# **Final report**

Exploring scalable, efficient innovations to improve tax compliance among MSMEs

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## **Table of Contents**

Executive Summary	2
Project Background	3
Study Objectives	3
Scope of Study: Definition of MSMEs	3
Survey Design	6
Survey Instrument Overview	6
Sampling Strategy	6
Implementation Details	6
Findings	7
Respondent Demographics	7
Social Economic Status and Relationship to Government Services	8
Social Desirability Measures	11
MSME Characteristics	13
MSME Revenue	13
MSMEs Reliance on Government Services	15
Tax Compliance Rates Among MSMEs	16
Factors Affecting Tax Compliance	19
Individual-Level Factors Affecting Tax Compliance	21
Business-Level Factors Affecting Tax Compliance	26
Tax System-Level Factors Affecting Tax Compliance	28
Quantitative Analysis of Tax Compliance Determinants	36
Conclusions	38
Bibliography	39
Appendix One	40

## **Executive Summary**

In this report we present findings on the tax behavior of Medium, Small and Micro Enterprises (MSMEs) in Zambia. We report findings from an original survey that was carried out in Lusaka and Central Province in April and May 2018. The report documents findings about individual, business and tax system factors that affect tax compliance. We find that tax compliance among MSMEs in our sample is quite low: 30% of MSME operators pay tax, and some in this group are making only partial payments. A rate of 30% compliance was found via several different measures of tax compliance.

Several patterns emerge from the data in terms of likely barriers to tax compliance, with the findings having clear policy implications for ZRA. First, tax awareness is low. A third of MSMEs have not heard of the ZRA tax system, and very few of them are even registered businesses. Similarly, the intractable logistics of paying taxes to ZRA is an issue. Proximity to bank branches and proximity to ZRA offices are low. In fact, ten percent of the sample rated the distance to a ZRA office as the number one barrier to tax compliance. Eighty percent of the sample agrees that having a ZRA agent in the area of their business would increase tax compliance. A third set of barriers relate to negative perceptions of ZRA. Few MSMEs understand how tax revenue is used and they are unable to find out the information they seek; if they do, they do not trust that information.

One promising intervention to increase compliance may be partnering with the city and district councils. Most registered MSMEs are registered with these councils. In addition, social media use is quite high among MSMEs, and it is used not only for personal purposes but for business-related purposes as well. In combination, these findings suggest that a relatively low-cost intervention might be to use social media to spread information about tax compliance rates and social norms regarding tax compliance.

## Project Background

This project is a result of a dynamic and growing partnership between the Zambia Revenue Authority (ZRA), the International Growth Center (IGC), and the research team. It arose out of initial interest by the ZRA to understand the potential uptake of mobile tax payment solutions amongst medium, small and micro Enterprises (MSMEs) in Zambia. The research team broadened the study design to look into the various barriers to tax compliance that MSMEs face with the aim of better understanding the tax behavior of MSMEs in Zambia and possibly providing insights applicable in other sub-Saharan African countries. In keeping with the IGC's model of cogeneration of knowledge, the research team worked in close partnership with ZRA counterparts in the Department of Research and Policy to produce findings rooted in evidence and targeted at improving policy design and implementation.

## Study Objectives

The objectives of the study are as follows:

- i) To determine the scope of the potential tax base among MSMEs, and establish optimal boundary criteria for a pilot of several innovations among MSMEs.
- ii) To investigate the primary barriers to tax compliance among MSMEs.
- iii) To determine the feasibility of possible innovations to improve tax compliance among MSMEs.

## Scope of Study: Definition of MSMEs

Medium, Small and Micro Enterprises (MSMEs) dominate the firm landscape in developing countries. The size of the sector is large and growing and for many sub-Saharan African countries accounts for the employment of the vast majority of the labor force. A universal definition of MSMEs does not exist, and attempts to define MSMEs have been largely unsuccessful, due to vast differences in country contexts with various factors such as business culture, country's population, industry and the level of international economic integration (Kushnir, 2010).

The most credible attempt at providing a definition comes from (Gibson & van der Vaart, 2008) who define an SME in the context of a developing country as,

"... a formal enterprise with annual turnover, in U.S. dollar terms, of between 10 and 1000 times the mean per capita gross national income, at purchasing power parity, of the country in which it operates."

In Zambia, the Ministry of Commerce, Trade and Industry, through the Micro, Small and Medium Enterprise Development Policy, categorizes enterprises based on four considerations: registration with the Registrar of Companies, total investment excluding land and buildings, annual turnover, and the number of employees (GRZ, 2008). MSMEs in Zambia therefore sort into the categories of micro, small and medium enterprises in line with the provisions in this definition.

The ZRA has however created its own classification system of enterprises for tax purposes. According to the Income Tax Act (GRZ, 2017), three categories of tax payers exist for tax purposes in Zambia: large, medium and small. This classification is primarily determined by two factors: annual turnover and a specific set of criterion that excludes certain types of income from the mainstream taxation regime and creates special rules or taxes for them. For instance, income from mining is subject to mineral royalties and cannot

<sup>&</sup>lt;sup>1</sup> See appendix one for the breakdowns of the categories.

be taxed under the presumptive tax scheme designed for small enterprises regardless of turnover (ZRA, 2016).

Generally, as a rule, the enterprises that possess the characteristics that would merit them to be MSME under the ZRA classification system fall into the category of small tax payers. These are firms whose annual turnover is less than K 800,000.00. These firms are typically described as being in the informal sector.<sup>2</sup> For the purposes of this report an MSME will assume the definition that the ZRA ascribes to it, which is an enterprise that has an annual turnover of less than K 800,000.00. This report goes beyond the brick and mortar MSMEs and also looks at the tax compliance behavior of transport service operators and marketeers who also fall into the broader category of the informal sector and are subject to ZRA's other presumptive taxes.

### Tax reform in the MSME sector in Zambia

The MSME sector in Zambia is large, with a recent census of firms estimating the number of enterprises at 47,428 in Lusaka alone (Ashraf et al., 2017). Beyond size, the sector is responsible for the employment of a large segment of the labor force; two-thirds of the workforce in Zambia is in the non-formal sector (CSO, 2017). Understanding the business conditions, tax compliance behavior, perceptions of tax collecting agencies and government service provision facing these firms is therefore extremely important.

One of the primary objectives of the Zambian government over the years has been to broaden the tax base to include the informal sector where the majority of MSMEs are located in (AfDB, 2014). One of the defining features of the informal sector is the lack of tax payment, although this view is now being reconsidered as informal sector workers have been found to be paying a number of users fees and taxes (Resnick, 2018). The goal of broadening the tax base has historically been motivated by a desire to increase public revenues, include the informal sector in the mainstream economy, and to more fairly distribute the tax burden from a narrow base so as to have a fairer and more inclusive tax regime (GIZ, 2011). As a long term objective, a tax system that is broader has numerous benefits beyond increased revenue collection in that it helps build a health fiscal contract between the state and its citizens. This is important for the strengthening of institutions, good governance and accountability (Besley and Persson, 2014).

The current taxation scheme of MSMEs in Zambia has undergone a number of transitions over the years. The most significant attempt to draw the MSME sector into the tax next began in 2004 with the creation of a presumptive tax regime focused on the sector. Prior to 2004, MSMEs in Zambia were taxed in the exact same way as all other enterprises through a profit based tax system. Three presumptive taxes targeted at the informal sector were then introduced. A turnover tax of three percent on gross sales for MSMEs with an annual turnover of less than K800,000.00, a daily base tax levied on market traders that translates into K150 annually, as well as a presumptive tax on public service transport operators which is based on the sitting capacity of the vehicle (Nhekairo,2014, Resnick, 2018). The introduction of these presumptive taxes was seen as a way of creating a nursey environment in which MSMEs would grow into larger firms that could then be mainstreamed into the normal profit based tax system (Nhekairo, 2014). The MSME sector is further regarded by the Zambian government as a potential engine for growth and poverty reduction (GRZ, 2008).

To further respond to the needs of MSMEs, further reform took place in 2006, with the ZRA creating a specific office to address the needs of small tax payers with the creation of the small tax payers' office. While a targeted office exists for MSMEs the department has faced unique challenges related to implementation and design. These challenges include a lack of in-depth knowledge of the sector, a lack of understanding in its composition and structure, and weak capacity within the ZRA (GIZ, 2011). We would also add a lack of understanding about the tax behavior of these firms, which is the area to which this report seeks to contribute. Other recent administrative changes dating back to 2013 include a new online system

<sup>&</sup>lt;sup>2</sup> The definition of the informal sector is a contested one. Some argue that the payment of tax qualifies a firm to be considered formal. However, the term informal sector is generally used to make a distinction between firms that started out informal and later formalised and firms that carry out some of their operations in an informal way.

that requires online filing of returns and payments by all tax payers including MSMEs (ZRA, 2017). While the other modes of payment-such as physically filing returns at the tax office-remain available, there has been a general push to encourage all segments of the tax paying population use the system including MSMEs. As we report below, uptake of the online payments system is not very widespread. Alternative filing options is an area ripe for future exploration.

In the area of tax compliance, the ZRA reports that the rates of compliance for the tax types that MSMEs pay are very low. They further report that filing compliance among these taxpayers has been declining since 2010, though the revenue collected in absolute terms from the sector have been increasing over the period. What is particularly concerning is that these compliance figures relate to formal firms that are registered with the ZRA and little is known about the tax behaviour of informal firms, which are, in fact, the majority of MSMEs in Zambia. The table below reports the revenue contribution by tax type of the categories of presumptive taxes. In 2016, the total amount of presumptive taxes collected amounted to K90.1 million which when compared with the total revenue collected across all tax types in 2016- K28 billion- amounts to less than 1 percent of total revenue (GRZ, 2017).

