



## African Tax Administration Paper 6

### **Nil-Filing in Eswatini: Should the Revenue Administration be Concerned?**

Fabrizio Santoro and Winnie Mdluli

May 2019

ICTD African Tax Administration Paper 6

## **Nil-Filing in Eswatini: Should the Revenue Administration be Concerned?**

Fabrizio Santoro and Winnie Mdluli

May 2019

*The ICTD's African Tax Administration Papers (ATAPs) are research papers that will be of specific interest to people working in tax administration in Africa. The purpose is to encourage and support useful, policy-oriented research by African professionals directly involved in tax administration.*

### **Nil Filing in Eswatini: Should the Revenue Administration be Concerned?**

Fabrizio Santoro and Winnie Mdluli

ICTD African Tax Administration Paper 6

First published by the Institute of Development Studies in May 2019

© Institute of Development Studies 2019

ISBN: 978-1-78118-553-7



This is an Open Access paper distributed under the terms of the Creative Commons Attribution Non Commercial 4.0 International licence, which permits downloading and sharing provided the original authors and source are credited – but the work is not used for commercial purposes. <http://creativecommons.org/licenses/by-nc/4.0/legalcode>

Available from:

The International Centre for Tax and Development at the Institute of Development Studies, Brighton BN1 9RE, UK

Tel: +44 (0) 1273 606261

Email: [info@ictd.ac](mailto:info@ictd.ac)

Web: [www.ictd.ac/publication](http://www.ictd.ac/publication)

IDS is a charitable company limited by guarantee and registered in England

Charity Registration Number 306371

Charitable Company Number 877338

# Nil Filing in Eswatini: Should the Revenue Administration Be Concerned?

Fabrizio Santoro and Winnie Mdluli

## Summary

The tax-to-GDP ratio in developing countries is still remarkably low for many different reasons. One of the key factors behind poor tax collection is low tax compliance. In this paper we look at compliance with income tax in Eswatini, focusing on one particular dimension – filing of nil returns. Nil-filing represents a sizeable share of returns in many African countries. However, it is largely unexplored in the literature and disregarded by tax agencies, who are more interested in declarations yielding a positive return. For these reasons, we attempt to fill the gap by mapping nil-filing in Eswatini using anonymised administrative data provided by the Swaziland Revenue Authority (SRA).

First, we show that over a period of five years about 30 per cent of corporate income tax (CIT) returns are nil every year. This translates into 45 per cent of taxpayers nil-filing in at least one year over the five-year period. Moreover, nil-filing varies a lot within categories of firms: it is much more likely to take place in certain districts and sectors in Eswatini, and is more common for small and younger firms. At the same time, persistent nil-filing is also very common. We also cross-check CIT data with value added tax (VAT) and Pay As You Earn (PAYE) data to monitor the filing behaviour of nil-filers across different tax returns, finding some extent of misreporting – probably due to evasion. After describing the results, we analyse additional qualitative data and provide recommendations for future research.

**Keywords:** tax compliance; income tax; tax administration.

**Fabrizio Santoro** is a Research Officer at the Institute of Development Studies (IDS) and PhD student in Economics at the University of Sussex.

**Winnie Mdluli** is a Registration Manager in the Domestic Tax Department at the Swaziland Revenue Authority (SRA). She is a former Executive Master's Taxation (ATAF/GIZ) student.

# Contents

	Summary	3
	Acknowledgements	5
	Acronyms	5
	<b>Introduction</b>	<b>6</b>
<b>1</b>	<b>Context: tax system in Eswatini</b>	<b>7</b>
	1.1 Country overview	7
	1.2 Tax system in Eswatini	8
	1.3 Tax performance	8
<b>2</b>	<b>Who are the nil-filers?</b>	<b>9</b>
<b>3</b>	<b>Profile of nil-filers in Eswatini</b>	<b>11</b>
	3.1 Data description	11
	3.2 Profile of nil-filers	12
	3.3 Nil-filing by district	13
	3.4 Nil-filing by sector	14
	3.5 Nil-filing by size	14
	3.6 Nil-filing by length of business' life	16
	3.7 A more structured approach	16
	3.8 Persistent nil-filers	17
<b>4</b>	<b>What are nil-filers reporting in other tax returns?</b>	<b>18</b>
	4.1 Nil-filers with transactions for VAT	18
	4.2 Nil-filers with transactions for PAYE	19
	4.3 Nil-filers with transactions for both VAT and PAYE	19
<b>5</b>	<b>Additional qualitative evidence on nil-filing</b>	<b>19</b>
<b>6</b>	<b>Concluding remarks</b>	<b>20</b>
	Appendix	23
	<b>References</b>	<b>26</b>

## Tables

Table 1	Share of nil income tax returns 2013-2017	12
Table 2	Share of nil income tax returns by sector 2013-2017	14
Table A1	Corporate income tax	23
Table A2	Share of non-filers in 2013-2017	23
Table A3	Determinants of nil-filing	24

## Figures

Figure 1	Share of nil income tax returns by district 2013-2017	13
Figure 2	Share of nil income tax returns by size 2013-2017	15
Figure A1	Revenue collection in SZL '000 and revenue growth	25
Figure A2	Nil-filing by length of business' life	25

# Acknowledgements

This report was prepared with funding from the International Centre for Tax and Development (ICTD). We are very grateful to the officials from the Swaziland Revenue Authority (SRA) who provided support and guidance during this study. In particular, we would like to thank Giulia Mascagni, ICTD Research Director, and Edward Groening, SRA Head of the Research, Strategy and Statistics Department, for their high-level guidance, and Shongwe Mbongeni, SRA Economic Analyst, for his support in accessing the relevant administrative data. We are also extremely grateful for the valuable inputs from many others who have contributed by making time to talk to us during our consultations, especially officers in Domestic Taxes.

## Acronyms

AU	African Union
CIT	Corporate income tax
COMESA	Common Market for Eastern and Southern Africa
ERCA	Ethiopian Revenues and Customs Authority
ICT	Information and communications technology
ICTD	International Centre for Tax and Development
PAYE	Pay As You Earn
RRA	Rwanda Revenue Authority
SACU	Southern African Customs Union
SME	Small and medium enterprise
SRA	Swaziland Revenue Authority
URA	Uganda Revenue Authority
VAT	Value added tax

# Introduction

As information technology (IT) continues to evolve, tax administrations are realising the importance of learning from the vast amount of data extracted from their revenue management systems. The information contained in the authority's data could help create factual evidence and inform policymaking. It is difficult to imagine a modern tax administration that can successfully achieve given revenue targets and implement a sound tax strategy without efficiently managing its IT system. On a daily basis, massive amounts of taxpayers' data are captured from source documents, such as physical income tax returns. In addition to being used for administrative purposes, it is important that this information is gathered and interpreted to provide a basis for making informed policy decisions, or implementing transformational ideas to improve compliance.

There are many advantages of using administrative data (Mascagni et al. 2016). First, it captures actual filing behaviour as opposed to the self-reported willingness to comply that is collected with survey tools – which is often biased and not representative.<sup>1</sup> Second, the availability of tax returns across many years offers the opportunity to study trends in compliance over time, and to have a more comprehensive view of compliance patterns. Third, the analysis of administrative data could benefit from collaboration between revenue authorities and international development partners, a partnership that is pivotal to building capacity in the authority and embedding research as a key strategic component. In many high-income countries anonymised tax returns data has been released to researchers for a variety of studies, including field experiments to improve tax compliance (Mascagni 2018). At the same time, some revenue authorities in the African continent, such as agencies in Rwanda, Uganda and Ethiopia, have only recently inaugurated a collaboration with researchers, and provided them access to administrative data for research purposes.<sup>2</sup> Based on that data, rigorous experiments and impact studies have recently been published, thus supporting the growing wave of evidence-based tax research in Africa and the developing world.<sup>3</sup>

Another relevant fact in tax administrations is that revenue authorities are known to be more interested in those declarations that yield a positive revenue base than those that do not. This is not surprising in a context of underperforming tax collection and limited enforcement resources available to meet revenue targets. It has resulted in very little effort among tax authorities having been dedicated to further interrogating those declarations that do not contribute fiscal revenue.<sup>4</sup> These declarations come from taxpayers that we call nil-filers. Nil-filers are identified as taxpayers that regularly file their declaration, but indicate zero turnover, zero taxable income and zero tax payable for a given fiscal year, often repeating this behaviour over time. Nil-filing belongs to an often untapped space that tax authorities tend to ignore, even if it implies a possible alarming pattern of low compliance. Moreover, nil-filing is a largely unexplored topic in the tax research literature. Almost no evidence exists on why this phenomenon takes place, its key explanatory factors and which strategies are more effective in addressing it.

---

<sup>1</sup> It is difficult to survey wealthy people to detect tax compliance (Atkinson et al. 2010; Alvaredo and Atkinson 2010; Atkinson 2011; Higgins and Lustig 2013).

<sup>2</sup> ICTD has been a key research partner with the Rwanda Revenue Authority (RRA), Ethiopian Revenues and Customs Authority (ERCA) and Uganda Revenue Authority (URA), among others.

<sup>3</sup> Relevant studies from Africa include Mascagni and Mengistu (2016, 2018), Mascagni et al. (2017), Mascagni et al. (2019a), Almunia et al. (2017), Eissa et al. (2014, 2017) and Steenbergen (2017). Other field experiments using different tax returns from other developing context include: VAT payments in Chile (Pomeranz 2015), individual municipal taxes in Argentina (Castro and Scartascini 2015), firm taxes in Ecuador (Carrillo et al. 2017) and corporate income tax in Uruguay (Bergolo et al. 2018).

<sup>4</sup> We support this statement for two major reasons. First, there is no available empirical evidence studying nil-filing. Second, more importantly, informal discussions with staff from different revenue authorities in Africa, all from the ICTD research network, led to this conclusion. In order to shed more light on nil-filing, we had several interactions with SRA staff that further strengthened this view.

