9
Informal sector tax (% of income tax)	0.27	0.45	0.50	0.86	1.84	1.79

Source: Mwila et al. 2011

The sluggish performance of informal sector taxes raises the question of whether there is scope for more informal sector taxation in Zambia. Two major views stand out in this regard. One view is that informality largely comprises marginal and subsistence economic activities that can be ignored for tax purposes altogether (ILO 1972). This view regards taxation of informality as a costly exercise, so the observed “underperformance” of informal sector taxes is not underperformance at all but a self-fulfilling expectation.

Proponents of informal sector taxation, on the other hand, base their arguments on the tax literature which points out that in addition to revenue and equity purposes, taxing informality increases general tax compliance in the formal sector (Terkper 2003) and that economies with high levels of informality are usually characterised by lower tax compliance rates in the formal sector (Alm, Vazquez and Schneider 2004).

Advancing this debate in Zambia requires an empirical investigation. The Zambian government’s efforts at taxing informality, and even the public debates on the informal sector’s tax potential, have been poorly informed. The dearth of data, literature and evidence on the size, evolution, structure, causes and characteristics of the informal sector in Zambia impairs effective tax policy-making. This study is an attempt to fill this knowledge gap by providing insights into the evolution of the size of the informal sector in Zambia and its tax potential over time.

In achieving this main objective, this paper employs the Currency Demand Approach—one of the indirect methods for estimating informality described in Section 2.2—over the period 1973–2010. It finds that, in abstract terms, informal sector has significant tax potential: informal GDP averaged 47.7% of official GDP per annum during the sample period; as a proportion of total tax revenues, the forgone revenues from the informal sector would be as large as 42% per annum. However, looking at these estimates within the real context of the Zambian economy, the paper concludes that this tax potential cannot be realised in the short-to-medium term for both equity and efficiency considerations. The paper therefore asserts that what is needed is not more taxes but rather the strengthening of existing taxes and mechanisms that foster the formalisation of the informal sector. In the long run, the tax system should be simplified and

designed in such a way as to enable the Micro, Small and Medium Enterprises (MSMEs) who have the ability to pay taxes to graduate into the standard tax regime.

The remainder of this paper is organised as follows: Section 2 discusses the concept of informality and various methods used to estimate it; Section 3 provides a review of empirical literature; Section 4 outlines the methodology and data used; Section 5 presents and discusses the findings; and Section 6 concludes.

2 DEFINING AND MEASURING INFORMALITY

There are conceptual and practical challenges that come with estimating informality. The conceptual problem arises because of the absence of a single definition of informality. There are many terms used simply to refer to it: shadow economy, black economy, hidden sector, underground economy, parallel sector, second sector and subterranean sector. The practical challenge arises because it is usually difficult to collect data from informal workers who have an incentive not to disclose their true incomes. Even if alternative methods of estimation are available, their methodologies are often open to debate.

2.1 Defining the informal sector

A precise definition is almost impossible because the informal sector adjusts to changes in tax, sanctions from tax authorities, and to general moral attitudes (Schneider and Enste 2000). Any study's definition of the informal sector will depend on its focus. Some common working definitions in the literature are given below.

Feige (1994) defines it as “all economic activities that contribute to the officially calculated / observed GDP but are currently unregistered”. Smith (1994) defines it as “market based production of goods and services, legal and illegal, that escapes detection in the official estimates of GDP”. Hartzenberg and Leimann (1992) prefer a broader definition: “all economic activities pursued without the sanction of the authorities; i.e. those not recorded in the national accounts.”

As the definitions broaden, they become somewhat vague, allowing for very little consensus. In the case of Zambia, a definition in line with the above would be: “the carrying out of economic activities outside the established control structures of the government; non-registration with Patents and Companies Registration Agency (PACRA), National Pension Scheme Authority (NAPSA), and Zambia Revenue Authority (ZRA)”. This is the definition adopted in this paper.

2.2 Overview of the methods for measuring informality

The methods of estimating informality are generally classified into two categories: direct estimation approaches and indirect estimation approaches.

2.2.1 Direct estimation procedures

These are micro approaches that employ either surveys based on voluntary replies, or tax auditing and other compliance methods.