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Turnover tax	18.70	23.12	24.10	21.99	26.89	31.59	11.96	65.73	73.88	87.13
Base tax	0.04	0.03	0.03	-	-	-	-	-	-	-
Presumptive tax on minibuses & taxis	1.82	2.29	2.15	1.52	2.07	2.23	2.20	7.08	10.09	2.97
Total presumptive taxes paid	20.56	25.44	26.29	23.51	28.96	33.82	14.16	72.81	83.97	90.1

Source: ZRA (figures in millions of Kwacha)

## Survey Design

## Survey Instrument Overview

The data collection tool that we employed was a survey containing questions on five key sections: general demographic data, socioeconomic factors, business information, tax compliance measures, political participation and attitudes, and reliance on services. It also explored many of the oft-cited barriers to tax compliance, such as low rates of monitoring and enforcement of the tax law. A conjoint experiment was also embedded in the study to shed light on the social and group-level dynamics of tax compliance.<sup>3</sup> A list experiment provides a measure of tax compliance less prone to social desirability bias than direct questions. The survey was aimed at collecting data from two sub groups: MSMEs owners and providers of transport services – taxi and bus operators who provide services to the public.

## Sampling Strategy

The research team employed a three-stage sampling strategy to sample MSMEs. First, after discussions with ZRA, we purposively selected two commercially active provinces within Zambia: Central and Lusaka. Then, with the assistance of the local council authorities in these provinces, we compiled a list of markets in the metropolitan areas of Lusaka, Kabwe, and Kapiri Mposhi, the primary cities in Central and Lusaka provinces. We draw a stratified random sample of markets off of this list, removing the markets selected for the pilot and stratifying on market size. A replacement list of markets provides additional sampling locations; in the event the sampled markets are inactive or smaller than anticipated. The sample includes 41 markets in Lusaka, 7 markets in Kabwe, and 4 markets in Kapiri Mposhi.

At each sampled market, the research manager completes a random walk protocol to randomly assign a team of three enumerators to survey throughout the market and surrounding businesses. The three enumerators also employ a random walk protocol to sample individual respondents dispersed throughout their enumeration area. The sampling protocol results in an average of 23 respondents per market and 1390 respondents in the sample in total. The survey also sampled businesses in the central business districts of these towns.

We assert that the sampling strategy generally yielded a representative sample of MSMEs in Lusaka and Central provinces (though of course we lack the data on MSMEs that would be required to formally test this assumption). It is important to note that MSMEs in other provinces likely differ from the survey sample in critical ways.

### Implementation Details

Data collection took place during the months of April and May 2018 in Lusaka and Central Province. The data collection team was compromised of a lead enumerator, 3 senior enumerators and 8 enumerators. Two of the eight enumerators were interns from the Zambia Revenue Authority. This was a mutually beneficial arrangement with the addition of the interns to the data collection team increasing the number of data collectors and enabled us to collect more data. The interns in turn got an opportunity to participate in a survey and acquire data collection skills. The team was divided into four individual teams who were assigned separate and distinct markets from which to collect data. One of the four teams conducted the survey in Central Province and covered the two towns of Kapiri Mposhi and Kabwe.

<sup>&</sup>lt;sup>3</sup> The results of the conjoint experiment are not presented in this ZRA report, and will be released as part of the first academic paper out of this research project.

One of the major challenges encountered when conducting the study was the recruitment of respondents for one of the sub-groups: public bus operators and taxi owners. The public bus operators were difficult to access due to the heavy politicization of bus stations in Zambia where these operators predominantly operate from. Consequently, they were dropped out of the sample. While it was possible to recruit taxi operators, the challenge that arose was that some of the taxi operators were unable to commit to the 45-minute survey due to the nature of their business which requires them to drive off unexpectedly when they source a client. This challenge was addressed with the enumerators being strategic in targeting the taxi operators during off-peak hours or pre-scheduling interviews.

Some alteration also had to be made to the initial design as we had intended to sample 25 market hubs in Zambia but ended up sampling 52 hubs partially due to some of the sampling sites being too small for the effective implementation of the sampling protocol to be carried out fully. Data collection also had to be extended by four days due to the length of the survey instrument. The extra four days enabled the research team to collect the required number of surveys. Some sampling sites also had to be dropped due to refused entry by political operatives who were uncomfortable with the survey being conducted. This issue was addressed by drawing a replacement site off of the replacement sampling list.

## Findings

## Respondent Demographics

First, we provide some information about the demographics and background of the respondents in the survey.<sup>4</sup> Along with reporting the characteristics of the sample, we provide some interpretation of how these characteristics may affect tax compliance or condition the effectiveness of future interventions.

Variable	Mean/Percenta ge	No. of Observation s
Gender (Male)	0.69	1391
Age	35.34 years	1350
Education		1355
Attended but did not complete primary school	0.08	
Completed primary school	0.10	
Attended but did not complete secondary school	0.26	
Completed secondary school	0.32	
Attended but did not complete post-secondary school	0.04	
Obtained a degree from a post-secondary institution	0.10	
that is not a university		
Other	0.10	
Levels of Literacy		1317
Could not read	0.05	
Could read some of the card	0.05	
Could read the whole card with difficulty	0.17	
Could read the whole card with ease	0.72	
Tribe		1329
Bemba	0.32	
Lozi	0.04	
Nyanja	0.13	
Tonga	0.09	

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<sup>&</sup>lt;sup>4</sup> For the analysis of many survey questions, we removed the responses "Don't know" and "Declined to answer." The analysis focuses on the most useful and interpretable data provided by respondents. Note also that questions were not necessarily asked in the order in which we present them in this report.

Other	0.43	
Percentage of sample		
Urban	0.79	
Rural	0.04	
Peri-Urban	0.17	

The majority – 61.9 percent – of our survey's respondents are male. This is consistent with the gender statistics reported in similar surveys conducted in Zambia with the majority of MSME owners being male. When analyzed by sector the transportation sector is found to be dominated by males with 99 percent of respondents indicating that they were male. The only sector dominated by women was the accommodation sector. The average age in our sample was just over 35, with 68 percent between 22 and 48.5 This again is consistent with other surveys with the 2014 Labor Force Survey reporting the average age of an MSME owner in Zambia to be 38.7 (CSO, 2015).

Most respondents did not complete education beyond secondary school, and 48.8 percent said they did not complete secondary school. However, the vast majority of respondents were able to read a card we showed them, demonstrating literacy. 90 percent of respondents were able to do this, and 72.1 percent were able to do this with ease. Literacy does not seem to be a barrier to tax compliance.

The most common tribe with which respondents identified was Bemba – 31.9 percent of the sample. Even more popular than Bemba, though, was the choice "other," meaning the participants in the sample are likely quite diverse. The survey was conducted in two of Zambia's more urban provinces so it was not surprising that most respondents indicated that they live in an urban area – 79.2 percent – and only 4.2 percent live in rural areas.

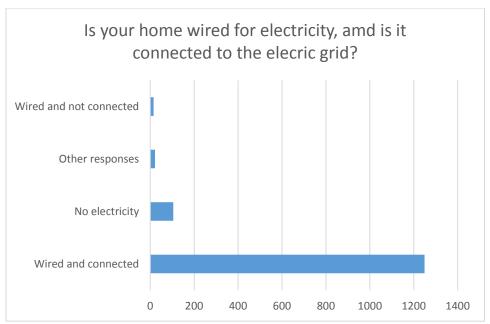
### Social Economic Status and

The social-economic status of an MSME owner is an important factor that can have a bearing on tax compliance.



Approximately sixty percent of respondents said they rent their places of residence. It is likely that this majority has less wealth than their counterparts who own a residence.

<sup>5</sup> There was a subset of the sample that did not know their exact age or were unwilling to report it. When asked to select an age bracket in which they thought themselves to be, we found that this group was slightly older on average, but not enough to change the distribution or to significantly alter our average.

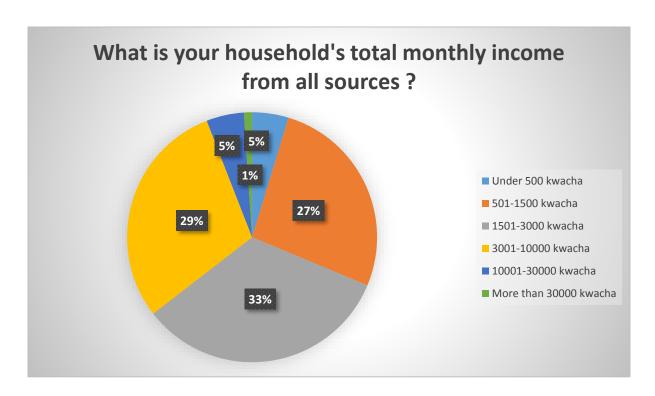


Just over 91 percent of respondents have electricity wired and connected to their homes, so we can conclude that lack of access to electricity (to run a computer for online filing or charge a phone for mobile filing, for example) is not a major barrier to tax compliance. This also indicates that the population of MSMEs is generally in the middle or high end of the socioeconomic distribution, given that the national electrification rate is 26% nation-wide and 45% in urban areas (CIA World Factbook 2013).