For these reasons, we set out to address two key questions. First, from a research perspective, how much nil-filing takes place in Eswatini, and what does the average nil-filing company look like? Second, from a policy perspective, how well does the revenue authority understand the way taxpayers are declaring their company income, and what can be done to improve this?

Against this background, the aim of this paper is to fill the knowledge gap about nil-filing, and measure the extent of nil-filers with company income tax (CIT) in Eswatini. Additionally, this paper produces a descriptive overview of a nil-filer, focusing on the heterogeneity across geographical location, sectors and firm's size. It also exploits alternative data sources, such as VAT and PAYE returns data, to cross-check the filing behaviour of nil-filers across different declarations, and measure the extent of misreporting information to the tax authority. Thanks to collaboration between the Swaziland Revenue Authority (SRA) and ICTD, the authors were able to analyse administrative data on CIT for a period of five fiscal years (2013-2017).<sup>5</sup> Anonymous information on all key variables of income tax returns is observable. This data is used to identify and map nil-filing across the registered companies all over the country. This paper provides only descriptive results, and can be considered as the starting point of a long-term plan of research in the country. The lessons learned from this exercise are particularly relevant for policy in a context of weak fiscal capacity, low tax morale and large informality, as in Eswatini. For many different structural reasons, fostering tax compliance is much harder for revenue authorities in Africa, in particular, as well as in other developing countries (Besley and Persson 2014). This paper aims to start a debate on which strategies can be tested to cost-effectively promote a sound culture of taxpaying. Building on the evidence reported here, the implementing partners are planning to pilot different strategies targeting nil-filers, as well as other types of non-compliant taxpayers. Their effectiveness will be estimated with a rigorous comprehensive field experiment.

The remainder of this paper is structured as follows. Section 1 contextualises our study, providing a clear picture of taxation in Eswatini. Section 2 introduces the issue of nil-filing, discussing the existing evidence on it from different developing countries. Section 3 reports the descriptive results on nil-filing from the main analysis of tax returns data. The extent of nil-filing companies is measured and analysed across key taxpayer characteristics in order to detect any heterogeneity in this behaviour. Section 4 provides further checks on nil-filers by using additional returns data from VAT and PAYE returns. Section 5 looks at additional qualitative evidence on nil-filing. Section 6 concludes.

# 1 Context: tax system in Eswatini

## 1.1 Country overview

The Kingdom of Eswatini<sup>6</sup> is a landlocked country in Southern Africa, bordered by Mozambique to the north-east and South Africa to the north, west and south. Eswatini is a developing country with a small economy, and is classified as a lower-middle income country with a GDP per capita of \$3,243 (2017).<sup>7</sup> Its main local trading partner is South Africa, and the countries' currency, the Lilangeni (SZL), is pegged to the South African Rand.<sup>8</sup> Economic growth is estimated to have declined to 1.9 per cent in 2017 from 3.2 per

---

<sup>5</sup> The official fiscal year of assessment for SRA starts on 1 July and ends on 30 June.

<sup>6</sup> Formerly known as Swaziland. The name change took place in April 2018. While in most places the paper reflects this change, several documents and reports issued prior to this change still make reference to Swaziland. The revenue authority is still called Swaziland Revenue Authority.

<sup>7</sup> Source: World Bank World Development Indicators.

<sup>8</sup> Eswatini is a member in the following regional trade blocs: Southern African Customs Union (SACU), Common Market for Eastern and Southern Africa (COMESA), Southern African Development Community (SADC) and the African Union



cent in 2016.<sup>9</sup> The country also faces major development challenges. Based on the international poverty line of \$1.90 a day, and lower middle income poverty line of \$3.20 a day, it is estimated that 38 per cent of the Swazi population live in extreme poverty, and a total of 60.3 per cent are poor overall. This is accompanied by a high unemployment rate of 23 per cent in 2018. Health issues are difficult to address, with HIV/AIDS and tuberculosis widespread in the country.<sup>10</sup> As of 2018, Eswatini has the twelfth lowest life expectancy in the world, at 58 years.<sup>11</sup> The present population growth rate is 1.2 per cent, with a total population of 1.4 million people in 2018.<sup>12</sup>

## 1.2 Tax system in Eswatini

SRA is a semi-autonomous institution established by the Revenue Authority Act in 2008, as part of the government's reform strategy for revenue administration. SRA officially took over the function of revenue collection on 1 January 2011. Over the past seven years SRA has focused on improving operations, customer services and overall efficiency in the collection of revenue.

SRA collects both direct and indirect taxes. The main direct income taxes are personal income tax (PIT), corporate income tax (CIT) and PAYE. The main indirect taxes are VAT and fuel taxes. PIT is a tax on income generated by individuals, and has a progressive structure – a maximum marginal rate of 33 per cent and exemptions for income below SZL41,000 (\$2,848). CIT is levied at a standard rate of 27.5 per cent, and imposed on taxable income from corporate business activities.<sup>13</sup> The VAT rate is 15 per cent.<sup>14</sup>

In terms of filing obligations and deadlines, income tax returns must be submitted according to a staggered timeline. Non-VAT-registered small and medium enterprises are expected to furnish their returns by 31 October each year, individuals have to file by 30 November, and large companies and VAT registered entities must submit their returns by 31 December.<sup>15</sup> The tax year ends on 30 June. Every registered taxpayer is required to file their return regardless of whether they were operative during the year. Strict sanctions are imposed by law for failure to file and for false assessment. According to Income Tax Order (1975), anyone who fails to furnish a return within the stipulated period may be liable on conviction to a fine of SZL10,000 (\$719) and/or imprisonment for a period of up to one year. Those making false assessments with an intention to evade are liable to a fine of SZL50,000 (\$3,591) or imprisonment up to five years.

## 1.3 Tax performance

Since the inception of the SRA, revenue collection has continued to show a steady increase year on year. A growth of 8 per cent was recorded in 2017/18, compared to an average of 13 per cent over the past five years, as indicated in Appendix Figure A1 (SRA 2018).<sup>16</sup> Total revenue collection amounted to SZL8.453 billion (\$617 million) in 2017/18. In terms of tax-to-

---

(AU). The country's major trading partners overseas are the United States and the European Union. Internationally, Eswatini is also a member of the Commonwealth of Nations and the United Nations.

<sup>9</sup> As reported by the World Bank <<http://www.worldbank.org/en/country/eswatini/overview> (accessed 30 November 2018)>.

<sup>10</sup> It is estimated that 26% of the adult population is HIV-positive.

<sup>11</sup> The population of Eswatini is fairly young - a median age of 20.5 years, and people aged 14 years or younger constitute 37.5% of the country's total population.

<sup>12</sup> As per footnote 9 above.

<sup>13</sup> Taxable entities include companies, whether incorporated or not, as well as foreign-incorporated entities of a similar nature, whether resident or non-resident; permanent establishments of non-residents; trusts and partnerships. Some entities are exempted from CIT; exemptions must be authorised by SRA's Commissioner General.

<sup>14</sup> The VAT rate increased from 14% in August 2018.

<sup>15</sup> This last group is expected to self-assess its liabilities online. This new deadline has been implemented since 2017.

<sup>16</sup> The reduced growth rate in 2017/2018 reflects the slow economic growth observed in the domestic economy in recent years and the fiscal challenges faced by the government, which is a major driver of the economy (SRA 2018).

GDP ratio, the country registers a positive trend – from 12.3 per cent in 2011/12 to 14.7 per cent in 2017/18, a figure that is in line with other African and low-income countries. More importantly, Eswatini collects proportionally much more income tax than other African countries. Income taxes account for more than half (57 per cent) of total revenue collected in 2017/2018.<sup>17</sup> VAT is also a major component, accounting for 30 per cent of the total.

SRA (2018) reports 53,208 registered taxpayers in 2017/2018. This represents a 6.9 per cent increase from the 49,793 taxpayers registered in 2016/2017. Taxpayers registered for income tax account for 83 per cent of the total tax base. The positive trend in registrations reflects the success of SRA's strategy in fostering formality, as well as other service-oriented initiatives.<sup>18</sup> However, the informal sector still represents about 41 per cent of Eswatini national income.<sup>19</sup> Although the most recent estimate of informality is ten years old, and it may have reduced, it still means that a sizeable share of the economy is under the agency's radar. Informal activities are not captured by the administrative data analysed in this study.

For this paper, it is important to understand the importance of income taxes in the country. Individual income tax accounts for 36 per cent of total revenue, being the largest tax component. This is followed by CIT, the focus of this study, which accounts for 16 per cent of the total. While in 2017/2018 individual income tax performed 13 per cent above target, CIT lagged behind, witnessing a 14 per cent below-target performance. Poor collection of CIT is mainly ascribed to reduced payments from major sectors during this period, particularly information and communication, financial services and manufacturing.

Appendix Table A1 illustrates how the relative contribution of corporate tax revenue has been on a downward trend since 2014/2015.<sup>20</sup> Against this background, this study is especially policy-relevant in the way it tries to understand and measure compliance issues with corporate income tax.

## 2 Who are the nil-filers?

Generally speaking, a nil-filer is a taxpayer that files a tax return, thus abiding by the law, but reports zero business income and zero income tax.<sup>21</sup> In principle, they are different from taxpayers declaring zero tax due to losses, which are expected in any economy, since they do not report a negative taxable income, but a nil one. A large number of nil-filers implies that no revenue is raised by the authority, and it is then important to understand the rationale behind this behaviour. Nil-filing has also been found to be an important issue in other African countries. In Uganda, for example, nil-filers for VAT in 2012-2015 are 15 per cent of the total (Almunia et al. 2017). In Ethiopia, they amount to 23 per cent of all business profit tax returns lodged from 2006 to 2014 (Mascagni and Mengitsu 2016). In Rwanda, nil-filers seem to be even more widespread: in a study of nil-filers in income tax, Mascagni et al. (2019a) find that the average rate of corporate tax nil-filing is 56 per cent in fiscal years 2015-2017. At the same time, nil-filing is a smaller issue for personal income taxpayers (sole traders, self-

---

<sup>17</sup> Income taxes have also been the main contributor to revenue growth over the period 2013/14-2017/18 (SRA 2018).