Surveys target potential informal workers directly in an attempt to quantify participation in the informal sector. They are widely used as a means of collecting data on all aspects of the informal sector. They offer the advantage of providing detailed information about the structure of the informal sector, but the accuracy of their results is heavily dependent on the design of

the questionnaire and the willingness of respondents to cooperate (Alderslade, Talmagem & Freeman 2006).

The **tax audit** approach is based on the discrepancies between income declared for tax purposes and that measured by selective inspections by the tax authorities. Since selection of taxpayers for audit is not random but based on properties of submitted tax returns that indicate the certain likelihood of tax fraud, the sample is not a random one of the whole population (Alderslade, Talmagem, & Freeman 2006).

The major advantage that direct estimation approaches have over indirect approaches is that they provide detailed information about informal activities and the structure and composition of those working in the informal sector.

2.2.2 Indirect methods

Researchers have developed indirect estimation methods involving macroeconomic relationships containing information about the informal sector. They are also called indicator approaches because they use various indicators that contain information about the development of the informal sector over time. We summarise six such approaches here.

The first approach concerns the **discrepancy between national expenditure and national income statistics**. In this approach, an independent estimate of total expenditure on final goods in the sector is compared with an independent estimate of national income. The two ideally should be identical, so any gap between expenditure and income serves as an estimate of the size of informality. The major advantage of this method is that in as much as some individuals can hide their reported incomes, their expenditures will nonetheless be captured. This is a good method only to the extent that all components of expenditure are measured without error. Otherwise, the discrepancy between income and expenditure may in part be due to errors and omissions in the statistics (Alderslade, Talmagem & Freeman 2006).

The second approach concerns the **discrepancy between the official and actual labour forces**. This method estimates the size of the informal sector by getting the residual between the number of people working and the number of official jobs. With reliable and accurate data, this method can give indications of the number, size, decomposition and structure of the informal workforce (Alderslade Talmagem& Freeman 2006). However, not all differences in the rate of participation may be due to informality; the risk of double counting is high because some people in the formal sector have jobs in the informal sector. Estimates from this method can thus be viewed as weak indicators of the development and size of the informal sector and its reliance on reliable and accurate data makes it difficult to apply in developing economies.

The third approach is the **Transactions Approach**. Pioneered by Feige, this method uses Fisher's quantity equation $MV=PT$ as its conceptual framework (*where M=money, V=velocity, P=prices and T=total transactions*). This equation states that in any sector, the volume of payments (MV) should be equal to the volume of transactions (PT). Thus, the difference between estimated payments (MV) and estimated transactions (PT) gives an estimate of "unrecorded transactions". Given these estimates, it becomes possible to estimate the volume

of unrecorded (informal) income by using the velocity from an independent investigation of the ratio of transactions to income (Feige 1994). The main demerits of this approach lie in the underlying assumptions and its heavy demands on the availability of accurate and reliable data, both of which are difficult to maintain in developing countries¹.

The fourth approach is the **Currency Demand Approach**. This method is based on the premise that transactions in the informal sector are usually conducted in cash in order to leave no traces for the authorities (Tanzi 1980). As such, an increase in informal activities is associated with “excess” demand for currency. Using econometrics, observed currency demand is split into currency demanded for formal transactions and currency demanded for informal transactions (excess demand). This excess currency can be turned into informal income using an appropriate velocity of money. The main flaw with this is that not all informal transactions are carried out in cash (some use barter) and the tax burden is not always the major factor influencing informality.²

The fifth approach is the **Physical Input/Electricity Consumption Method**. Pioneered by Kaufmann and Kaliberda, it assumes that the best physical indicator of economic activity is electricity consumption and that the growth of total electricity consumption is an indicator for growth of formal and informal GDP (Kaufmann and Kaliberda 1996). They show that electricity consumption and GDP share the same elasticity, so the difference in growth of GDP and electricity consumption can be attributed to informality. Schneider (2004) criticises this method on grounds that not all informal activities require the use of electricity.³