How many of the following belongings are owned by your household?				
Houses	·			
Min	Max	Mean	Standard Deviation	Total
0	14	0.63	0.94	1309
Acres of farmland				
Min	Max	Mean	Standard Deviation	Total
0	100	0.59	0.94	1309
Acres of undevelop	ped plots			
Min	Max	Mean	Standard Deviation	Total
0	40	0.45	2.00	1287
Chickens				
Min	Max	Mean	Standard Deviation	Total
0	1000	6.12	45.49	1300
Goats				
Min	Max	Mean	Standard Deviation	Total
0	150	0.62	5.96	1287
Bicycles				
Min	Max	Mean	Standard Deviation	Total
0	8	0.33	0.67	1292
Cars				
Min	Max	Mean	Standard Deviation	Total
0	8	0.41	0.75	1296
Smart Phones				
Min	Max	Mean	Standard Deviation	Total
0	10	1.39	1.40	1321
Televisions				
Min	Max	Mean	Standard Deviation	Total
0	10	1.16	0.73	1357
Computers				
Min	Max	Mean	Standard Deviation	Total

0	10	0.44	0.83	1286
Refrigerators				
Min	Max	Mean	Standard Deviation	Total

Among our respondents, the average household owns more smartphones than televisions, and three times as many smartphones as computers. Potentially because most of our respondents live in urban areas, about 68 percent own less than 1.5 acres of farmland, but 68 percent of respondents do own between 0 and 52 chickens. Deviating from Zambia-wide patterns, cars in our sample are more common than bicycles, but only slightly. We conclude that traveling a far distance to pay taxes might be difficult for many respondents, but reaching them via smartphone seems very attainable.



Most respondents – 89.4 percent – said their total monthly income was between K501 and K10,000. More specifically, 33.2 percent of the sample said their monthly income was between K1,501 and K3,000 so 64.5 percent of the sample said their monthly income was below K3,000. The monthly tax exempt threshold for employees in Zambia is K3,300 which implies that 64.5 percent of respondents are not eligible to pay employment tax. Most of our sample have fairly low incomes, which we discuss as a possible barrier to tax compliance.

### Relationship to Government Services

Reliance on public services is another important factor that can have a bearing on tax compliance. We sought to understand government service provision in the areas of health and education service provision.

What type of school did or do your children attend for education	1?
Public/Government	467
Public-government informal	274
Private	265
Public-government private-boarding	14

Public-government religious	9
Religious	7
Other	20

Seventy-seven percent of respondents said they were paying for the education of some of their dependents, and most said their children attend a public or government school, indicating that the vast majority of MSME owners and managers are invested in the education sector aspect of government service provision. Still, 25.1 percent said their children attended a private school.

Where do your family members usually go for a health check-up/treatment when someone in your family is sick? Mark up to three.			
Government hospital/clinic	938		
Government hospital/clinic and private hospital/clinic	212		
Private hospital/clinic	78		
Local medical store and government hospital/clinic	45		
Local medical store and government hospital/clinic and private hospital/clinic	44		
Health post and government hospital/clinic	15		
Other	37		

Most respondents said they go to government hospitals when someone in their family gets sick, with only 6 percent choosing an answer that does not include "government hospital" among the preferred place. It appears that our respondents are quite dependent on government medical services, which we hope makes them more invested in the tax system that funds these services.

## Social Desirability Measures

In your day to day life, have there been occasions when you took advantage of someone?	In your day to day life, do you sometimes try to get even (get revenge) rather than forgive and forget?	In your day to day life, are you always polite to everyone, including people who are disagreeable?	Number of responses
No	No	No	158
No	No	Yes	520
No	Yes	No	65
No	Yes	Yes	93
Yes	No	No	95
Yes	No	Yes	120
Yes	Yes	No	176
Yes	Yes	Yes	68

We asked a battery of questions designed to measure the respondent's vulnerability to social desirability bias: in other words, respondents saying what they think we want to hear rather than the truth. The idea behind these questions is that, in reality, everyone has at some point taken advantage of someone, tried to get revenge rather than forgive and forget, and failed to be polite. It is therefore likely that respondents who answer "No," "No," and "Yes" to the following questions are not giving truthful answers in an effort to appear more in line with what is socially expected of them.

Indeed, more than 40 percent of respondents said they do not take advantage of others, nor do they get revenge rather than "forgive and forget," and that they are polite to everyone, including people who are disagreeable. These individuals are likely saying what they think is most socially acceptable in answering

these questions, and perhaps are doing the same when asking the questions about taxes.<sup>6</sup> However, the second most common response (though only 13.6 percent) said the opposite. This group admitted they sometimes take advantage of others, try to get revenge, and are not always polite. This indicates our sample divides into two modal types of respondents: likely to lie; and likely to tell the truth.

<sup>&</sup>lt;sup>6</sup> This is also important because information on taxes is sensitive and there is a tendency to report more favourable responses than the actual.

#### **MSME** Characteristics

We next consider a series of questions regarding the nature of the respondent's business, once again reporting and interpreting the findings as much as possible.

Variable	Mean/percentage	No. of Observations
Category of Industry		1390
Wholesale and tertiary trade; repair of motor	0.32	
vehicles and motorcycles		
Transportation and storage	0.09	
Manufacturing	0.05	
Agriculture, forestry, and fishing	0.02	
Accommodation and food service activities	0.02	
Other service activities	0.13	
Other	0.36	
Frequency of Business Operations		
At least once a week, but not every day	0.36	
Every day	0.63	
Number of Employees	0.59 employees	
Full time employees	1.45 employees	
Unpaid workers (Family/friends)	0.44employees	

The most common industry<sup>7</sup> in our sample includes wholesale and tertiary trade as well as vehicle repair. The three most popular industries of which respondents said their business was a part were all service-based, and this accounts for 85 percent of the sample. Indeed, 94 percent of those asked whether their business provides a good, service, or both answered that they provide exclusively a service.

Just under 64 percent of respondents said that they operate their business every day, and combining this with the second-most popular response, we note that over 99 percent of the sample said they operate their business at least once a week. We believe this means these businesses are perhaps part of the informal economy, but are nonetheless established and stable. In other words, inability to locate the businesses should not be a barrier to tax compliance.

Furthermore, these are mostly year-round businesses rather than ones that are seasonal or otherwise inconsistent. It is therefore very unlikely that the 98.6 percent of respondents who said they always operate their business throughout the year are evading taxes because they view the business as temporary or a "side" income. Broadly, the MSMEs in our sample are full-time, year-round businesses.

On average, the individuals we surveyed said they have less than one employee, meaning it is very common for the respondents to be running their business completely on their own. Indeed, about 68 percent of respondents have fewer than two employees. These are mostly small operations with limited worker-hours at their disposal. Of those who did have an employee, 68 percent have between zero and four who were full-time. On average, these businesses have fewer than one-third as many family members or friends who are unpaid workers as they do full time employees.

#### MSME Revenue

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<sup>&</sup>lt;sup>7</sup> To calculate this, we removed the response "other" because we cannot know what industry of which these businesses are a part.

On an average day, how much is your revenue?				
Min Max Mean Standard Deviation Total				
0	60003	693.75	2388.18	1354

Sixty-eight percent of respondents reported that their average revenue is between 0 and 3082 kwacha per day. Revenue of 3000 kwacha per day equates to 750000 kwacha per year, if a business is open five days a week for 50 weeks per year. This implies that most – though not all – of these respondents' businesses would thus qualify to pay the turnover tax rather than the profit tax, based on the threshold of 800,000 for the profit tax.

In an average month, what is the sum of purchasing goods to sell, paying workers, supplies to maintain the business, repayment of a business loan, payment of association fees, payment of tax to ZRA, and other expenses?						
Min Max Mean Standard Deviation Total						
0	720625	6369.14	22808.03	1383		

We compared the average monthly expenses of about 6369 kwacha with the average daily revenue (about 694 kwacha). To break even, the average respondent would have to operate their business for between nine and ten days in a month. Since most said they operate their business almost every day, we would expect the average business to be making a profit, at least when only considering revenue and business expenses. As can be seen in the question text in the table above, our question about expenses included most - if not all - of the common expense categories.

Looking back one year, to April of 2017, how do you rate your profits today?			
Much lower	434		
Lower than April of 2017, but not less than half	486		
Same economic conditions	240		
Higher than April of 2017, but not more than double	171		
Much higher than April of 2017 – more than double	29		

Looking back one year, to April of 2017, how do you rate economic conditions for your business today?		
Much worse	437	
Worse than April of 2017	535	
Same economic conditions	268	
Better than April of 2017	103	
Much better	14	

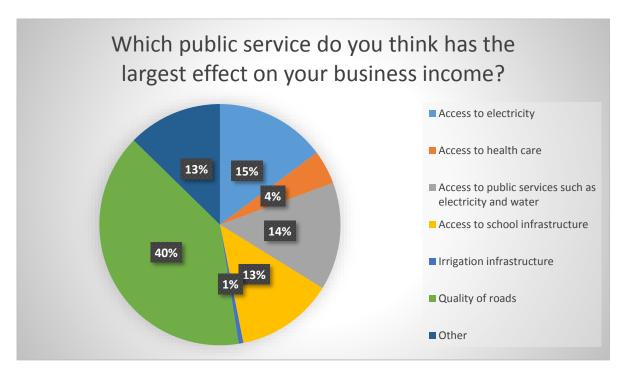
Most respondents – 67.6 percent – said their business income was lower than in April 2017. Similarly, 71.6 percent said economic conditions were much worse for their business today compared to April 2017. If people see the economy worsening and their budgets tightening, they may be less willing to devote some of their income toward paying taxes.

#### MSMEs Reliance on Government Services

We next asked about the respondent's reliance on government services from the perspective of running their MSME business.

How would your business income change if the following were improved in your community?	Roads	Water & Sanitation	School Infrastructure	Electricity Access	Health Access
Much lower	7	4	6	4	10
Slightly lower	25	10	16	18	5
About the same	342	485	454	488	497
Slightly higher	259	310	286	256	300
Much higher	718	543	585	593	531

We presented many possible service types to respondents and asked which has the greatest potential to affect their business. By far the most popular was road improvement, which 53.5 percent of respondents said would make their business income much higher. In contrast, none of the other options presented generated responses of over 50 percent for "much higher," though very few respondents reported improvements in services would have a *negative* effect on their income. In other words, improving the roads in Zambia may be an effective strategy to improve the health of Zambian MSMEs and therefore increase MSME tax revenue.