<sup>18</sup> A noteworthy example of this approach is given by '*Operation Bakhumbute*'. This was a door-to-door compliance campaign, which aimed to increase the taxpayer base and remind taxpayers of their tax obligations. The operation was carried out on 733 businesses in the Lubombo, Shiselweni and Manzini districts. About 20% of the businesses visited were found not to have registered with SRA for tax purposes. These businesses were educated on their compliance obligations, furnished with registration forms and advised on the registration process. Following initial engagement with these businesses, follow-up visits ensured that they actually registered.

<sup>19</sup> This figure is taken from Schneider and Williams (2013), and is an average value between 1999 and 2006.

<sup>20</sup> This weak performance is also shown in the deteriorating company tax-to-GDP ratio, from 2.7% in 2016/17 to 2.4% in 2017/18 (SRA 2018).

<sup>21</sup> Additional conditions can be added, as in the case for Eswatini, to these two (necessary) ones.

employed individuals).<sup>22</sup> For them, nil-filing rates average at about 20 per cent in the same three-year period. In another study on VAT in Rwanda, Mascagni et al. (2019b) show that 35 per cent of VAT returns from July 2016 to June 2017 have both zero VAT on sales and zero VAT on purchases.

Overall, it is not clear why the proportion of nil-filers is so high. In an attempt to summarise the different possibilities that emerged from discussions with tax practitioners in Africa, the following hypotheses can be formulated:

- i) Tax evasion from a business hiding its income, but avoiding fines for failure to file. Taxpayers of this type may perceive a low enforcement probability and consider the tax agency capacity to detect them to be limited. At the same time, they file and are visible to the authority, but they are still not paying any tax.
- ii) Given that filing a return is the norm regardless of having actually traded in the period (and severe sanctions are often enforced for failing to file), nil-filing could reflect the legitimate declaration of a business who registered but is not operating yet, and thus has zero income to declare. There are different reasons behind this behaviour. First, a registered taxpayer could be waiting to get a trading licence to start operations.<sup>23</sup> However, due to some bureaucratic weaknesses in the process of getting a licence, delays in getting a licence usually occur. The newly registered taxpayer is compelled to file in the meantime, and nil-filing is the most immediate solution. Second, taxpayers who have registered a business to apply for a public tender and are waiting for the result, need to nil-file in the meantime. Third, and more in general, newly registered firms may just find it harder to be operative. As shown in a study of McKenzie and Paffhausen (2018) on 12 developing countries, a firm in its first year is twice as likely to shut down in the next year as a five-year-old firm. Tax authorities tend to exacerbate these issues. Administrative policies often try to expand their tax net by encouraging registration. While the target of enlarging the tax net is reasonable, mass campaigns usually take place and translate into unnecessary registrations of a large number of only potential entrepreneurs who are most likely to be inoperative. These newly registered taxpayers legitimately file nil to be compliant.
- iii) Businesses who ceased operations but are still registered due to the bureaucratic complexity of deregistering from the authority records and keep filing nil to avoid penalties.<sup>24</sup> A taxpayer who wants to deregister from the tax authority has first to deregister from government bodies. While deregistering from a tax authority is usually free, deregistering from government registry can be costly, as it implies paying all outstanding debts taxpayers owe to the government. This complexity is often exacerbated by a lack of cooperation between government and revenue authorities, who often work in isolation and do not share information to facilitate the deregistration process, among other taxpayer services.

A field experiment in Rwanda (Mascagni et al. forthcoming), explicitly targeting nil-filers with different messages to test hypothesis (i) and (iii) above, provides useful insight. The authors show that targeted nil-filers are more likely to switch to declare a positive amount after receiving the deterrence message. Effects are rather small (2% decrease in nil-filing), but they provide evidence that part of the issue is due to evasion. Likewise, informing nil-filers about the deregistration procedure has a significant effect on the probability of deregistering from the revenue authority, even if small in magnitude (just under 1%). Additionally, a simple

---

<sup>22</sup> As a referee correctly suggested, the most important compliance issues with self-employed taxpayers are usually informality and non-filing, rather than nil-filing.

<sup>23</sup> While, as is the case in Eswatini, some sectors, i.e. real estate and finance, are exempted from getting a trading licence, they are still required to obtain a certain form of trading document from the responsible regulating authority.

<sup>24</sup> From the SRA taxpayers' registry, we can see that just 3.7% of the total taxpayer population are labelled as 'suspended', i.e. deregistered. All the others are considered to be active. If we compare this figure with the 'death' rate from 12 developing countries (McKenzie and Paffhausen 2018), which is about 8.3% per year in the first five years, we can speculate that not all taxpayers that shut down are actually removed from the registry.

reminder about the filing deadline significantly reduces nil-filing by 2 per cent.<sup>25</sup> These results, taken together, suggest that a large proportion of nil-filers still do not react to messages – even if they are being specifically targeted.

## 3 Profile of nil-filers in Eswatini

### 3.1 Data description

This study mainly relies on administrative data provided by SRA, accessed in September 2018, as extracted from the authority's Revenue Management System. The administrative data is completely anonymous to ensure that taxpayers could not be identified in any possible way.<sup>26</sup> Much preliminary work has been done on understanding the key figures in a income tax return form, as well as how the information was stored on the SRA platform. Additionally, data has been cleaned to better fit the purpose of this analysis.<sup>27</sup> More specifically, the following sources of data have been used:

- i) CIT returns. Declarations lodged in the period 2013-2017. In total, we observe 31,777 declarations lodged by 9,357 companies. This means that each taxpayer (with a given TIN) files on average 4.1 times across the five years, due to the fact that some of them registered after 2013 or that they interrupt filing in at least one year.<sup>28</sup> The dataset contains additional taxpayer's information, such as administrative district and economic sector, which will be used in the heterogeneity analysis.
- ii) VAT returns. VAT declarations are made in the same period as income tax returns. They account for 78,916 declarations lodged by 4,029 taxpayers.<sup>29</sup> However, this data is at the monthly (40% of all returns), quarterly (39%) or yearly (1%) level, given that VAT payers have a different filing frequency.<sup>30</sup> For this reason, we aggregated the VAT returns at the year level, to make the dataset comparable to the one for income tax.
- iii) PAYE reconciliation returns. Available for three years only, 2015-2017. PAYE returns are submitted monthly but PAYE reconciliation returns are on annual basis, lodged by the end of October of each year. We observe a total of 8,674 declarations lodged by 3,549 taxpayers. Key figures on PAYE deducted and number of salaried employees declared will be derived from this source of data.

The reason for using sources (ii) and (iii) is to merge them with the list of nil-filers from (i). In this way, we are able to see whether a nil-filer is also filing nil on their VAT and PAYE returns, or whether they are declaring divergent information in different returns, a possible indication of misreporting or evasion.

---

<sup>25</sup> Even if a direct link is not easy to identify, it could be that, just by sending an SMS, the authority increases the perceived likelihood of enforcement for those taxpayers who are evading and now feel more on the agency's radar.

<sup>26</sup> Instead of using TINs, SRA created random ID numbers to be used as unique identifiers.

<sup>27</sup> Some cleaning of data was necessary. The only relevant cleaning actions refer to the better labelling of the Sector and District variables. Only two duplicates (same declaration info for the same TIN in the same year) were found and deleted.

<sup>28</sup> Some 38% of taxpayers filed across all 5 years, while only 19% filed in just one year.

<sup>29</sup> The VAT Act requires that any business that supplies goods or services that are not exempt from VAT should apply for VAT registration. VAT registration is compulsory for businesses whose annual taxable turnover exceeds SZL500,000. National, regional or public institutions (parastatals and municipalities) that make taxable supplies are required to register for VAT even though they do not meet the above-mentioned threshold. Businesses supplying only exempt goods and services are not required to register. However, where a business supplies both exempt and taxable services, that business must register if the total turnover of the taxable supplies meets the annual turnover of SZL500,000. Other businesses whose turnover is below the threshold of SZL500,000 may apply for registration if they meet the registration requirements and the Commissioner General is satisfied that they are fit and proper to be registered.

<sup>30</sup> VAT payers who file monthly fall above the threshold SZL20 million. VAT payers who file quarterly are smaller, falling below the threshold. The remaining 1% filing annually consists of sugar cane companies, which mostly follow seasonal fluctuations in production and report transactions once a year.

### 3.2 Profile of nil-filers

In order to identify a nil-filer, we assume a taxpayer as being nil-filing if they report zero in all the following information fields: turnover, cost of sales, total income, net taxable income, tax assessed and tax payable or refund. The first key figure produced in this exercise is the share of nil returns per year. Overall, across the five-year period 2013-2017, the share of nil-filing is as high as 29 per cent. Almost a third of all income tax returns lodged are nil. Table 1 below shows the disaggregated extent of nil-filing by year. The trend has been quite stable over time, with a significant reduction in the last year, when nil-filing falls by 2.4 percentage points from 29.6 per cent in 2016 to 27.2 per cent in 2017. This means an 8 per cent decrease in 2017 in relative terms with respect to 2016.<sup>31</sup> One reason for the fall in nil-filing could be that declarations could still be missing in 2017. Indeed, the total number of returns lodged and processed in 2017 is 11 per cent smaller than the number of returns lodged in 2016, while this number increased every year from 2013. The argument would be that late filing is correlated with nil-filing, some evidence of which is anecdotal.<sup>32</sup> A further analysis of the tax returns data provides a clearer picture of the failure to file in any year under study. Appendix Table A2 summarises the share of taxpayers failing to file over the total number of taxpayers supposed to be filing. As expected, the share of failure-to-file increases from 2013 to 2017. While non-filers are 15 per cent in 2013, they amount to 26 per cent in 2017, somewhat corroborating the intuition behind the drop of nil-filers in 2017.