The final approach is **The Dynamic Multiple Indicators – Multiple Causes model (DYMIMIC)**.⁴ DYMIMIC is based on the statistical theory of unobserved variables, where informality (the unobservable) is caused by multiple factors and manifests itself in multiple forms. The output obtained from a DYMIMIC is a time series index of the informal sector, so there is need to use another macro-model⁵ as a benchmark for the conversion of this index into a monetary value (Frey and Weck 1984). It is more robust than the other indirect methods, especially when country-specific indicators or causes of informality are used. However, the MIMIC or DYMIMIC is criticised on grounds that no theory is used to determine which variables to include as indicators or as causes. In addition, the estimate of the informal sector from this model relies on physical input or monetary methods for the initial levels, thus making it vulnerable to the criticisms of these two methods (Arby, Malik, & Hanif 2010).

¹ See Feige (1994) and Schneider (2004) for in depth analysis of the difficulty in upholding the assumptions.

² See Breuch (2005) and Ahumada et al (2006) on the caveats of this approach.

³ In Zambia, 75% of energy consumption is from wood fuel.

⁴ If this modelling is not dynamic what we have is a Multiple indicators Multiple cause model (MIMIC).

⁵ Usually the currency demand or physical input method is used.

3 REVIEW OF EMPIRICAL LITERATURE

Estimates of informality from all of the different methods are not available for Zambia. The only available estimates available are from Schneider and Enste (2000) and Schneider (2004) using the DYMIMIC approach.⁶ Schneider (2004) applies the DYMIMIC method to 37 African economies including Zambia over the period 1999–2003. The findings suggest that informality in Zambia was above the average levels of informality (see Table 2).

Schneider ranks the three largest informal economies as Zimbabwe, Tanzania and Nigeria (in descending order) and the smallest three as South Africa, Lesotho and Namibia (in ascending order). Attributing informality to tax burden, intensity of regulation, and quality of public service provision for the 37 African economies, he finds evidence that all countries in the sample experienced increasing informality.

Table 2. Informality (% of GDP) for selected African economies

	Country	1999/2000	2001/2002	2002/2003
Top three largest informal economies	Zimbabwe	59.4%	61.0%	63.2 %
	Tanzania	58.3%	59.4%	60.2%
	Nigeria	57.9%	58.6%	59.4%
Fourth ranked	Zambia	48.9%	49.7%	50.8%
	Namibia	31.4%	32.6%	33.4%
Bottom three smallest informal economies	Lesotho	31.3%	32.4%	33.3%
	South Africa	28.4%	29.1%	29.5%
	Average for 37 African economies	41.3%	42.3%	43.2%

Source: Authors' compilation from Schneider 2004

Tanzania and South Africa are the two countries for which we have estimates of informality other than those of Schneider's. In both countries, Schneider's estimates were similar to estimates from other studies which used the Currency Demand and survey approaches. Other estimation approaches, like the Physical Input Method, gave results quite different from these three.⁷

In other developing countries outside Africa (Jamaica, Peru, Venezuela, Mexico and Pakistan) a similar picture is observed. Similarities in results obtained by the DYMIMIC, survey and Currency Demand approaches abound (with Schneider yielding higher results than the other two on average). The Physical Input Method was found to provide estimates dissimilar to those of the aforementioned three approaches.

⁶ Schneider (2004) is an update of findings in Schneider and Enste (2000) extending the time period under investigation.

⁷ See Phiri (2012) for detailed review of literature.

It seems clear from the literature for *developing countries* that the Currency Demand, survey and DYMIMIC will usually give comparable results, while the Physical Input Method typically gives estimates dissimilar to the other three. For *developed countries* as a group, though, a cross-country comparison of eight different estimation approaches for five OECD countries⁸ reveals that the Currency Demand and DYMIMIC approaches yield similar results, while the survey usually yields the lowest values of informality. This is unlike the case for developing countries. The Physical Input Method, Transactions Approach and the actual/official labour force discrepancy approaches did not provide estimates of informality that were similar to those of each other, nor to those of the survey, Currency Demand and DYMIMIC approaches.

This study adopted the Currency Demand Approach because it yields comparable results with the survey and the DYMIMIC approaches. The need to observe how informality has evolved over time, and the unavailability of information about the appropriate causes and indicators of Zambia's informal sector (as inputs in the DYMIMIC), makes the Currency Demand method preferable for our purposes.