In addition, 39.8 percent of respondents said that quality of roads had the largest effect on their business income out of all the public services we listed. Nearly 30 percent of respondents said "access to electricity" and "access to public services such as electricity and water," taken together, had the largest effect on their business income.

## Tax Compliance Rates Among MSMEs

We asked a series of questions designed to provide robust measures of tax compliance among the MSMEs in our survey sample.

Have you ever heard of paying taxes to the government?	
No	449
Yes	891

Most respondents have heard of paying taxes to the government, with 66.5 percent selecting this answer choice. However, it is concerning over a third of the population has never even heard of the tax system.8

We next asked a direct question about whether the respondent paid their taxes to ZRA last year.9

Were you able to pay your business taxes to ZRA last year?	
No	605
Yes	274

If yes, do you believe you paid the full amount to ZRA?			
No – a portion	12		
No – close to full	43		
Yes	209		

Only 31.2 percent of respondents said they paid their business taxes to ZRA last year, but among this group, 79.2 percent said they paid the full amount.

We then asked a question in which we asked respondents to allocate 10 stones, representing 10 fellow MSME operators in the market. They placed the stones into three piles: one pile representing those paying taxes in full; one pile representing those paying taxes in part; and one representing those paying nothing in taxes.

Number of business owners out of ten that the participant indicated paid taxes in full					
Min	Min Max Mean Standard Deviation Total				
0	10	3.49	2.85	811	

Number of business owners out of ten that the participant indicated paid taxes in part				
Min	Max	Mean	Standard Deviation	Total
0	10	1.79	1.95	811

Number of business owners out of ten that the participant indicated paid nothing in taxes					
Min	Max	Mean	Standard Deviation	Total	
0	10	4.71	3.47	811	

On average, the results align with the answer to the direct question. Respondents believe that between 30% and 40% of business owners pay their taxes in full, that between 10% and 20% pay their taxes in part, and that nearly 50% do not pay taxes at all.<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> Note that there was inconsistent implementation of this screening question across the survey enumeration team, so this particular statistic (the percentage of MSMEs who are aware of the tax system) may be measured with error. <sup>9</sup> We prefaced this with a comment regarding how we understand there are many reasons people are unable to pay their taxes. This comment was designed to make participants comfortable admitting they did not pay. <sup>10</sup> We asked the enumerators to evaluate the respondent's comfort with the task. When we restrict the sample to only those who the enumerators rated comfortable with the task, the proportions of those paying taxes in full increased (3.66 vs. 3.49 out of 10 paying in full, 1.90 vs. 1.79 out of 10 paying in part) and the proportion of those paying in part or not at all decreased (4.43 vs. 4.71 out of 10).

Our final measure of tax compliance was provided via a list experiment. In this method, respondents answer a question about the number of things they spent money on within the last year. The respondents are randomly assigned to one of two lists: one list (the control group list) includes four items on which they spent money; and the other list (the treatment group list) includes those same four items plus a sensitive item (in this case, paying business taxes to ZRA). The respondent answers this question with only one number, and the difference in means across the treatment and control groups reveals the proportion of respondents who are spending money on the fifth item - paying business taxes to ZRA.<sup>11</sup>

We asked respondents to say the number of items <sup>12</sup> on the following list they spent money on within the last year:
Tyre repairs for a bicycle
New clothes for your spouse
School fees for a female child
Medical bills for a relative
ZRA taxes on your business (Only asked to Group A)

The average number of items the treatment group spent money on in the last year was 2.41, while for the control group, it was 2.11. The difference between these means is 0.30. This means 30 percent of MSMEs paid ZRA taxes on their business in the last year. Our p-value, which measures the likelihood that these results could be due to random chance instead of indicative of a true trend in the population, is essentially zero. Therefore, we can conclude that the rate of paying ZRA business taxes is about 30 percent in the population of MSMEs we surveyed. Once again, this aligns with the alternative measures of tax compliance that we discuss above.

What type of tax is a business such as yours supposed to pay? Select all that apply.			
Turnover tax	239		
Base tax	52		
Income tax	37		
Presumptive tax on buses and taxis	27		
Import duties	34		
Other tax	182		

The most common tax respondents said their business was supposed to pay was the turnover tax, accounting for 41.9 percent of responses.

How frequently do you pay these taxes?

Type of tax	Daily	Weekly	Monthly	Quarterly	More than yearly	Yearly
Other tax	14	5	93	35	0	35
Base tax	27	1	20	2	1	1
Turnover tax	0	0	189	16	2	32
Presumptive tax on buses and taxis	0	0	6	15	0	6
Import duties	0	1	18	14	1	0
Income tax	0	0	25	6	0	6

 $<sup>^{11}</sup>$  If this proportion was 100%, the difference in means would be exactly 1, since everyone in Group A was asked about one more item than in Group B.

<sup>&</sup>lt;sup>12</sup> We removed from the calculations respondents who did this task incorrectly, as reported by the enumerator. For example, if they identified specific items on the list that they spent money on, rather than simply reporting the number of things, we did not include this response in our analysis.

The most common type of tax paid is a monthly turnover tax, with around 33.1 percent of respondents selecting this answer. Additionally, 61.5 percent of taxes that respondents reported paying are monthly. However, the second-most common tax that respondents said they pay, aside from "other," is a yearly turnover tax. The 'other' category is probably referring to levies and user fees that are collected by other agencies such as the city and district councils.

How do you typically pay your business taxes to ZRA?		
Typically, you pay via mobile money	23	
Typically, a ZRA official visits your business, and you pay the taxes directly to him	75	
Typically, you pay at the bank	15	
Typically, you pay online	22	
Typically, you visit a ZRA office and pay taxes there	297	
Other	202	

Almost 47 percent of respondents said they pay taxes by going to a ZRA office, far outpacing any other specific option we listed. This indicates that the proximity of ZRA offices may be a barrier to tax compliance, unless the other avenues for paying taxes can be enhanced and take the place of paying at a ZRA office.

It is important to note that 31.9 percent said they used some other method to pay taxes to ZRA that we did not list. More investigation is necessary to determine what "other" methods nearly one third of MSMEs are using to pay business taxes to ZRA.

We considered one particular alternative payment method that ZRA has been rolling out at present: paying via mobile money.

Do you think you would use mobile money to pay your business taxes to ZRA?		
No	385	
Yes	694	

Most of the sample – 64.3 percent – said they would use mobile money to pay ZRA taxes. This is a promising alternative payment avenue that could reduce non-compliance due to inability to reach a bank or a ZRA office.

## Factors Affecting Tax Compliance

We next consider the factors that could either increase or decrease tax compliance. We consider individual-level, business-level, and tax system-level factors. Before delving into the direct questions we asked regarding specific barriers, we asked a general, open-ended question: "What issues make it especially difficult for you to pay your taxes?" We analyze the responses to this question before analyzing the direct questions about specific barriers.

What issues make it especially difficult for you to pay your taxes? Please choose the most significant issue. Do not read options aloud. Select all that apply.		
Business profitability is low	388	
The tax is too high	125	
Distance to the tax office	51	
Difficulties calculating what tax you owe	47	

What issues make it especially difficult for you to pay your taxes? Please choose the 2nd most significant issue. Do not read options aloud. Select all that apply.		
Business profitability is low	133	
The tax is too high	122	
Difficulties calculating what tax you owe	51	
Technical challenges using the filing system	28	

What issues make it especially difficult for you to pay your taxes? Please choose the 3rd most		
significant issue. Do not read options aloud. Select all that apply.		
The tax is too high	64	
Business profitability is low	53	
Difficulties calculating what tax you owe	37	
Technical challenges using the filing system	21	

Over 63 percent of responses identified the most significant barrier to paying taxes to be low business profitability (or something closely related to that issue). The next most common choice was that taxes were too high (20.5 percent). Together, these account for over 80 percent of the sample, so we would conclude that these two reasons are the most important barriers inhibiting tax compliance. For the first, second-, and third-most significant issues, the top two selected were "The tax is too high" and "Business profitability is low." They combine to be no fewer than 66.9 percent of respondents' selections for any of the top three issues. However, they make up a progressively smaller share of answers for each successive issue ranking. There is broad agreement on the most significant barriers to tax compliance, but respondents have diverse opinions regarding the second tier issues. When this is looked at together with figures reported by respondents on monthly income, 64 percent reported income that falls below the turnover tax threshold of K3,000.00 which makes them eligible to pay turnover tax.

"Distance to the tax office" is 8.3 percent of respondents' number one barrier to paying their taxes, but no one's second or third most significant issue. This suggests that distance to the tax office is a critical problem for some, but not a pressing issue for most. On the other hand, technical challenges using the filing system is no one's most important barrier to paying taxes, but it is 8.4 percent of respondents' second-most significant issue and 12 percent of respondents' third-most significant issue. This indicates that technical challenges are a recurring issue that acts as a barrier to tax compliance.

19

<sup>&</sup>lt;sup>13</sup> To perform this calculation, we removed the responses "other" and "none," as this could mean any number of unclear reasons.

In addition to the above barriers, which we pre-populated into the answers enumerators could select in the survey (though without reading them aloud), respondents brought up a number of "other" issues. We coded these other issues for prevalent patterns.