**Table 1 Share of nil income tax returns 2013-2017**

Submitted returns	Year					Total
	2013	2014	2015	2016	2017	
Non-nil	3,920 70.7%	4,379 70.4%	4,767 70.5%	4,933 70.4%	4,545 72.8%	22,544 70.9%
Nil	1,625 29.3%	1,840 29.6%	1,996 29.5%	2,075 29.6%	1,695 27.2%	9,231 29.1%
Total	5,545	6,219	6,763	7,008	6,240	31,775

Source: authors' computation on SRA administrative data

A closer inspection of the data provides a clearer picture on nil-filing. First, we can translate the share of nil returns in terms of actual taxpayers. As already discussed in section 3.1, the average taxpayer files 4.1 times over 5 years, meaning that a taxpayer could be nil-filing more than once. Indeed, the share of nil-filing taxpayers over the total number of taxpayers filing a return is higher than the 29 per cent reported above. As many as 4,212 uniquely identified taxpayers (with unique TINs) nil-filed in at least one year over the period 2013-2017, or 45 per cent of the total.<sup>33</sup>

<sup>31</sup> This decrease is significant at the 1% level when running a Pearson chi-square test on the equality of trends across years (we would consider p-values above 10% to indicate that no statistically significant differences exist across groups/years).

<sup>32</sup> Author's discussion with SRA officials often pointed out that taxpayers who missed declarations for many years and wanted to clear their tax position (most likely to get the Tax Clearance Certificate required for certain types of transactions, such as buying a vehicle or property), are advised by SRA staff upon being interviewed to file nil for all those years for which they have not lodged a return.

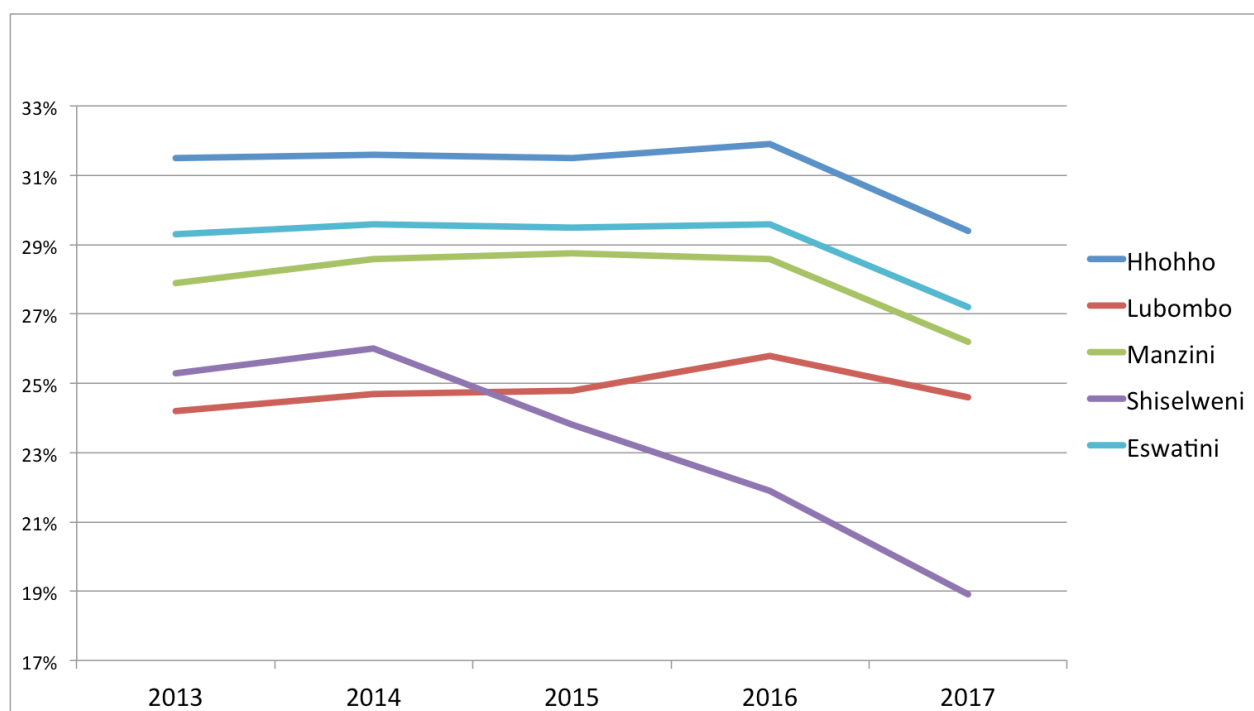
<sup>33</sup> Of the 4,212 nil-filers, 5 are classified as exempt from income tax in the SRA database. However, an additional 31 exempted taxpayers filed positively in the period. We are not sure whether we should remove them since they filed. Moreover, the data on exempted firms is scant and possibly not up-to-date. Given the small number of exempted taxpayers, their influence is very negligible. We decided to keep them in the analysis.

### 3.3 Nil-filing by district

In order to detect any geographical distribution of nil-filing across Eswatini, it is necessary to represent the national figures at the district level. There are four districts in Eswatini – Hhohho, Manzini, Lubombo and Shiselwini. The capital city and government headquarters are located in Hhohho. Manzini is the most industrial district, where many registered businesses are found. More specifically, 88 per cent of all companies' returns lodged in 2013-2017 come from either Hhohho (46%) or Manzini (42%), while Lubombo and Shiselwini represent a smaller share of the total, 8 per cent and 4 per cent respectively.

Figure 1 shows the trend of nil-filing across years in each district. On the vertical axis, the share refers to the percentage of nil returns over the total returns filed within each district.

**Figure 1 Share of nil income tax returns by district 2013-2017**



Some key considerations can be derived from Figure 1. First, Hhohho shows the highest share of nil-filing – about 31 per cent for the whole period, a bit higher than the national average. Second, Lubombo and Shiselwini have much lower incidence of nil returns in the period, 24 per cent and 25 per cent respectively. Third, the economically vibrant district of Manzini closely follows the national trend. Lastly, while nil-filing stayed stable over time in Hhohho, Lubombo and Manzini, a sizeable drop from 26 per cent in 2014 to 19 per cent in 2017 took place in Shiselwini.<sup>34</sup>

More in-depth research should be carried to understand the differential in trends across districts. A plausible explanation for the high prevalence of nil-filing in Hhohho could be linked to sector-specific dynamics or firm-level characteristics, such as sector or size, as shown in the following sections.

<sup>34</sup> Moreover, Shiselwini is the only district that does not see a reduction in the number of filed returns in 2017 (they are actually more than in 2014 and 2015, when nil-filing was much higher), as happens in all the other districts, so signalling the absence of late filing. This means that the reduction in nil-filing is not due to late filing, as suggested for the other districts. However, the relative importance of this district is minor, given that it represents only 4% of all returns filed in Eswatini.

### 3.4 Nil-filing by sector

An interesting question is whether nil-filing is more common in some sectors than others. Table 2 below describes the total share of nil returns over the total returns within each sector by year.

**Table 2 Share of nil income tax returns by sector in 2013-2017**

SECTOR	2013	2014	2015	2016	2017
Agriculture, forestry and fishing	25.6%	27.6%	26.7%	26.5%	24.0%
Construction	35.6%	40.5%	38.6%	39.2%	37.7%
Finance and insurance	25.8%	25.2%	26.7%	26.5%	21.3%
Information and Communications Technology (ICT)	38.2%	33.3%	37.9%	34.5%	27.0%
Manufacturing, mining and quarrying	23.4%	24.2%	21.4%	22.4%	20.2%
Other service activities	43.3%	39.3%	40.5%	38.8%	35.9%
Professional, scientific, technical activities	32.6%	30.7%	31.4%	30.6%	27.1%
Real estate	27.3%	27.9%	30.6%	33.1%	29.4%
Trade, transport, accommodation and food services	24.4%	26.6%	27.9%	28.4%	24.5%
Eswatini	29.3%	29.6%	29.5%	29.6%	27.2%

Source: authors' computation on SRA administrative data

From the table above, it can be seen that three sectors file nil returns much more frequently than others: construction, other service activities and ICT. The former two seems to have the highest share of nil-filing each year, with peaks at 40 per cent in 2014 for construction and 43 per cent in 2013 for other service activities. In a few sectors, such as agriculture and finance, trends are stable over years, while larger fluctuations take place in other sectors – such as ICT and other service activities. However, the same downward trend in nil-filing can be seen for all sectors in 2017, as already discussed in section 3.2.

A closer interrogation of reasons for the high prevalence in nil-filing across these three sectors is worthwhile. Why is nil-filing more likely to take place in ICT, construction and other service activities? Are common explanations for nil-filing, such as no trade or operations in the year, more likely to affect these sectors for some structural reason? This result implies the need to explore the heterogeneity in nil-filing taking place within the country, not just considering the national figures. For example, in an attempt to answer our question about the higher extent of nil-filing in Hhohho from section 3.3, it can be seen that taxpayers in other service activities are more frequent in Hhohho (12%) with respect to Eswatini as a whole (8.6%). Given that ICT and construction sectors in Hhohho are as representative as in the country overall, it could be that service activities are partly driving up nil-filing rates in that district.

### 3.5 Nil-filing by size

In this section, a further dimension of heterogeneity is explored: firm's size. According to SRA data, firms are classified as either small and medium enterprise (SME) or large, mostly based on turnover.<sup>35</sup> SMEs represent the vast majority of filing firms 2013-2017 – 97.8 per cent, or 9,139 unique firms. Large taxpayers are just 205 in total.

<sup>35</sup> There is no specific threshold to classify what are SMEs or large enterprises; instead an 80:20 revenue rule-of-thumb is observed. Usually, all financial institutions, mobile operators, mining and textile companies with high PAYE are large. Most often, the Commissioner General assigns the status of large at his discretion.

Figure 2 below shows the varying prevalence of nil-filing by firm size. Nil-filing is much more common for SMEs, where on average about 30 per cent nil-file per year. Nil-filing for large firms ranges between 5 and 7 per cent, with a peak of 10 per cent in 2016. These figures confirm that SMEs are driving the national average of nil-filing of about 29 per cent. As an additional consideration, it may seem counterintuitive that a large firm nil-files. However, it could well be that these firms are classified as large by the authority at the time of registration or the initial years of operation, and could end up nil-filing in following years. To confirm this, it could be noted that 83 per cent of the 205 large firms in the sample registered before 2013. It is plausible that, despite being large initially, they nil-file as they stop being operational or for another reason.