⁸ Germany, Great Britain, Italy, US and Canada.

4 METHODOLOGY AND DATA DESCRIPTION

Using the currency demand approach we estimate a currency demand function for the Zambian economy and extract from it the currency demanded in the informal sector by assuming that transactions conducted in the informal sector are made to avert tax obligations. This demand for currency in the informal sector is then converted into informal GDP using an appropriate velocity of income. The data used consisted of annual observations from 1973 to 2010 drawn from various secondary sources such as the Bank of Zambia, Zambia Revenue Authority, International Monetary Fund, and World Bank.

Currency holdings by the public (C) was measured as nominal currency in circulation outside banks (in millions of kwacha) deflated by the GDP deflator. Real GDP (Y) (in millions) was measured in 2005 prices. The average tax rate (T) was approximated by the total revenues normalised by GDP, and the opportunity costs variables –interest rate (R) and inflation (π) – were measured by the 91-day Treasury bill rate and the GDP based inflation rate respectively.

5 RESULTS

Figure 2 gives the estimates of Zambia’s informality over time. The trend was increasing from 1973 to 2000. The highest levels of informality coincide with the era of liberalisation, which was characterised by significant job cuts. A conservative decline in informality as a proportion of GDP is seen after 2007. As a proportion of formal GDP, informality averaged 47.7% per annum (or ZMK 10,900 billion⁹) for the period 1973–2010. In Table 3 we see informality reaching its peak during the 1990s (averaging 56.3% between 1991 and 2000). As of 2010, the informal sector was as large as 40% of GDP.

Figure 2. Evolution of the informal economy in Zambia (1973–2010)



Table 3. Average period estimations of the informal sector as percentage of formal GDP

	1973–1980	1981–1990	1991–2000	2001–2010
Size of informality	39.01%	44.83%	56.27%	48.9%

Source: Authors’ own computation

Comparing the estimates from this study with those from Schneider (2004), a similarity is observed especially for the periods 2001–2003 (see

⁹ All monetary figures estimated are in 2005 prices.

Table 4). Bearing in mind that Schneider uses the DYMIMIC approach, the similarity in results obtained by the two studies reinforces the earlier observation that the DYMIMIC model and the Currency Demand method usually yield comparable results.

Table 4. Informality as percentage of GDP, Schneider 2004 and this study

	1999/2000	2001/2002	2002/2003
Schneider (2004)	48.9%	49.7%	50.8%
This study	61.8%	50.9%	51.5%

Source: Comparison of Schneider (2004) estimates with this study's estimates

Table 5 shows relative changes or growth rates in order to cast the evolution of informality in a different light. The average growth rate over the sample period shows that the formal and informal sectors have grown at almost the same rate over the period considered. The growths of these economies are positively correlated, albeit weakly. (We obtain a correlation coefficient of 0.09 for the period 1974–2010. When the outlier observation for 1974 is omitted, the correlation coefficient for both economies during 1975–2010 rises to 0.232.) This is suggestive of the structuralists' view that there are linkages and synergies between the formal sector and the informal sector. It is also an indication that some incomes earned in the formal sector get spent in the informal sector.