Among respondents who selected "other" when asked about their most significant barrier to paying taxes, what did they describe?		
Lack of access to information/ignorance, lack of sensitization	53	
Not registered	28	
Long queues at the tax office, few pay points, internet challenges	28	
Business is slow/fluctuating business income	14	
Already paying too many taxes	11	
Don't see benefits of paying taxes	7	
No money/too many expenses	6	

The primary "other" barrier indicated by respondents is the lack of information about the requirements for paying ZRA taxes. The second most popular barrier among respondents is that they are not registered for taxes and also the logistical difficulties of paying taxes. The key thing mentioned here were the long queues followed by internet challenges and the limited number of pay points. Other barriers that had multiple responses were low business turnover or a high number of expenses, which prevents people from having money to pay taxes. Finally, a few respondents indicated that they are already paying too many taxes and other indicated that they don't see the benefits of paying tax. We return to many of these issues in our specific questions about tax compliance barriers, which we analyze below.

We asked another general question regarding barriers to tax compliance, attempting to adjudicate across four primary drivers of tax compliance identified in the scholarly literature: A) social norms; B) convenience of the tax system; C) risk of consequences; and D) integrity of the tax system.

Which of these statements is closest to your own opinion?	
Statement 'A': Business owners only have a responsibility to pay taxes to ZRA	178
if most businesses are doing so.	
Statement 'B': Business owners only have a responsibility to pay taxes to ZRA	407
if paying taxes is straight-forward and convenient.	
Statement 'C': Business owners only have a responsibility to pay taxes to ZRA	101
if there is a big chance they will be audited.	
Statement 'D': Business owners only have a responsibility to pay taxes to ZRA	140
if ZRA is free of corruption.	

Given a choice between these four barriers, the vast majority (nearly 50 percent) view tax compliance as driven primarily by the clarity and convenience of the tax system (Statement 'B'). Out of our sample, 21.5 percent of respondents said that business owners only have a responsibility to pay taxes to ZRA if most other businesses do so. A lower percentage selected risk of consequences and integrity of the tax system as the primary driver of tax compliance obligation.

### **Individual-Level Factors Affecting Tax Compliance**

You can register to receive contact information and meeting notifications for your area's business associations by sending a SMS to a number. If you send an SMS, you will receive this information back via an SMS by June 1. Are you interested in this?		
No, because I am not interested	471	
No, because I do not own a phone	68	
Yes, but not at this time	161	
Yes	514	

We collected a behavioral measure of willingness to take costly action to receive information, which was whether people would pay to send an SMS in order to receive information about the local business association (ZANAMACA). We view as a proxy measure of general civic engagement and willingness to invest resources in developing the business long-term. Over 42 percent of respondents said they would be interested in receiving information about business associations via SMS, and this number rises to 55.6 percent when including people who responded that they were interested but did not want to sign up at the time of the survey. Perhaps tax system information can also be disseminated in a similar manner.

We next asked a series of questions about the MSME operators' awareness and use of technological tools in daily life and in running their business. The goal of these questions was to assess technological barriers to tax payments and the potential for leveraging technology to increase tax compliance.

Do you have a cell phone?	
No	79
Yes	1291

Are you on Facebook?	
No	648
Yes	721

How often do you check Facebook?	
Less frequently than once a month	21
Monthly	24
Weekly	142
Daily	533

Are you a member of any professional groups on Facebook?	
No	404
Yes	317

Are you on WhatsApp?	
No	731
Yes	639

How often do you check WhatsApp?	
Less frequently than once a month	12
Monthly	7
Weekly	83
Daily	536

### Are you a member of any professional groups on WhatsApp?

No	401
Yes	238

How important is online social networking to you, as a means of sharing and obtaining information?	
Not important	215
Somewhat important	293
Very important	704

Do you use a computer in running your business	?
No	1237
Yes	150

Are you familiar with the software program Microsoft Excel?	
No	1079
Yes	308

More than 94 percent of respondents said they owned a cell phone, indicating that lack of access to mobile phones is not a significant barrier to tax compliance.

A slim majority (52.7 percent) of the sample said they were on Facebook, but most of these people said they check Facebook daily (74 percent). Further, over forty percent of respondents said they were members of professional groups on Facebook. Just 46.6 percent of respondents said they use WhatsApp, but a larger percentage of these people said they check daily (84 percent). Therefore, our sample tells us that Facebook is slightly more popular than WhatsApp, but Facebook's users check slightly less regularly than do the users of WhatsApp. Furthermore, 44 percent of our sample's Facebook users said they were a member of some professional groups on Facebook, while just 37.2 percent of WhatsApp users said the same about professional groups on WhatsApp. Lastly, most respondents – 58.1 percent – said online social networking was a very important way to share and to obtain information. It seems that on Facebook, this social networking with a focus on business information is slightly more popular, but WhatsApp is not far behind. Disseminating information about tax compliance via these two outlets seem to be a very effective way of reaching people. In brief, social media is a promising avenue for a tax compliance intervention.

In contrast to the popularity of social media, computer literacy is quite low. Most respondents said they did not use a computer with their business, with only 10.8 percent saying they did. In addition, 22.2 percent of the sample said they were familiar with Microsoft Excel, slightly-higher but still quite low. We would conclude from this that the technological barrier to paying taxes is quite significant, and it likely plays a role in low collection rates.

Is there a bank branch in your area?	
No	492
Yes	869

Most respondents seem to have access to some form of banking and credit in their area, as 63.9 percent said there was a bank branch nearby. However, the 36.1 percent who do not have a bank branch in their area may have trouble finding a location with which to save or to borrow. When times are good, businesses or owners near bank branches may be able to save money for when times are bad, allowing them to continue to pay taxes without straining their budgets to the point of exhaustion. However, this may be more difficult for those without bank branches. In addition, our sample shows that only 2/3 of the tax base have access to a bank branch, but this is certainly lower for the rest of Zambia because our respondents were mostly living in urban areas. Thus, asking for tax payments at banks would be an additional barrier to tax compliance.

Which of the following best describes where you live?	
In a different constituency	234
In a different village or town, but in the same constituency	105
In the same village or town as where I am doing business now	1029

Most respondents (75.2 percent) live in the same village or town in which they do business, so we would expect that not knowing in which village or town to pay taxes is not a primary reason for tax noncompliance. This also implies that the MSMEs should be familiar with and reliant on the government services in the area, and that the MSMEs should be embedded in the social network of the community.

We next asked a series of questions about respondent's levels of trust in government, in ZRA, in other business owners, and in community members more generally. In other work on political behavior and civic engagement, trust has been identified as a factor affecting whether or not individuals adhere to the rules of society and respect the rule of law.

In your opinion or based on what you have heard, would you say the central government is trustworthy?	
Not at all trustworthy	321
Not very trustworthy	222
Somewhat trustworthy	432
Very trustworthy	258

In your opinion or based on what you have heard, would you say ZRA is trustworthy?	
Not at all trustworthy	253
Not very trustworthy	206
Somewhat trustworthy	366
Very trustworthy	214

In your opinion or based on what you have heard, would you say other business owners in this area are trustworthy?	
Not at all trustworthy	191
Not very trustworthy	293
Somewhat trustworthy	499
Very trustworthy	299

In your opinion or based on what you have heard, would you say most Zambian citizens are trustworthy?	
Not at all trustworthy	180
Not very trustworthy	314
Somewhat trustworthy	513
Very trustworthy	287

Most respondents – 56 percent – said the central government is at least somewhat trustworthy, and for ZRA, this is also 56 percent. For business owners in the area, though, 62.2 percent of respondents said they were at least somewhat trustworthy, and 61.8 percent said the same for most Zambian citizens. Trust does not appear to be a significant barrier limiting MSME operators' proclivity to pay taxes.

We next asked a set of questions designed to measure the respondent's overall level of civic engagement and political interest.

How frequently do you talk about politics with friends?	
Never	464
Almost never	330

Frequently	360
Very frequently	205

How frequently do you contact a local politician about a problem or to give them your views?	
Never	952
Almost never	240
Frequently	137
Very frequently	26

Have you ever taken part in a voter engagement program?	
No	936
Yes	417

Have you ever taken part in a civic education program?	
No	1064
Yes	286

Have you ever taken part in an anti-corruption program?	
No	1215
Yes	125

Have you ever taken part in a rally for a political party or candidate?	
No	801
Yes	546

Are you involved in any voluntary association or community group? If so, are you a leader, active member?	
Not involved	978
Inactive member	84
Active member	191
Leader	108

A majority of respondents rarely talk about politics with their friends, but 41.6 percent said they do at least "frequently." A much smaller number – 12 percent – said they contact their local politicians at least "frequently" about a problem or to give them their views. The majority of citizens are not very involved with civic engagement groups and programs. Just 30.8 percent of respondents said they had ever participated in a voter engagement program, and 21.2 percent said they had ever participated in a civic education program. Even fewer – 9.3 percent – said they had participated in an anti-corruption program. However, a larger group – 40.5 percent – said they had been a part of a rally for a political party or a candidate. This is still, however, less than half the population of MSMEs sampled. Less than a third of respondents said they had ever been involved with a voluntary association or community group, and less than a third of those who are involved said they had been a leader in that group. In brief, based on these metrics, civic engagement and political participation among MSMEs is relatively low.

The exception to this rule, however, appears to be voting behavior among MSMEs in Zambia:

In the last election, what did you do?	
You decided not to vote	85
You did not have time to vote	29
You were not registered to vote	112
You were prevented from voting	12

You didn't vote for other reasons	148
You voted	964

### **Business-Level Factors Affecting Tax Compliance**

We asked a set of questions regarding the business' relationship with other government structures and professional associations, besides (or in addition to) ZRA. The purpose of these questions was to assess whether other institutions are potential partners for and/or potential competitors with the tax system managed by ZRA.