**Figure 2 Share of nil income tax returns by size in 2013-2017**



There are several reasons why nil-filing is much more common for SMEs. First, large firms are expected to be operational due to their size, which allows them to be more competitive and to access financial markets more easily. SMEs are more prone to be not trading in a given year due to financial constraints. As shown in section 5, the qualitative desk exercise shows that lack of trade is the main reason for nil-filing. Second, large firms are likely to have more rigorous bookkeeping procedures, and can afford to hire highly skilled external tax advisers to assist with filing a return. Third, related to the latter point, filing a tax return for larger firms would seem to be a more serious obligation as they are always on the radar of the tax authority. Nil-filing from large firms would almost automatically trigger an audit. SMEs are much less likely to be detected for suspicious reporting behaviour due to their high numbers on the tax register, and they might be aware of this. As a result, they might internalise a lower perceived risk of being caught, and nil-file more often. In this case, the argument that evasion is the main reason for nil-filing is more credible.

From a policy point of view, the fact that the vast majority of nil-filers are SMEs should help the authority predict that the possible extra revenue that can be raised by targeting them could be small. However, this does not mean that this issue should be considered unimportant. If nil-filing is also driven by evasion, curbing it could bring other non-monetary benefits to SRA and to society as a whole – such as a greater perception of fairness in the



community of taxpayers, where everyone pays the taxes they owe, fewer economic distortions between competing businesses, less inequality, as well as, more broadly, a strengthened culture of compliance.

### 3.6 Nil-filing by length of business' life

As a final check on the heterogeneity of nil-filers, we were interested in detecting any different behaviour according to length of the business' life. It could be that nil-filing is a specific response for businesses of a given age. For this reason, we split the sample of taxpayers in two groups: those that are new – in the first year of declaration after registration, and those that are old – in the second year after registration or later. Appendix Figure A2 shows the percentage of nil-filing by the two groups. It seems that nil-filing is much more common in the first year after registration, in which taxpayers are 46 per cent likely to file nil, rather than when they are in the second year or more (26%). The difference between the two groups is statistically significant with a p-value of the Chi-square test of 0 per cent.<sup>36</sup> This tells us that nil-filing is correlated with the age of the business. A plausible explanation could be that firms in their first year are not yet operative, and could be legitimately nil-filing for this reason (see section 2). This is also related to some contemporaneous evidence on the fact that younger firms are more likely to die, especially during the first year (McKenzie and Paffhausen 2018).

A relevant concern that emerges when using the year of registration in the analysis is that this information may not be sufficiently reliable. SRA is still devoting much of its resources to the cleansing of the taxpayers' registry, and the process has not yet been completed. For this reason, as an alternative measure for business' life length, we look at the number of years for which the taxpayers filed a return, a variable that ranges from one to five (every year in the reference period). This information is not extracted from the registry, is more likely to be accurate, and could possibly proxy the life length of the business. When disaggregating the share of nil returns by the numbers of years of filing, a similar picture emerges: submitting a nil return is much more likely to take place for businesses with just a year of filing, 58 per cent, vis à vis businesses with five years of filing, 18 per cent. The probability of observing a nil return decreases when the number of years move from one to five.<sup>37</sup>

This last finding adds to the diversified picture of nil-filing behaviour described in the previous sections.

### 3.7 A more structured approach

While in the previous subsections we map the patterns of nil-filing in a descriptive way, in this subsection we present a more robust solution to identify those patterns. We adopt a regression approach, in which we regress an indicator variable for a nil return in a given year on a set of descriptive variables of the company in that same year. This set of variables is composed of district, sector, size and business' life length, which, in this setting, may be referred to as explanatory variables. This is exactly the same information studied above, but presented here in a way to obtain more robust estimates of the correlations lying behind this filing behaviour.

---

<sup>36</sup> In this case, the Chi-square test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies of nil-filing in the two groups - i.e. taxpayers in their first year of declarations and taxpayers in their second year or more. In the absence of any different reporting behaviour between the two groups, the expected frequencies should be the same in the groups. However, this is not the case. A p-value lower than the 5% significance level implies a strongly significant difference of nil-filing between the two groups.

<sup>37</sup> Table omitted for brevity. The share of nil returns for firms with 2 years of filing is 47%, with 3 years is 43%, and with 4 years is 35%.

Appendix Table A3 reports the results. In column 1, a simple multivariate OLS regression is adopted, while in columns 2 and 3 probit and logit estimates are provided. Estimates do not provide a causal link, but should rather be looked at as indicating a correlation with nil-filing. Results are quite similar to those presented in the subsections above. Nil-filing is more likely to take place in Hhohho and Manzini rather than Lubombo (Shiselweni omitted), as in section 3.3. Likewise, nil returns are more frequent in construction, other service activities, ICT and professionals, as explained in section 3.4 (Table 2), and least likely to take place in public administration. Moreover, a strong negative correlation can be noticed between nil-filing and the size of the firm, as in section 3.5. Finally, firms at their first year after registration are much more likely to file nil. Similarly, the number of years with filing is negatively related to nil-filing, as emerged from section 3.6.

### 3.8 Persistent nil-filers

Here, in an attempt to dig deeper in the nil-filing issue, we restrict the analysis to the so-called persistent nil-filers. Persistent nil-filers are taxpayers who nil-file every year in which they file a return. While a nil-filer, as defined in the previous sections, is filing nil in at least one year over the five-year period, and could positively file in any other year, persistent nil-filers nil-file every time they file.

The extent of persistent nil-filers can be summarised as follows:

- 29.6 per cent of all taxpayers filing in the period 2013–2017 are persistently nil-filing. This amounts to 2,749 unique taxpayers out of a total of 9,357 (see section 3.2).<sup>38</sup>
- With respect to the broader definition of nil-filer from section 3.2, according to which 4,212 taxpayers were nil-filing in at least one year – 66 per cent of them are persistent nil-filers. A nil-filer in Eswatini has two-thirds probability of persistently nil-filing.
- Cascading down this analysis to those taxpayers who filed in at least two years, to consider persistent nil-filers over a minimum period of two years,<sup>39</sup> the share slightly decreases: persistent nil-filers are 23 per cent of the total number of filing taxpayers (down from 29.6%) and 54 per cent of the sample of non-persistent nil-filers (down from 66%).

When making a further comparison, the heterogeneity analysis of persistent nil-filers yields very similar results to the one on nil-filers only. More specifically:

- By district: Hhohho has the highest share of persistent nil-filers over the total number of filing taxpayers, 31 per cent, while Shiselweni has the lowest, 23 per cent, similar to what is shown in section 3.3.<sup>40</sup>
- By sector: in construction (38%), other service activities (38%) and ICT (37%) persistent nil-filers are a higher percentage of the total number of filers, similar to what is shown in section 3.4.<sup>41</sup>

<sup>38</sup> Even if the results are remarkably similar, the share of persistent taxpayers is not to be confused with the 29% nil-filing rate as an annual average over the period 2013–2017 (see section 3.2). We are expressing persistent nil-filing in terms of the number of taxpayers, not on an annual basis. Given that persistent nil-filers are nil-filing in any year, it makes more sense to look at the overall population of filing taxpayers than the annual average.

<sup>39</sup> In this case, we do not consider a taxpayer who files in only one year, possibly because they are newly registered, as a persistent nil-filer. We also do not show results disaggregated by 'new' and 'old' taxpayers, since, in this analysis, taxpayers are all beyond their first year after registration.

<sup>40</sup> The corresponding figures for the subsample of filers for at least two consecutive fiscal years is: Hhohho 20%, Manzini 18%, Lubombo 15% and Shiselweni 12%. These figures exclude those taxpayers who registered in 2017 and were found to submit nil returns in the same year.

<sup>41</sup> The corresponding figures for the subsample of filers for at least two fiscal years are: construction 23%, other service activities 26% and ICT 21%.

- By size: similarly to what is described in section 3.5, SMEs are much more likely to be persistently nil-filing (30%) than large taxpayers (12%), as a share of the total number of filers.<sup>42</sup>

## 4 What are nil-filers reporting in other tax returns?

In the previous section, the extent of nil-filing has been quantified in a total of 4,212 taxpayers who filed a nil tax return in a given year over the past five years (2013-2017). The next step is to determine whether these nil-filers are making a true declaration – if this is consistent with what the taxpayer reports in other tax returns.

The basis of this section therefore is to prove legitimacy of the captured nil income tax declaration by merging income tax returns data with other tax types (VAT, PAYE) that the same taxpayer is registered for. In this way, we can compare the information submitted on different tax types by the same taxpayer in the same year. Subsequently, discrepancies across different tax returns can be mapped. Where a taxpayer who is nil-filing in their income tax return is found to have positive transactions for either VAT or PAYE, it could be argued that the nil income tax return submitted during that year is not justified. Concerns of misreporting and tax evasion come into play.

### 4.1 Nil-filers with transactions for VAT

Over the past five years, it was found that 449 from a total of 4,212 income tax nil-filers had declared VAT in the year that they filed a nil return (10.7%). This corresponds to 724 CIT annual returns for which a VAT declaration can be found in the same year. A closer analysis of these returns produces the following results:

- 436 (60%) report zero supplies in the VAT declaration, somewhat in line with their nil business income in the CIT return.
- 288 (40%) report positive supplies with an average amount of SZL26 million (\$1.8 million). The sum of these supplies amounts to SZL7.46 billion (\$532 million).
- Similarly, of the 724 CIT nil returns for which a VAT declaration is found, 432 (59.6%) consistently report zero VAT payable or refundable, 237 (33%) declared a positive VAT payable of SZL1.19 million (\$85,000) on average; 55 (7.5%) are in a refund position for an average of SZL1.78 million (\$127,000).