Table 5. Average growth trends in the formal and informal sector

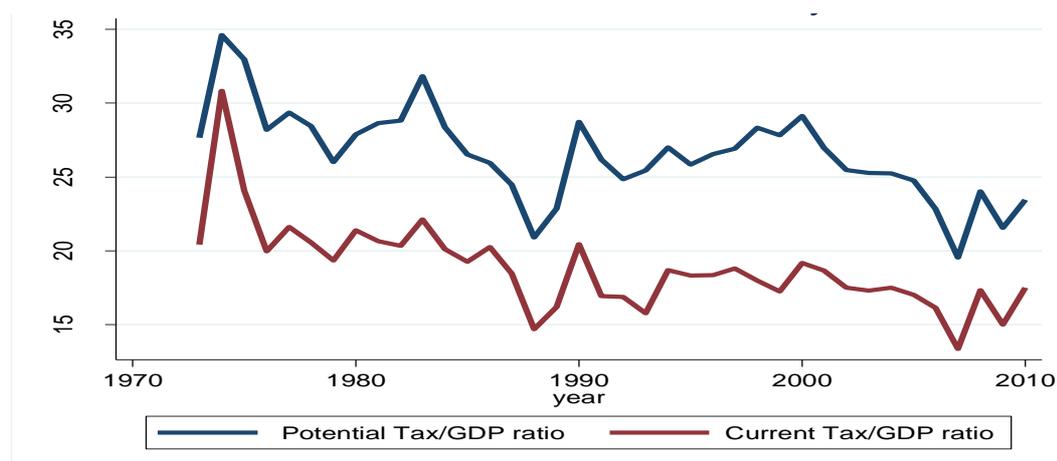
	1974–1980	1981–1990	1991–2000	2001–2010	1974–2010
Informal GDP growth	7.2%	0.5%	3.1%	1.5%	2.7%
Formal GDP growth	9.4%	-2.3%	0.7%	5.7%	2.8%

Source: Authors' own computation

5.1 Informality and its tax potential

We now consider the informal sector's contribution to tax revenue had the informal sector (so estimated) been fully incorporated in the formal sector. Since the methods used by this study are not simulations, we employ a "weak" measure of the informal sector's tax potential. This weak estimate is a question about the extent to which the observed tax rates and estimates of informality can provide insights into the level of tax revenues forgone. We begin by constructing a series of the upper-bound potential Tax-to-GDP ratio by obtaining a product of the observed Tax/GDP ratio (in the formal sector) and the augmented GDP (formal plus informal GDP) as depicted in Figure 3 below. The gap between the potential Tax-to-GDP ratio series and the actual tax-to-GDP ratio series is a reflection of the tax revenues forgone due to the non-taxation of the informal sector.

Figure 3. Tax evasion due to informality



Assuming zero compliance costs, therefore, had the informal sector been incorporated in the formal sector, tax revenues would have been higher by an average maximum of 7.7% of GDP per annum. As a proportion of total tax revenues, these forgone revenues are as large as 42% per annum. For the year 2010, the total amount of tax foregone due to informality was 6% of GDP, or 34% of the 2010 total tax revenues. These amounts are enough to finance the total expenditure of the health sector.¹⁰

In the real world, it must be emphasised, only a fraction of this potential can be actually realised, so we now ask whether it is worthwhile to try.

5.2 Insights for tax policy

To find out whether it is worthwhile to devote more resources to taxing the informal sector, there is need to gain insights into how this tax potential is distributed among the participants in Zambia's informal sector. According to the 2008 labour force survey (CSO 2011), out of the 4.6 million employed persons in Zambia, 89% (4.1 million) were employed in the informal sector while the remaining 11% (0.5 million) were employed in the formal sector. Of the 4.1 million informal sector employees, 3.4 million operated at household level. Further, of the total informal sector employees, 3.2 million were employed in the agricultural sector, while the second largest portion (400,000) were working in trade. This shows that Zambia's largest group of employed persons largely comprises unregistered and hard-to-tax groups such as small-scale traders, famers, small manufacturers, craftsmen, individual professionals and many small-scale businesses.

5.2.1 Short run implications

Notwithstanding its importance as a major source of employment, the distribution of the informal sector's tax potential among over 4 million individuals is too sparse to warrant

¹⁰According to the WHO, this total health expenditure is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

taxation with minimal costs to the economy. Since the informal sector produces about half of what the formal sector produces in monetary terms, it is clear that the incomes generated in the informal sector are largely for basic sustenance; as such, taxation would serve to increase the levels of poverty. This conclusion is corroborated by Shah (2012) who finds that of 75% of the MSMEs in the informal sector in Zambia earn revenues of less than ZMK 1 million per month.

If income tax collections for each taxpayer type relative to their respective tax administration costs are considered, it becomes apparent that the tax revenue collections from informal MSMEs may not be adequate to cover the costs of tax administration. The bulk of income tax revenue contributions (about 75–80%) come from the Large Taxpayer's unit, which has about 3.3% of ZRA staff. The Medium Taxpayer office is allocated roughly 10% of the staff and they manage to rake in 18–23% of revenue contributions from income taxes. The Small Taxpayer office is allocated about 14% of the staff but only collects 2% of income tax revenue (Mulenga 2011) These figures suggest that the cost of that massively increasing tax collection from the informal sector would be intolerable.