Is your business registered or a member with any of the following organizations?	
Council	328
PACRA, ZRA, and Council	104
RTSA	53
PACRA and ZRA	41
The business is not registered with any organization	614

Most respondents (53.9 percent) said their businesses are not registered with an organization, but among those who are registered, most are registered with the Council. Over eighty percent of those who said their business is registered with one or more of the organizations we listed said their business was registered either with the Council alone or with the Council plus PACRA and ZRA. We can infer that respondents are interacting with (and perhaps trusting) the Council more than RTSA, PACRA, and ZRA, and that partnership with the Councils may be a promising avenue for ZRA to examine in trying to increase tax compliance. In order to run a business in Zambia, an MSME owner needs to have a license from the council. This is especially the case for markets which are run by the councils, which is the majority of markets. This might explain the larger number of individuals registered with the council. However, most respondents have not registered their business with any organization, which implies that registration may be a critical pre-requisite to raising tax compliance.

Are you a member of a business association?	
No	1264
Yes	123

Have you ever held a leadership position in this business association?		
No	76	
Yes	44	

Under ten percent of respondents said they were a member of a business association, indicating that professional organizations may not be a promising potential partner for ZRA. It should be noted, however, that 36.7 percent of respondents who were asked whether they had ever held a leadership position in a business association answered that they had. In other words, most respondents are not members of business associations, but just over a third of those who were have had some leadership role.

Value of dues paid to this business association				
Min	Max	Mean	Standard Deviation	Total
0	36000	3459.82	6354.10	82

Of respondents who are members of a business association, 68 percent of them said the dues are between 0 and 9814 kwacha<sup>14</sup>.

Do you keep written records of every purchase and sale made by the business?		
No	698	
Yes	686	

<sup>&</sup>lt;sup>14</sup> The amount reported of 9814 Kwacha paid as association fees is high and could possibly represent association fees for one of the larger manufacturing associations.

Almost exactly half the respondents said they keep written records of every purchase and sale made by their business. For the 50.4 percent of respondents who do not keep these written records, this may be a barrier to tax compliance, as they may not have records of total turnover from which to calculate their tax burden. The introduction of presumptive taxes was meant to capture MSMEs for whom keeping records is a challenge.

### Tax System-Level Factors Affecting Tax Compliance

The first step in assessing barriers to tax compliance at the level of the tax system was to ask several questions assessing basic tax literacy.

Which statement best describes the meanings of the words turnover and profit?			
Profit is the money you are paid by customers while turnover is the money you	102		
are paid by customers minus the money you spend to run your business			
Profit is the money you spend to run your business while turnover is the money	40		
you are paid by customers			
Turnover is the money you are paid by customers while profit is the money you	496		
are paid by customers minus the money that you spend to run your business			
(CORRECT)			
Turnover is the money you spend to run your business while profit is the	70		
money you are paid by customers			

The vast majority (70.1 percent) of respondents understood the meanings of turnover and profit. For these people, it is unlikely that low tax compliance results from not understanding from what sum of money they must calculate their tax burden.

Consider a business that sells a single type of item. The business spends 92 kwacha in costs per		
item and sells each item for 100 kwacha. Under which tax would the business pay more tax?		
The 3% turnover tax (CORRECT) 334		
The 35% income tax	211	

Most respondents chose the right answer to this question, but it was a much slimmer margin than the turnover versus profits definition question. Over 61 percent of respondents selected, "The 3% turnover tax," but it is possible that the other 38.7 percent of respondents have trouble accurately calculating their tax burden.

How much turnover does your business need to do per year before you are required to pay income tax on your profits, instead of turnover tax?		
100000 kwacha	120	
400000 kwacha	45	
600000 kwacha	29	
800000 kwacha	71	
1000000 kwacha	65	

Only 21.5 percent of respondents selected the correct answer to this question, 800000 kwacha. In other words, up to 78.5 percent of the sample may be unsure how to calculate their tax burden because they are unsure which tax they are supposed to pay – the turnover tax or the profit tax. Even though some of the MSME operators may be trying to comply with tax law, they may simply not be adequately informed to do so. In summary, across these three knowledge questions, there is mixed evidence indicating that tax literacy is a barrier to tax compliance.

We next asked about overall tax (or fees) burden facing the MSME operators.

Besides ZRA taxes, do you pay any other fees, levies, or t	axes?
No	98
Yes	574

Would you feel less over-taxed if you paid all fees, levies, and taxes to one authority, even if the money was the same?

No	670
Yes	454

More than 85 percent of respondents said they paid some other fees, levies, or taxes aside from ZRA taxes. Moreover, 40.4 percent of respondents said they would feel less overtaxed if all fees, levies, and taxes were paid to one authority even if the amount of money was the same in the end. This is not a majority, but there is still a large percentage of people who think that it is inconvenient to pay their fees, levies, and taxes to numerous different authorities rather than to one central source. This is a critical insight of the survey, as consolidation of payments would be relatively costless for ZRA (and may, in fact, be cost-saving).

We next asked a series of questions about the respondent's experience with and perceptions of audits and other consequences of tax non-compliance.

Have you been audited by ZRA to determine if you are paying their business taxes properly?		
No	810	
Yes	65	

In the last year, have you been audited by ZRA to determine if you are paying your business taxes properly?			
No	816		
Yes	57		

The vast majority of respondents said they had never been audited for tax compliance, and the rate is very similar for our question asking about just the last year. Only 7.4 percent of respondents said they had ever been audited for tax compliance.

Among those who answered yes: How many times have you been audited?				
Min	Max	Mean	Standard Deviation	Total
0	12	2.51	2.49	65

Among those who *have* been audited, respondents said they had been audited for tax compliance between two and three times.

Have you heard of any fellow business owners being audited by ZRA to determine if they are		
paying their business taxes properly?		
No	601	
Yes	263	

	Among those who answered yes: how many of your fellow business owners have been audited by ZRA to determine if they are paying their business taxes properly?				
Standard		Total			
	0	50	4.56	6.45	250

Just 30.4 percent of respondents said they had heard of fellow business owners undergoing a ZRA audit. Among those who said "yes," though, the average number of times their fellow business owners had undergone an audit was between 4 and 5 times. More of the respondents said they had heard of an audit being performed than they said they had been audited themselves.

As we know from the academic literature and policy studies in other countries, it is critical for taxpayers to believe there is a risk of real consequences for failing to pay taxes. With under 10% of the MSMEs surveyed ever experiencing any consequences, and less than a third even being aware that *others* have experienced any

consequences, it is clear both the perceived and actual risk of consequences are low. In brief, one barrier to tax compliance is the lack of awareness of the consequences of noncompliance.

However, there is a piece of counter-evidence worth considering. To develop a more subtle measure of risk of audit, we asked the respondents to sort 20 stones representing 20 business owners into two piles: those who will be audited and those who will not be audited.

Number of business owners out of 20 that the participant indicated will be audited				
Min	Max	Mean	Standard Deviation	Total
0	20	9.28	7.28	891

Number of business owners that the participant indicated will not be audited				
Min	Max	Mean	Standard Deviation	Total
0	20	10.72	7.28	891

On average, respondents said they believed a slightly lower number of businesses would be audited than those that would not. In their answers, they indicated an average expectation that just over 46.4 percent of businesses would be audited, while 53.6 percent would not. This is in stark contrast to the survey question asking how many respondents had been audited (only 7.4 percent said they had ever been audited for tax compliance). It is therefore possible that the perceived risk of audit is much greater than the experienced risk of audit.

We next asked more generally about the consequences for non-compliance.

In your experience, what are the consequences for discovering a business owner is not paying his business taxes to ZRA properly?		
Paying fine	77	
Restrictions on business	68	
Paying taxes owed plus interest	55	
Arrest	49	
Paying a fine and paying taxes owed plus interest	39	
Having their property seized	39	
Business Closed	88	
Told to pay	4	
Nothing	6	

The predominant consequence for not paying business taxes to ZRA was having your business closed down. The second most popular response from the respondents was that ZRA would seize their property. A few responses simply indicated that they would be asked to pay. A few were convinced that nothing would happen while others indicated that they would be sensitized. In general, there seems to be widespread confusion regarding the legal (and perhaps also informal) consequences for failing to pay business taxes to ZRA.

We next asked about attitudes towards taxation, specifically trying to identify prevalent social norms affecting tax compliance.

If you knew that most other business owners in this area were paying their business taxes to ZRA		
in full, would that affect your decision about whether or not to pay your own taxes?		
Knowing that would not affect my decision	393	
Knowing that would affect my decision a little	119	
Knowing that would affect my decision a lot	343	

About 40 percent of respondents said that if they knew that most other business owners in the area were paying their taxes, this would affect their decision whether or not to pay taxes "a lot," and a total of nearly 60 percent of respondents acknowledged they would be affected a little or a lot. That said, the most common response was that knowing this would not affect their decision (46 percent). Social pressure seems to be a factor in most MSME operators' decisions about paying taxes; and if the social norm was perceived to be to pay taxes, respondents indicated that they would be more willing to do so themselves.

What percentage of business owners would need to pay their business taxes in full for you to feel a sense of responsibility to always pay your own taxes in full?		
0-20%	215	
20-40%	79	
40-60%	125	
60-80%	134	
80-100%	209	

Just over 28 percent of respondents said they would feel responsible always to pay their taxes in full if somewhere between 0 and 20 percent of their fellow business owners were paying their own taxes in full. This seems to be a group that is relatively unaffected by social pressure with regards to taxation; they likely believe that it is their responsibility to pay taxes no matter what other people are doing. However, the second most popular response was 80-100%, or 27.4 percent of the sample. These people seem to feel very strongly about the importance of others' contributing to the tax system. Perhaps they feel that their tax money would not have that much of an effect unless the government collects from nearly everyone else; or maybe they see it as unfair to contribute some of their earnings even as others refuse to pay taxes. Based on this question, social norms regarding tax compliance are quite strong among MSMEs.