Considering the fact that a nil-filer could file a VAT return multiple times over the reference period, the figure of 288 VAT returns with positive supplies reported above refers to 236 unique nil-filers. These taxpayers should not have submitted a nil return and are therefore reporting divergent information to the authority. It is also worth noticing that this group of taxpayers is a small share of the nil-filing sample, just 5.6 per cent. The remaining nil-filers do not flag any concern of blatant evasion. Most of them (about 90%) are not even declaring a VAT return. This could be due to the fact that they did not trade (section 1.2), but it could also be that they are aware that reporting discordant information to the authority could increase the risk of an audit. It could also be due to the fact that the majority of nil-filers are not VAT-registered, something that we cannot observe with the available data. At the same time, 60 per cent of those taxpayers filing VAT returns while nil-filing in their income tax return consistently report zero supplies in the VAT form. This could reflect both a virtuous filing behaviour, where the taxpayer declares VAT regardless of whether he is operating or not, but, at the same time, could mean that the taxpayer is evading on both returns. It is very

<sup>42</sup> The corresponding figures for the subsample of filers for at least two consecutive fiscal years are: SMEs 23%, large 5%.

difficult to disentangle the different mechanisms that could explain this pattern. What we could state with certainty is that the 236 nil-filers reporting positive sales in the VAT returns show a concerning behaviour most likely to be considered as tax evasion.

#### **4.2 Nil-filers with transactions for PAYE**

In the same way as in section 4.1, here we merge the nil-filers sample with the PAYE returns data for the year 2015-2017. As explained in section 3.1, only a restricted period is available for the PAYE data – 3,272 unique nil-filers can be identified in 2015-2017, as opposed to the larger sample of 4,212 in 2013-2017. When merging with PAYE data, we notice that 164 nil-filers are declaring PAYE (5%) or 3.4 per cent of the total returns in the period 2015-2017. Focusing on this subsample of 164 PAYE-declaring income tax nil-filers, we can realise that:

- 37 per cent report zero employees, while 63 per cent indicate a positive number of salaried employees. The average number of employees reported is 31, with an average total taxable salary of SZL2.8 million (\$198,000).<sup>43</sup> In sum, 106 nil-filers are reporting salaried employees in the year in which they nil-filed.
- In the same way, while 48 per cent report zero PAYE deducted, 24 per cent have positive PAYE deducted and 28 per cent are in a refund position. The average PAYE deducted is SZL4,884 (\$348),<sup>44</sup> while the average PAYE refunded is SZL3,336 (\$238).

Again, discrepancies in the information declared to the authority with different tax returns signal the possibility of evasion taking place. However, when considering the absolute numbers, the extent of misreporting with PAYE data is not substantial. There are only 106 income tax nil-filers who report positive salaries, or 3 per cent of the nil-filing sample. Nevertheless, these taxpayers should not have reported nil taxable income, even with zero turnover. More correctly, they should be in a loss position, with a negative taxable income. Moreover, these findings beg the question of where the income to pay the salaried employees was taken from, if they declared nil in the submitted tax return of that year. The vast majority of nil-filers did not file any PAYE return or, if so, reported to have zero employees. As mentioned above, this could either be due to proper filing behaviour or to tax avoidance and evasion on both income and PAYE taxes.

#### **4.3 Nil-filers with transactions for both VAT and PAYE**

As a final check, we consider nil-filers declaring both VAT and PAYE and observe the resulting discrepancy, if any. Not surprisingly, there are very few nil-filers reporting both VAT and PAYE – 90 in total. They amount to 20 per cent of nil-filers declaring VAT, and 55 per cent of those declaring PAYE. Of these, 54 (60%) report divergent information with respect to their income tax returns – positive supplies in the VAT declaration and positive salaries in the PAYE returns.

Despite this being a fairly negligible share, a certain trend of misreporting in the way taxpayers make their declarations is visible. From the above findings, it is therefore safe to say that not all the observed nil-filers in the system are actually nil-filers in the true sense. It is somewhat reassuring to notice that these numbers are not high. Nevertheless, they do call for caution and the need to respond before the gap widens.

## **5 Additional qualitative evidence on nil-filing**

<sup>43</sup> The number of salaried employees is derived from the PAYE returns and not from the taxpayer registration profile. While in these profiles taxpayers indicate the number of employees at the time of registration, they update that number every time they file a PAYE reconciliation return. This means that the figures above reflect the actual number of employees in that given year, not the one at the time of registration.

<sup>44</sup> Mostly driven down by very small amounts. The first quartile (25%) amounts to an annual PAYE deducted of \$2.6 only.

In the specific context under study, in addition to administrative data some qualitative evidence can be easily gathered that may help decipher the issue of nil-filing. Indeed, in Eswatini it is a mandatory requirement for a taxpayer to attach an official letter to the nil income tax return justifying the reason for submitting a nil return.<sup>45</sup> We selected a random sample of 50 nil-filing companies in 2017 and coded the reasons for this behaviour.<sup>46</sup> It results that:

- The main reason for all 50 nil-filers is that they are not operational.
- The reason why they are not operational is not always specified. A few nil-filers clearly state the main challenges they faced and why they became inoperative.
- The key challenge is related to lack of funds and unpredictable financial constraints (16%).
- Other challenges refer to management disagreement, failure to find an office to work in, or health issues of the business' owner.
- About 10 per cent say the business has not been running for several years.<sup>47</sup>

In summary, most of the nil-filers are simply not in operation, or at least report that this is the case. It can be also noticed that 40 per cent of the sample registered before 2013,<sup>48</sup> while the remaining 60 per cent registered in the following years, in a pretty uniform manner. This implies that nil-filing could be a common problem regardless of the length of the firms' life.

Additional qualitative evidence comes from the authors' discussions with seven SRA staff.<sup>49</sup> It emerges that nil-filing could be the result of a process in which taxpayers rationally maximise the benefits of exploiting internal loopholes within the tax system. According to the tax code there are no penalties applicable for submitting a nil return, even if it is past the filing deadline. For this reason and subsequent to engagement with SRA, taxpayers are often 'advised' by SRA officials to submit a nil return in order to prove to be compliant with tax obligations and clear their tax position. This usually happens when the taxpayer needs to obtain a tax clearance certificate, which is a mandatory requirement in most business spheres in the country. The feeling among SRA's staff is that taxpayers are maximising this loophole and probably sharing information about it as a simple means of avoiding paying taxes and penalties, but still being in a legitimate position with respect to the authority.

## 6 Concluding remarks

In this study, SRA and ICTD aim to describe and measure the extent of nil-filing among corporate income tax filers. Nil-filing is a widespread compliance issue in many economies in sub-Saharan Africa (Rwanda, Uganda and Ethiopia) and is a largely under-researched topic. Very little is known of the reasons why a large proportion of registered taxpayers report nil returns, often for many consecutive years. The same revenue authorities focus little attention on those declarations that do not yield a positive revenue base, and it seems to be difficult to design proper revenue-generating strategies targeting a behaviour that is not well understood.

---

<sup>45</sup> To our knowledge, this attachment is not required in other ICTD partner countries, such as Rwanda.

<sup>46</sup> Randomisation was performed using STATA statistical software.

<sup>47</sup> This finding is linked to the discussion on persistent nil-filers in the previous section.

<sup>48</sup> We aggregate all registrations before 2013 in a single group, since information on the registration date before 2013 is more likely to be inaccurate.

<sup>49</sup> SRA staff were from Field Service, Central Operations and Compliance Divisions. They were not randomly selected or sampled in any rigorous way.

After accessing anonymised CIT returns for the period 2013-2017, we have been able to map the extent of nil-filing in the country. Results show that nil-filing is not a minor issue in Eswatini. On average as many as 29 per cent of CIT returns are nil in the last five years. This translates to 45 per cent of filing taxpayers who nil-file in at least one year. A more in-depth analysis of the data has been run in order to measure the heterogeneity patterns across key taxpayers' characteristics, such as location, economic sector and size. Nil-filing is not a homogenous behaviour: in Hhohho, nil-filing rates are higher than the national average, while in Shiselweni they are at their lowest. Similarly, three key sectors – construction, ICT and other service activities – show a much higher presence of nil-filers, about 40 per cent of yearly returns. These are also the sectors that show a sharp decrease in revenue collection in 2017/2018, as reported in SRA (2018). At the same time, small firms are six times more likely to nil-file than large ones. Equally important, the issue of persistent nil-filing is explored. A sizeable 30 per cent of all taxpayers filing in the five-year period are persistently nil-filing. In line with this finding, it is also shown that two-thirds of nil-filers are persistent ones. This suggests that nil-filing could be a well-established filing behaviour that persists over time.

With the evidence emerging from this study, it is important to ponder the initial question prompted by this paper. As a revenue administration, how well does SRA understand the way taxpayers in Eswatini are declaring their income, and what is being done to improve this understanding? Obtaining appropriate responses to this question will enable the development of innovative solutions to meet the strategic vision for SRA, expressed by the '100% voluntary compliance for a better Eswatini' plan. SRA needs to comprehend fully the triggers that make taxpayers nil-file, and this requires a sound understanding of the way taxpayers behave and how they respond to different situations.

Building on the results presented, some key policy recommendations can be formulated. First, on a more general level, the ongoing improvement on the taxpayers' registry is welcomed in order to have a cleaner database to be analysed in further research. During this study, some issues have been experienced in the correct understanding of the profiles of different taxpayers in the database, and SRA realised how crucial it is to ensure that those taxpayers who appear in the registry are those who should be in the tax system. According to SRA, a key step in cleaning and improving the database would be the exchange of business registration information with the government counterpart who usually has separate registries for specific taxpayers.<sup>50</sup>

Second, several recommendations can be made regarding the way the tax authority could cope with nil-filing. The large number of nil-filers found in this study can encourage SRA to put more effort into establishing a dedicated intelligence unit with the role of monitoring compliance. A proper monitoring system could be set up, to automatically gather figures on nil-filing to be shared to inform the policy discourse.<sup>51</sup> Likewise, the system could systematically cross-check different tax returns for the same taxpayer and trigger audits when inconsistencies are detected, in much the same way as has been done in this study. A key requirement would be to dedicate resources and skilled staff to this task. Moreover, physical inspections for a sample could be done for those nil-filers who own well-known properties (see section 5). Finally, given the qualitative evidence that nil-filing is often a solution for missed declarations and late filing (see section 5), the income tax law could be refined with harsher penalties for late filing being introduced, regardless of whether the taxpayers brings a nil return. A stricter tax code could improve the general compliance

---

<sup>50</sup> At the time of writing this report there is no systematic linkage with the government business registration database, which would allow the SRA to view the total number of businesses registered in a timely fashion. The same lack of interface refers to information on trading licence renewal, deregistrations from the government registry and those businesses that are dormant.