Therefore in order to tap into some of the informal sector resources currently escaping the tax net, the following policies are feasible in the short to medium term. First, it would be worthwhile to reduce levels of non-compliance. Currently, personal income tax is largely an employees' tax deducted at source (PAYE). The heavy reliance on PAYE implies that regardless of individuals' other incomes, tax deducted from their salaries usually constitutes their total and only liability for tax. Furthermore, individuals who do not earn income deductible at source may escape the tax net completely. Good examples of this are freelancing by various professionals and rental income received by a growing housing market.

Second, small businesses' incentives for formalisation should be enhanced. The government has in the past used deterrent and punitive measures to compel businesses to register for income tax or VAT. For example, the Advance Income Tax (AIT) for traders was raised from 3% to 6% in 2009 to encourage registration for tax purposes and to increase compliance given that traders opted to remain unregistered even after the introduction of AIT.

Third, the administration of VAT needs to be improved. As the most broad-based tax in Zambia, VAT captures some of the transactions in the informal sector when informal sector participants purchase goods and services from the formal sector. Over time, VAT exemptions should be rationalised and streamlined.

5.2.2 Implications for the long run

In the long run, the tax potential of the informal sector cannot be ignored. It would be prudent to place informal MSMEs within an appropriately designed framework that assigns administrative resources to collecting tax from this sector. When taxpayers are demarcated into small, medium and large, a clustering of taxpayers is usually observed just below the tax threshold as they try to minimise their tax burdens. In other words, a demarcation of this sort hinders growth of small businesses (and economic growth in the long run) because it does not

encourage them to graduate into the standard tax regime and face higher compliance costs. This poses a constraint on the long-term revenue potential and is therefore not in conformity with the objectives of a tax system.

Tax simplification and the minimisation of the differential tax treatment arising from differences in taxpayer size should be emphasised in order to encourage easy graduation of MSMEs into the standard tax regime. The main challenge is to come up with incentives that encourage these small businesses to voluntarily opt into the standard tax system and begin to enjoy the benefits of formalisation.

Alternatively, since the decision to participate in the informal sector also involves weighing the cost and the benefits of being formal or informal, measures could be taken to raise the costs of being informal relative to those of being formal. As a benchmark, Shah (2012) considers the cost–benefit situation at play in countries with low levels of informality elsewhere in Africa and notices a sharp delineation in the access to public infrastructure services (such as telephone services, transport systems, electricity and water and sanitation) between formal and informal firms.¹¹ In Zambia, however, Shah finds no significant difference in access to most public infrastructure services between the formal and informal MSMEs in the urban areas.¹² In addition, these urban informal MSMEs are seldom recipients of tax inspection visits. She therefore advocates that policy-makers enforce stricter tax code on these urban informal operators so as to increase the costs of non-compliance which would in turn increase the likelihood of formalisation.

¹¹ For example, in South Africa 30 % informal firms have access to electricity while access rates for formal firms are 95%.

¹² For example, 76% of urban informal MSMEs have access to electricity compared to 95% for urban formal firms

6 CONCLUSION

This paper attempted to establish whether significant scope exists for informal sector taxation in Zambia using the Currency Demand Approach over the period 1973–2010. It found that informal GDP has averaged 47.7% of official GDP per annum and that the informal sector's tax potential has averaged 42% of total tax revenues per annum.

This seemingly large tax potential was found to be thinly spread among the 4 million plus participants in the informal sector, implying that devoting more resources to tax this potential would not be prudent in terms of either equity and efficiency considerations – at least not in the short-to-medium term. Short-to-medium term measures should focus on strengthening existing taxes and mechanisms for fostering the formalisation of the informal sector. This would entail, among other things, exploiting personal income taxes other than PAYE and also strengthening the administration of VAT, the most broad-based tax. In the long term, the informal sector's tax potential cannot be ignored, so the tax system should be simplified and designed in such a way that it encourages informal MSMEs to graduate into the standard tax regime, while also increasing the costs of non-compliance.