Critically, this suggests that boosting tax compliance may have a multiplier effect whereby people voluntarily comply with tax law as they see others doing the same. In addition, it may help to publish rates of tax compliance that are particularly high in some areas. For instance, if one locality has 80 percent tax compliance, it is possible that the remaining 20 percent could be influenced by knowing that the vast majority of business owners in their area do indeed pay their taxes in full.

We next asked a series of disagree/agree Likert-scale questions, designed to assess particular aspects of public opinion regarding taxation among MSMEs in Zambia. For clarity, these questions are presented in descending order of number of responses in the "strongly agree" category.

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
It would be easier for me to pay my taxes if there was a ZRA agent permanently stationed in this area.	123	55	154	479
I pay business taxes to ZRA because it is the right thing to do.	89	24	135	461
I pay business taxes to ZRA because I want to use the services the government provides.	121	42	150	382
I am over-taxed, in that I pay too much in fees and levies and taxies to various authorities.	197	88	133	285
I pay business taxes to ZRA because I will be caught if I don't.	241	74	141	228
This area provides more tax revenue than the government	155	106	111	223

provides in services within the				
area.				
The government wastes too				
much tax revenue from my area	210	111	119	220
to justify paying my taxes.				
I would be more willing to pay				
my taxes if ZRA provided free 1				
gigabyte data bundles that I	249	60	91	204
could use to pay my taxes				
online.				
Taxes from businesses like				
mine go to provide services for	309	93	123	169
businesses like mine.				
Resentment about other types				
of businesses not paying their	437	104	108	155
fair share makes me less willing	43/	104	100	155
to pay my taxes.				
It is difficult for me to pay taxes				
because I compete with firms	409	137	99	128
that opt not to pay taxes.				
I pay business taxes to ZRA				
because I would be	407	82	110	98
embarrassed to admit to other	<del>1</del> 07	02	110	20
business owners that I didn't.				

The greatest majority of respondents agree it would be easier to pay taxes if a permanent ZRA agent was stationed in their area. From our sample, 59 percent strongly agree with this statement, and 78 percent at least somewhat agree.

Fully 65 percent of respondents said they pay taxes to ZRA because it is the right thing to do. Furthermore, 55 percent of respondents say they strongly agree with the statement that they pay taxes because they want the services that come about as a result. However, 59.5 percent agree that they are overtaxed.

Slightly more respondents say they strongly disagree with the idea that they pay taxes to ZRA because they will be caught if they do not than strongly agree with the same statement, but these are by far the two most popular responses. And, more than half said they at least somewhat agree with this statement.

Over 55 percent of respondents agreed that their area provides more in tax revenue than the government provides in services in the same area. Respondents are very split on whether the government wastes too much of their area's tax revenue to justify paying taxes.

Respondents are also split on whether it would be easier to pay taxes if ZRA provided free data bundles to pay taxes online – 51.2 percent disagree, 48.8 percent agree. This seems to be a polarizing policy proposal likely not worth pursuing at this time.

Almost 58 percent of respondents *disagree* that their taxes go to provide services to businesses like theirs, and most of this group strongly disagrees.

Most respondents – 54.4 percent – said other businesses not paying their taxes does not reduce their willingness to pay taxes; and 52.9 percent disagreed that they find it difficult to pay taxes because competitors evade their own.

Lastly, a majority (58.4 percent) of respondents strongly disagreed with the idea that they pay taxes to ZRA to avoid embarrassment from admitting tax evasion to other business owners. Possibly this can mean that respondents know many of their fellow business owners do not pay taxes and therefore would not judge them for making that choice. As discussed above, it may be possible to shift this perception.

We next asked a series of questions regarding perceptions of ZRA transparency and integrity.

Are you able to find out how much ZRA is collecting from businesses, or how the money collected is spent?		
No – we cannot find out the amount collected or how the money is spent	632	
Yes – we can find out both the amount collected and how it is spent	95	
Yes – we can find out how the money is spent only	6	
Yes – we can find out the amount collected only	22	

What is the method to obtain this information?	
By asking a ZRA official	66
Posters/written materials	20
SMS system	5
Someone visits the business to tell you	11
Through a professional association	4
Other	34

How accurate do you believe this information?	
Very inaccurate	7
Somewhat inaccurate	23
Somewhat accurate	70
Very accurate	35

Most respondents – 83.7 percent – indicated that they do not believe they can find information about how much ZRA collects from businesses or how that money is spent. Of those who said they could, though, the most common response was asking a ZRA official (47.1 percent of people who were able to obtain this information selected this response). Nearly 78 percent of people who were able to access this information believed it to be at least "somewhat accurate," but only 25.9 percent said it was "very accurate."

Most of the 16.3 percent of our sample who said they could find out how much money ZRA was collecting from businesses and how it was being spent indicated that they trusted the information they were given at least somewhat. However, a much larger group believed they were unable to access this information, possibly creating a perception that ZRA is not transparent or is otherwise secretive. Perhaps making it clearer to people that they can request this information - or even periodically and proactively providing this information - would improve public perception and trust of ZRA.

For every 1000 kwacha the ZRA collects from businesses like yours, how much do you think is						
spent on public	spent on public goods and services, such as roads and sanitation in other areas, not this one?					
Min	Min Max Mean Standard Deviation Total					
0	999	356.68	271.00	694		

For every 1000 kwacha the ZRA collects from businesses like yours, how much do you think is				
spent on public goods and services, such as roads and sanitation in this area?				
Min	Max	Mean	Standard Deviation	Total
0	999	375.83	284.39	713

For every 1000 kwacha the ZRA collects from businesses like yours, how much do you think is spent on ZRA expenses?				
Min	Max Mean Standard Deviation Total			
0	999	342.08	257.19	698

	For every 1000 kwacha the ZRA collects from businesses like yours, how much do you think is lost				
	to corruption?				
Min Max Mean Standard Deviation T				Total	
	0	999	305.88	251.13	683

On average, respondents believe that 37.6 percent of the money ZRA collects in taxes is spent near their area, while they believe 35.7 percent is spent in other areas of the country. This suggests that people do not think that ZRA takes their money and sends it only to other areas of the country. However, the respondents do believe that, on average, over 30 percent of the tax dollars are lost to corruption with another 34.2 percent being spent on ZRA overhead. Once again, increased transparency by ZRA regarding the use of funds may be a promising avenue for increasing tax compliance among MSMEs.

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree
ZRA officials are polite and treat business owners well.	127	82	199	176
ZRA officials are honest	157	114	161	126
ZRA transfers the full amount it collects to the National Treasury	148	92	105	148

Over 64 percent of respondents said ZRA officials are polite and treat business owners well. However, only 51.4 percent said ZRA officials are honest, and similarly, just 51.3 percent agreed that ZRA transfers the full amount it collects to the National Treasury. In summary, concerns about corruption seem to be a greater concern among respondents than concerns about customer service.

If you hear about improper behavior such as corruption or harassment by a ZRA official, how likely would you be to report it?		
Very unlikely	116	
Somewhat unlikely	33	
Somewhat likely	102	
Very likely	583	

If you did report it, to whom would you report it?		
A professional association	10	
A ZRA office	219	
Another government office	15	
Councilor	12	
Media	11	
Police	238	
The Anticorruption Commission	214	

Just under 70 percent of respondents said they would be "very likely" to report corruption or other improper behavior by ZRA if they heard about it, but it should be noted that 13.9 percent of respondents selected "very unlikely," making this the second-most popular response.

As for where this would be reported, the three most popular responses were "Police" (33.3 percent), "A ZRA office" (30.5 percent), and "The Anticorruption Commission" (29.8 percent). It would seem that giving more information to help citizens to report wrongdoing to the people best equipped to stop it could improve anti-corruption efforts. Since most respondents said they would be very likely to report corruption they heard about, it would be prudent to ensure they are going to the right place and have the maximum impact.

Finally, we asked about the likelihood of paying taxes to ZRA if the money was instead collected by another authority. Specifically, we asked: "Would you be more willing to pay business taxes if the money was collected by one of the following authorities, instead of by ZRA?"

Council	
No, much less willing	402
No, somewhat less willing	67
Equally as willing	145
Yes, somewhat more willing	144
Yes, much more willing	455

Market Cooperative	
No, much less willing	588
No, somewhat less willing	92
Equally as willing	122
Yes, somewhat more willing	90
Yes, much more willing	268

Market Committee		
No, much less willing	616	
No, somewhat less willing	97	
Equally as willing	133	
Yes, somewhat more willing	67	
Yes, much more willing	209	

RTSA	
No, much less willing	607
No, somewhat less willing	60
Equally as willing	56
Yes, somewhat more willing	39
Yes, much more willing	102

ZANAMACA	
No, much less willing	710
No, somewhat less willing	78
Equally as willing	68
Yes, somewhat more willing	31
Yes, much more willing	76

The most common response for all the organizations we asked about was that respondents would be much less willing to pay taxes if that organization was doing the collection – except for the Council, for which the most popular response was that people would be much more willing to pay taxes. To boost compliance rates, it may be better to rely on or partner with the Council, as it appears respondents trust this organization more than any other we asked about.

## Quantitative Analysis of Tax Compliance Determinants

In this section, we present a regression analysis of the determinants of tax compliance. As the dependent variable in these regressions, we use the respondent's answer to the question as to whether they paid business taxes to ZRA last year. As this is a binary outcome variable, we use a probit model in these regressions (and present marginal effects in the tables). Note that this is not an exhaustive analysis, and that we were prevented from using any of the variables on which we had relatively little variation (e.g., the frequency the business operates), relatively high item non-response (e.g., party membership), or relatively high correlation with another explanatory variable (e.g., perception of corruption in ZRA and perception of waste of tax revenue in government).