<sup>51</sup> Authors' discussion with SRA officials show that the internal revenue management system is not configured to track persistent nil-filers. Ad hoc reports on nil-filers are produced on a monthly basis, but the monitoring and feedback mechanism to Operations Department is still very weak.

behaviour and reduce nil-filing as a way to exploit the existing internal loopholes.

Third, SRA and ICTD aim to build on the evidence gathered in this study and to implement a large-scale field experiment in the country. Using rigorous methods and sampling strategies, such as randomised controlled trials, the aim of both partners' is to test cost-effective strategies to reduce nil-filing in Eswatini. Different hypotheses could be tested by simply nudging taxpayers with messages varying both in content and delivery methods. Ideally, a cheap SMS with the right content – even a simple reminder to file on time – could have an immediate impact (Manoli and Turner 2014). Similarly to what has been done in Rwanda (Mascagni et al. 2017), SRA could contact nil-filers with different types of message, such as a deterrent letter, a brochure with information on deregistration procedures, or a simple reminder, and then measure the effectiveness of each message in reducing nil-filing and increasing revenue raised. For example, given initial qualitative evidence showing that nil-filers are likely not to be trading, a message informing them of the deregistration procedure would increase the deregistration rates and reduce nil-filing for those who ceased operations.<sup>52</sup> At the same time, if we expect that some evasion is taking place through nil-filing, as shown from cross-checking different tax returns for the same nil-filer (section 3), a pure deterrence message would help reduce nil-filing by increasing the perceived probability of audit and sanctions, as implied by the neoclassical literature (Allingham and Sadmo 1972). In so doing, SRA could signal to taxpayers that it has the infrastructural capacity to monitor compliance and check for different tax returns at the same time.

Significantly, much evidence has been produced on the effectiveness of deterrence in improving compliance (Slemrod et al. 2001; Castro and Scartascini 2015; Fellner et al. 2013; Ariel 2012; Bott et al. 2014; Dwenger et al. 2015), with the caveat that the threat of audits may be ineffective if enforcement strategies are perceived to be weak and not credible by the evading taxpayer (Carrillo et al. 2017). Additionally, an alternative softer approach could also be used in addressing nil-filers, for example leveraging on their tax morale (Luttmer and Singhal 2014) – even if evidence from existing studies on the impact of this is somewhat mixed.<sup>53</sup> A softer approach could also show another face of the revenue authority to taxpayers: from qualitative interviews with five economic sector representatives, it seems that taxpayers feel there is a lack of reciprocity and collaboration with the authority. This also includes the SRA's hostile approach of extracting revenue with minimal investment on targeted and intensive taxpayer education, or even informing how taxes are used.

In conclusion, many avenues to tackle nil-filing can potentially be explored, thus contributing to the growing literature on tax experiments in the developing world (Mascagni 2016). From a broader perspective, further rigorous research can be started considering tax compliance in its multidimensionality – for example, including the issue of failing to file or the possibility of evading for positive, non-nil-filing, taxpayers.<sup>54</sup> This descriptive paper represents only the first step in a long-term plan of research collaboration between SRA and ICTD, and fruitful and exciting discussions on future research are currently ongoing.

---

<sup>52</sup> In an unpublished study in Rwanda, Mascagni et al. (forthcoming) finds that a reminder is quite effective in pushing taxpayers to deregister.

<sup>53</sup> Some studies find that improved tax morale brings more compliance (Hallsworth et al. 2014; Bott et al. 2014), while others fail to find any effect (Dwenger et al. 2015; Slemrod et al. 2001; Castro and Scartascini 2015; Fellner et al. 2013).

<sup>54</sup> A parallel study to this seeks to quantify the extent of taxpayers failing to file by the deadline, which will be most likely included in a single, multi-faceted, cross-country experiment.

## Appendix

**Table A1 Corporate income tax**

Year	Actual	% Year on Year change	% of tax revenue	% of GDP
2013/14	1,070,384,992	44.0%	19.6%	2.4%
2014/15	1,483,248,126	38.6%	24.6%	3.0%
2015/16	1,371,839,190	-7.5%	20.6%	2.6%
2016/17	1,498,625,559	9.2%	19.2%	2.7%
2017/18	1,373,916,336	-8.3%	16.3%	2.4%

Source: SRA (2018).

**Table A2 Share of non-filers in 2013-2017**

	Year				
	2013	2014	2015	2016	2017
Non-filers	505	776	1,080	1,495	1,941
Expected filers	3,316	4,403	5,395	6,521	7,467
% Non-filers	15%	18%	20%	23%	26%

Source: authors' computation on SRA administrative data

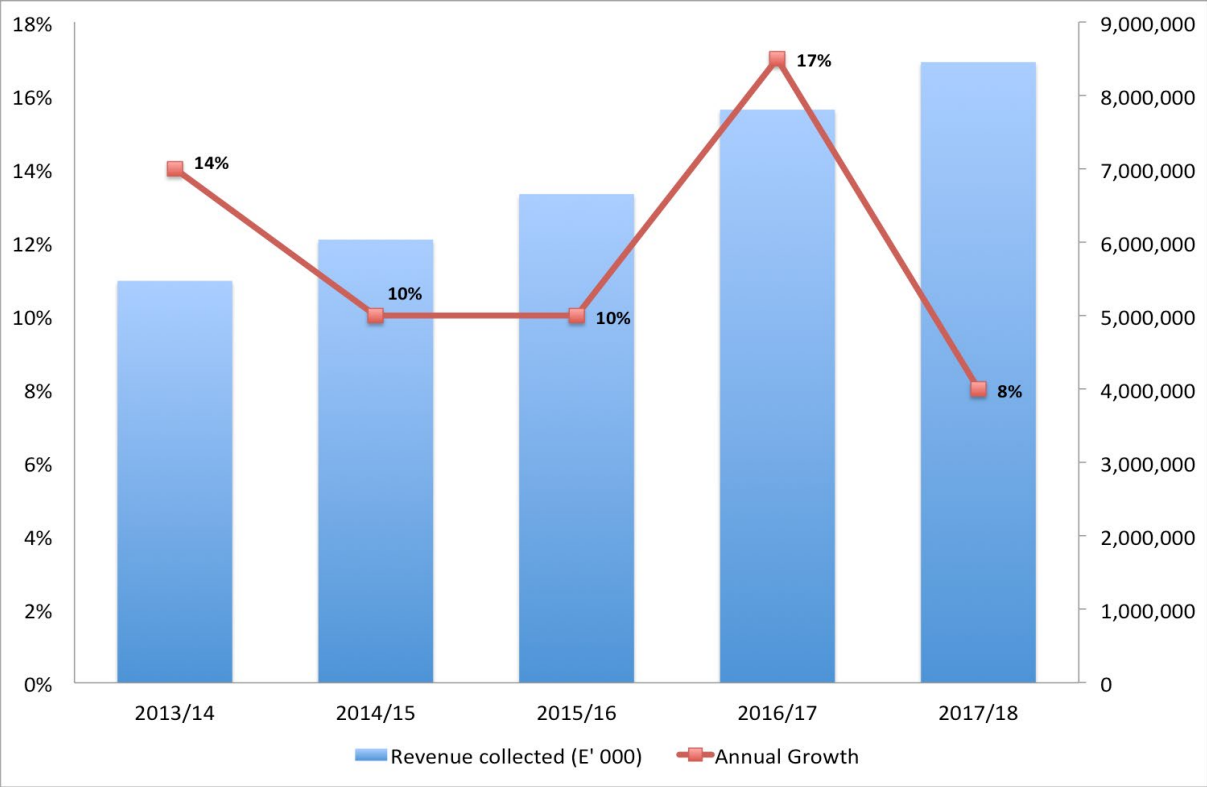


**Table A3 Determinants of nil-filing**

	OLS	Probit	Logit
Hhohho	0.0634*** (4.73)	0.0712*** (4.81)	0.0722*** (4.76)
Lubombo	0.000627 (0.04)	0.00255 (0.15)	0.00390 (0.22)
Manzini	0.0431** (3.22)	0.0495*** (3.34)	0.0504*** (3.31)
Agriculture	-0.0319 (-1.31)	0.0200 (1.61)	0.0211 (1.68)
Construction	0.0534* (2.33)	0.107*** (12.75)	0.106*** (12.83)
Finance	-0.0686** (-2.76)	-0.0153 (-1.11)	-0.0163 (-1.16)
ICT	0 (.)	0.0563* (2.42)	0.0567* (2.46)
Manufacturing	-0.0704** (-3.01)	-0.0226* (-2.18)	-0.0231* (-2.17)
Other service activities	0.0579* (2.48)	0.111*** (11.64)	0.109*** (11.58)
Professional	-0.0188 (-0.82)	0.0365*** (4.41)	0.0359*** (4.32)
Public admin	-0.112*** (-4.34)	-0.0630*** (-3.88)	-0.0668*** (-3.95)
Real estate activities	0.00815 (0.35)	0.0633*** (6.34)	0.0641*** (6.43)
Trade	-0.0521* (-2.35)	0 (.)	0 (.)
Large	-0.181* (-2.47)	-0.292*** (-3.73)	-0.311*** (-4.11)
SME	-0.0550 (-0.77)	-0.0488 (-0.65)	-0.0508 (-0.72)
1 <sup>st</sup> year after reg	0.0855*** (11.85)	0.0808*** (11.27)	0.0777*** (11.01)
# of years with filing	-0.0908*** (-42.51)	-0.0862*** (-39.82)	-0.0839*** (-39.44)
Constant	0.682*** (8.90)		
Observations	31349	31349	31349