Put succinctly, what would be most prudent in both the short-to-medium and long run is not the introduction of more taxes, but rather the strengthening of existing taxes and mechanisms that foster the formalisation of the informal sector.

REFERENCES

- Ahumada, H., A. Facundo and C. Alfredo (2006) The Demand for Currency Approach and the Size of the Shadow Economy: A Critical Assessment. Berkeley Program in Law and Economics, Working Paper Series. <http://www.escholarship.org/uc/item/6zn9p98b>
- Alderslade, J., Talmagem, J. and Y. Freeman (2006) Measuring the Informal Economy-One Neighborhood at a Time. A Discussion Paper Prepared for the Brookings Institution Metropolitan Policy Program. Brookings Institution. http://www.brookings.edu/metro/umi/pubs/20060905_informaleconomy.pdf
- Alm, J., J. Vazquez & F. Schneider (2004) Sizing the Problem of the Hard-To-Tax. Paper for the Andrew Young School of Policy Studies Hard to Tax Conference 2003.
- Arby, M., M. Malik and N. Hanif (2010) Size of the Informal Economy in Pakistan. Karachi: State Bank of Pakistan, SRB Working Paper Series no. 33. <http://mpra.ub.uni-muenchen.de/22617>
- Breuch, T. (2005) Fragility of Tanzi's Method of Estimating the Underground Economy. Australian National University, Economics. Mimeo.
- CSO (Central Statistical Office) (2011) Zambia Labour Force Survey 2008. Lusaka: Central Statistical Office.
- Feige, L. (1994). The Underground Economy and the Currency Enigma, *Public Finances Publiques* Vol. 49: 119–136.
- Frey, B. and H. Weck (1984) The Hidden Economy as an Unobservable Variable, *European Economic Review*(26): 33–53.
- Hartzenberg, M. and A. Leimann (1992) The Informal Economy and its Growth Potential in South Africa. Oxford: Oxford University Press.
- ILO (International Labour Office) (1972) Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya. Geneva: International Labour Office.
- JCTR, CSPR, & CARITAS (2009) Economic Growth and Equity. Investing in the Dignity of the People. Pre-Budget Press Release, 5 August. Lusaka: Jesuit Centre for Theological Reflection, Civil Society for Poverty Reduction and CARITAS.
- Kaufmann, D. and A. Kaliberda (1996) Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economies: A Framework of Analysis and Evidence, in B. Kaminski, *Economic Transition in Russia and the New States of Eurasia*. New York: M.E Sharpe.
- Mwila, A., D. Manley, P. Chileshe, E. Phiri & K. Mpembamoto (2011) The Taxation System in Zambia. Lusaka: Jesuit Centre for Theological Reflection.

- Phiri, C. S. (2012) *The Evolution of the Informal Economy and Its Implications for Tax Policy in Zambia*. MA Thesis. Lusaka: University of Zambia.
- Schneider, F. (2004) *The Size of the Shadow Economies of 145 Countries All Over the World: First Results over the Period 1999 to 2003*. Bonn: Institute for the Study of Labor, IZA DP No. 1431.
- Schneider, F., and D. Enste (2000) *Shadow Economies: Size, Causes, and Consequences*, *Journal of Economic Literature* Vol. 38: 77–144.
- Shah, M. (2012) *The Informal Sector in Zambia: Can it Disappear? Should it Disappear?* London: International Growth Centre, Working Paper 12/0425.
- Smith, P. (1994) "Assessing the Size of the Underground Economy: The Statistics Canada Perspective", *The Canadian Economic Observer* 7(5).
- Tanzi, V. (1980) *The Underground Economy in the United States: Estimates and Implications*, *IMF Staff Papers* Vol. 80: 283–305.
- Terkper, S. (2003) *Managing Small and Medium-Size Taxpayers in Developing Countries*, *Tax Notes International*, 211–234.
- Mulenga, C. (2011) *SME Taxation in Zambia*. Presentation to the International Growth Centre Workshop on Informal Sector Taxation in Zambia, Lusaka, 16 November 2011.