In the first model, we present the relationship between tax compliance and individual and business characteristics. At the individual characteristic level, those in a higher income bracket are more likely to pay (8% more likely with each income bracket level), and those with higher education are more likely to pay (4% more likely with each education level). It is not surprising that more wealthy and educated individuals are more likely to pay business taxes. However, those with a family member who is a government employee are 11% less likely to pay business taxes, a surprising result.

In terms of business characteristics, each additional employee of the business is associated with a 8% increase in the likelihood of paying. Registered MSMEs are more than 20% more likely to pay, and those who keep written business records are 18% more likely to pay. These results are difficult to interpret causally, but it seems that tax compliance is positively associated with registration, more established MSMEs (as measured by keeping written records), and larger MSMEs (as measured by the number of employees). Finally, those who are willing to pay to send an SMS to access information about business associations are 10% less likely to pay business taxes, the opposite association of what we might expect.

	DV:
VARIABLES	Paid Tax
Female $(0/1)$	-0.0419
	(0.0474)
Age (Years)	-3.59e-05
	(0.00221)
Own Home $(0/1)$	0.0756
	(0.0481)
Smart Phones Owned (#)	0.0162
	(0.0166)
Facebook User (0/1)	-0.0243
	(0.0552)
Social Desirability Score (-1/0/1)	-0.0133
	(0.0316)
Talk About Politics (scale)	0.00567
	(0.0219)
Family Member Government Employee (0/1)	-0.105**
	(0.0518)
Income Bracket (scale)	0.0830***
	(0.0287)
Education Level (scale)	0.0386*
	(0.0213)
Bank Branch in Area (0/1)	0.0500
A 60 67 F	(0.0483)
MSME Employees (#)	0.0777***
	(0.0208)
Reliance on Roads (scale)	-0.0258
	(0.0449)

MSME Registered Business (0/1)	0.214***
	(0.0443)
Keep Written Business Records (0/1)	0.183***
Progressed Rusiness Association Information (0/1)	(0.0451) -0.0977**
Requested Business Association Information (0/1)	(0.0455)
	(0.0 133)
Observations	542

In the second model, we present the relationship between tax compliance and attitudes and perceptions of the tax system. Here, we see that those who agree the government wastes tax revenue are less likely to pay taxes, and knowing someone who has been audited increases the likelihood of paying by 20%.

	DV:
VARIABLES	Paid Tax
Government Wastes Tax Revenue (Disagree-Agree)	-0.0347*
	(0.0187)
Caught if Don't Pay Business Taxes (Disagree-Agree)	0.0157
	(0.0184)
Percentage of Others who Pay for Respondent to Pay	-0.00430
	(0.0147)
Pay All Fees to Single Authority (Yes/No)	-0.0481
	(0.0461)
Heard of Others Audited (Yes/No)	0.222***
	(0.0481)
Observations	465

## Conclusions

This report summarizes the results of a survey of medium, small, and micro enterprises conducted in mid-2018 by a research team in partnership with ZRA and the International Growth Centre. The participants in the survey were drawn from Lusaka and Central provinces. Though relatively wealthy in some ways such as access to electricity and smartphones, those surveyed are cash poor. Note that the sampled population is likely wealthier and more educated than the nationwide population of MSMEs.

We find that tax compliance among MSMEs in our sample is quite low: 30% of MSME operators pay tax, and some in this group are making only partial payments. A rate of 30% compliance was found via several different measures of tax compliance: a direct question about the respondent himself (or herself); an indirect question about other MSMEs; and a list experiment.

Several patterns emerge from the data in terms of likely barriers to tax compliance, and the findings regarding the barriers have clear policy implications for ZRA. First, tax awareness is low. A third of MSMEs have not heard of the ZRA tax system, and very few of them are even registered businesses. While overall literacy is high, only half of MSMEs keep any written records of transactions, tax literacy is middling, and computer and Excel literacy are dismally low. ZRA needs to shift away from any tax policies that require complex calculations, a nuanced understanding of tax law, or extensive use of computer programs.

Similarly, the intractable logistics of paying taxes to ZRA is an issue. Proximity to bank branches and proximity to ZRA offices are low. In fact, ten percent of the sample rated the distance to a ZRA office as the number one barrier to tax compliance. Eighty percent of the sample agrees that having a ZRA agent in the area of their business would increase tax compliance. Alternative avenues for transferring funds to ZRA must be explored. One promising avenue appears to be mobile money; the majority of those surveyed report they would be likely to pay their taxes via mobile money, if that were an option.

A third set of barriers relate to negative perceptions of ZRA. Many MSME operators generally trust ZRA, but they have concerns regarding overt corruption within ZRA or more passive waste of tax revenue by the government. Few MSMEs understand how tax revenue is used and they are unable to find out the information they seek; if they do, they do not trust that information. If ZRA improved its public image and became more transparent and accountable, tax compliance may improve.

There is mixed evidence regarding how MSMEs perceive the risk of punishment for non-compliance. Less than ten percent of MSME operators have been audited, and less than a third even know of someone else who has been audited. Yet, they report a perceived risk of audit around 50%. Collectively, this evidence suggests that increasing the perceived risk of audit is not a promising area of intervention. The perceived risk is already quite high, despite it being low in reality, and yet we do not see high tax compliance. One area of particularly high confusion surrounds the possible consequences for non-compliance more generally. This area of the tax law could be clarified.

One promising intervention may be partnership with the councils. Most registered MSMEs are registered with the council. Further, MSMEs report they would be more likely to pay their taxes if the councils collected them on ZRA's behalf. This aligns with another finding, which is that MSME operators report being overwhelmed by paying many different fees, dues, and taxes, and they anticipate being much more willing to pay taxes if their payments for these various items were to be consolidated into fewer payments collected by one authority.

In addition, social media use is quite high among MSMEs, and it is used not only for personal purposes but for business-related purposes as well. Relatedly, many MSMEs report resentment over others not paying taxes or report being more willing to pay taxes if they were certain others were doing so. In combination, these findings suggest that a relatively low-cost intervention might be to use social media to spread information about tax compliance rates and social norms regarding tax compliance.

## Bibliography

African Development Bank (AfDB) (2014) Domestic Revenue Mobilization for Financing Development: Zambia (Draft country case study report)

Ashraf, N., Calvin, C., Delfino, A., Glaeser, E., & Swanson, N. (2017). *Urban density, trust, and knowledge sharing in Lusaka, Zambia.* London: IGC. https://www.theigc.org/wp-content/uploads/2017/05/Ashraf-et-al-2017-Policy-Brief\_rev.pdf

Besley, T., & Persson, T. (2014). Why do developing countries tax so little? *Journal of Economic Perspectives, Vol 28, No 2, fall,* 99-120.

CIA World Factbook. 2013. "Electrification Rates." Zambia.

Central Statistics Office (2018) The monthly bulletin Vol 177, January 2018, Lusaka

Central Statistics Office (2015) 2014 Labor Force Survey, Lusaka

Gibson, T., & van der Vaart, H. (2008). Defining SMEs: A Less Imperfect Way of Defining Small and Medium Enterprises in Developing Countries. *Brookings Global Economy and Development*.

GRZ. (2008). The Micro, Small and Meduim Enterprise Development Policy. The Republic of Zambia.

GRZ. (2017). The Income Tax Act. Lusaka: The Republic of Zambia.

Kushnir, K. (2010). A Universal Definition of Small Enterprise: A Procrustean bed for SMEs? http://blogs.worldbank.org/psd/a-universal-definition-of-small-enterprise-a-procrustean-bed-for-smes.

Ministry of Finance (2017). Annual Economic Report 2016. The Republic of Zambia. Lusaka

Nhekairo, W. (2014) The Taxation System in Zambia. Lusaka, Zambia: Jesuit Center for Theological Reflection.

Resnick, D. (2018) Tax Compliance and representation in Zambia's Informal Economy. forthcoming.

ZRA (2018) ZRA Annual Report 2017 The Republic of Zambia. Lusaka

## Appendix One

In Zambia, the key policy document that guides government policy on MSME doesn't define what an MSME is but rather categorizes them according to firm size in terms of turnover.

A micro enterprise shall be any business enterprise registered with the Registrar of Companies;

- i) Whose total investment excluding land and buildings shall be up to Eighty Million Kwacha (K80, 000,000).
- ii) Whose annual turnover shall be up to One hundred and Fifty Million Kwacha (K150,000,000).
- iii) Employing up to ten (10) persons.

### 2.5.2. Small Enterprises

A small enterprise shall be any business enterprise registered with the Registrar of Companies;

- i) Whose total investment, excluding land and building
- In the case of manufacturing and processing enterprises, shall be between Eighty Million and Two Hundred Million Kwacha (K80,000,000 K200, 000,000) in plant and machinery;
- In the case of trading and service providing enterprises shall be up to One Hundred and Million (K150,000, 000) Kwacha.
- ii) Whose annual turnover shall be between One Hundred and fifty Million and Two Hundred and Fifty Million (K151,000- K300,000,000) Kwacha.
- iii) Employing between eleven and forty nine (11-50) persons.

### 2.5.3 Medium Enterprises

A medium enterprise shall be any business enterprise larger than a small enterprise registered with the Registrar of companies;

- i) Whose total investment, excluding land and building;
- In the case of manufacturing and processing enterprises, shall be between Two Hundred Million and Five Hundred Million (K201,000,000 –K500, 000, 000) Kwacha in plant and machinery,
- In the case of trading and service providing shall be between One Hundred and Fifty One Million and three Hundred Mullion (K151, 000,000 –K300,000,000) Kwacha.

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