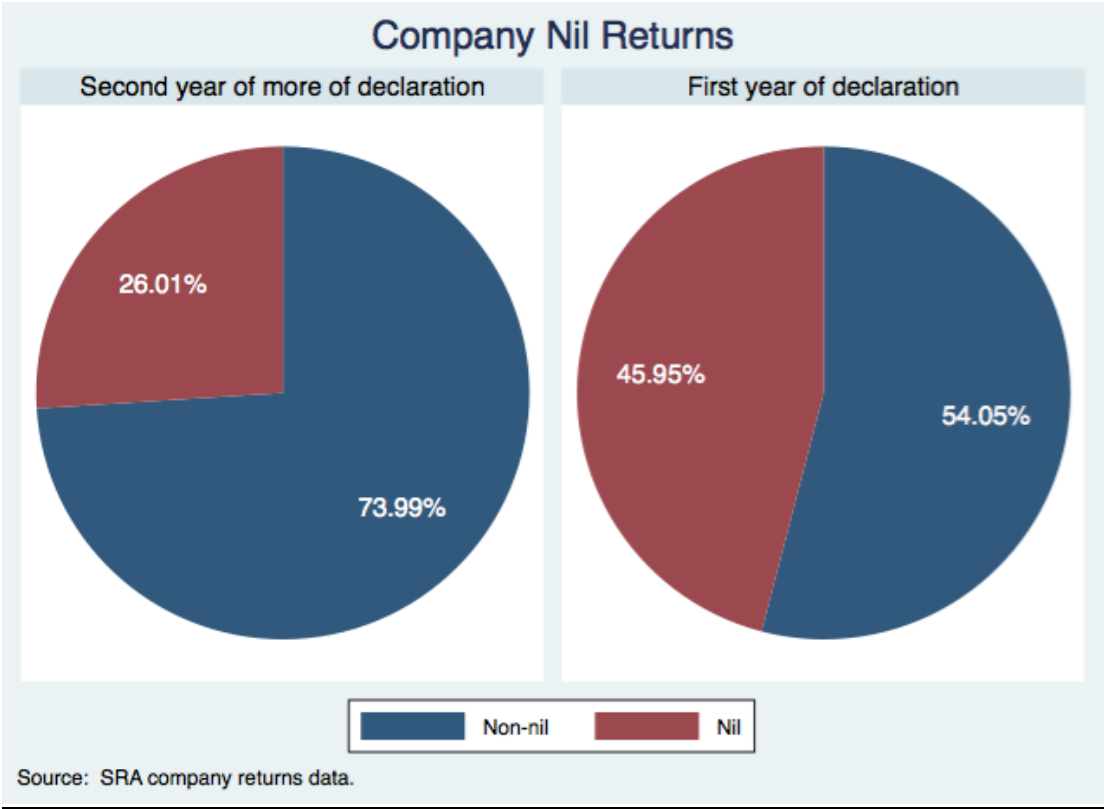
*t* statistics in parentheses. \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . The district of Shiselweni is omitted. The dependent variable is an indicator variable that takes value 1 if the firm submitted a nil return. Coefficients from Probit and Logit are marginal effects computed at mean of covariates.

**Figure A1 Revenue collection in SZL '000 and revenue growth**



Source: SRA (2018).

**Figure A2 – Nil-filing by length of business' life**



Source: SRA company returns data.

# References

- Allingham, M. G. and Sandmo, A. (1972) 'Income Tax Evasion: A Theoretical Analysis', *Journal of Public Economics* 1(3-4): 323-38
- Almunia, M., Gerard, F., Hjort, J., Knebelmann, J., Nakyambadde, D., Raisaro, C. and Tian, L. (2017) *An analysis of discrepancies in tax declarations submitted under value-added tax in Uganda*, Final report S-43312-UGA-1, International Growth Centre
- Alvaredo, F. and Atkinson, A. (2010) *Colonial Rule, Apartheid and Natural Resources: Top Incomes in South Africa, 1903–2007*, CEPR Discussion Paper 8155, London: Centre for Economic Policy Research
- Ariel, B. (2012) 'Deterrence and Moral Persuasion Effects on Corporate Tax Compliance: Findings from a Randomized Controlled Trial', *Criminology* 50(1): 27-69
- Atkinson A. (2011) *Evidence on Top Incomes in Tanzania, 1948–1970*, ICG Working Paper 11/0070, London: International Growth Centre
- Piketty, T. and Saez, E. (2010) 'Top incomes in the long run of history', in A. Atkinson and T. Piketty (eds), *Top incomes: A global perspective*, The MIT Press
- Bérgolo, M., and Ceni, R., Cruces, G., Giacobasso, M. and Perez-Truglia, R. (2018) *Tax Audits as Scarecrows: Evidence from a Large-Scale Field Experiment*, National Bureau of Economic Research Working Paper Series 23631
- Besley, T. and Persson, T. (2014) 'Why Do Developing Countries Tax So Little?', *Journal of Economic Perspectives*, 28(4): 99-120
- Bott, K., Cappelen, A. and Sørensen, E. (2014) *You've Got Mail: A Randomised Field Experiment on Tax Evasion*, Norwegian School of Economics
- Carrillo, P., Pomeranz, D. and Singhal, M. (2017) 'Dodging the taxman: Firm misreporting and limits to tax enforcement', *American Economic Journal: Applied Economics* 9(2): 144-64
- Castro, L. and Scartascini, C. (2015) 'Tax Compliance and Enforcement in the Pampas: Evidence From a Field Experiment', *Journal of Economic Behavior & Organization* 116: 65-82
- Dwenger, N., Kleven, H., Rasul, I. and Rincke, J. (2015) 'Extrinsic and Intrinsic Motivations for Tax Compliance: Evidence from a Field Experiment in Germany', *American Economic Journal: Economic Policy*
- Eissa, N., Zeitlin, A. and Murray, S. (2017) *Fiscal impacts of a presumptive tax for microenterprises in Rwanda*, International Growth Centre policy paper no. I-38113-RWA-1
- Karpe, S. and Murray, S. (2014) *Incidence and Impact of Electronic Billing Machines for VAT in Rwanda*, Report, International Growth Centre
- Fellner, G., Sausgruber, R. and Traxler, C. (2013) 'Testing Enforcement Strategies in the Field: Legal Threat, Moral Appeal and Social Information', *Journal of the European*

*Economic Association* 11(3): 634-660

Hallsworth, M., List, J., Metcalfe, R. and Vlaev, I. (2014) *The Behavioralist as Tax Collector: Using Natural Field Experiments to Enhance Tax Compliance*, *Journal of Public Economics* 148(C): 14-31

Higgins, S. and Lustig, N. (2013) *Commitment to Equity Assessment (CEQ): Estimating the Incidence of Social Spending, Subsidies and Taxes. Handbook*, CEQ Working Paper 1, New Orleans: Center for Inter-American Policy and Research and Department of Economics, Tulane University and Washington DC: Inter-American Dialogue

Luttmer, E. and Singhal, M. (2014) 'Tax Morale', *Journal of Economic Perspectives* 28(4): 149-68

Manoli, D. and Turner, N. (2014) *Nudges and learning: evidence from informational interventions for low-income taxpayers*, NBER Working Paper 20718, Cambridge MA: National Bureau of Economic Research<sup>[SEP]</sup>

Mascagni, G. (2018) 'From the lab to the field: A review of tax experiments', *Journal of Economic Surveys* 32(2): 273-301

—— (2016) *From the Lab to the Field : A Review of Tax Experiments*, ICTD Working Paper 46, Brighton: Institute of Development Studies

—— and Mengistu, A. (2018) *Are There Any Reliable Data on Wages in Low-Income Countries? Observations and Lessons from Ethiopia*, ICTD African Tax Administration Paper 3, Brighton: Institute of Development Studies

—— (2016) *The corporate tax burden in Ethiopia: Evidence from anonymised tax returns*, ICTD Working Paper 48, Brighton: Institute of Development Studies

—— and Wodleyes, F (2018) *Can ICTs increase tax? experimental evidence from Ethiopia*, ICTD Working Paper 82, Brighton: Institute of Development Studies

—— Nell, C. and Monkam, N. (2017) *One size does not fit all: A field experiment on drivers of compliance and delivery methods in Rwanda*, ICTD Working Paper 58, Brighton: Institute of Development Studies

—— (2016) *Unlocking the Potential of Administrative Data in Africa: Tax Compliance and Progressivity in Rwanda*, ICTD Working Paper 56, Brighton: Institute of Development Studies

—— Santoro, F. and Mukama, D. (forthcoming), *Active Ghosts: Income Tax Nil-filing in Rwanda*, ICTD Working Paper

—— (2019a) *Teach to comply? An evaluation of a tax education programme in Rwanda*, ICTD Working Paper 91, Brighton: Institute of Development Studies

—— (2019b) *An Analysis of Discrepancies in Taxpayers' VAT Declarations in Rwanda*, ICTD Working Paper 92, Brighton: Institute of Development Studies

McKenzie, D. and Luisa Paffhausen, A. (2018) *Small Firm Death in Developing Countries*, *The Review of Economics and Statistics*

- Pomeranz, D. (2015) 'No taxation without information: Deterrence and self-enforcement in the Value Added Tax', *American Economic Review* 105(8): 2539-69
- Schneider, F. and Williams, C. (2013) *The Shadow Economy*, London: The Institute of Economic Affairs
- Slemrod, J., Blumenthal, M. and Christian, C. (2001) 'Taxpayer Response to an Increased Probability of Audit: Evidence from a Controlled Experiment in Minnesota', *Journal of Public Economics* 79(3): 455-83
- Steenbergen, V. (2017) *Reaping the benefits of Electronic Billing Machines – using data-driven tools to improve VAT compliance*, International Growth Centre Report
- Swaziland Revenue Authority (2018) *Integrated Annual Activity Report*, unpublished