How Best to Nudge Taxpayers? A Tailored Letter Experiment in Eswatini

Summary of ICTD Working Paper 112 by Fabrizio Santoro, Edward Groening, Winnie Mdluli and Mbongeni Shongwe

Tax collection in sub-Saharan Africa (SSA) performs poorly, with a tax/GDP ratio of about 15% –this has severe repercussions for service delivery, growth and state-building. The ratio in high-income countries is 35%.

Resource-constrained tax authorities in SSA are transitioning towards a new tax era, and implementing innovative compliance strategies such as 'tax nudges' – communication campaigns aiming to influence the behaviour of taxpayers.

Very little quantitative evidence has been produced as to why taxpayers in SSA comply with or evade taxes. While tax nudge literature has boomed in OECD countries and Latin America, only a handful of tax nudge studies have been produced in SSA. Understanding what motivates compliance is crucial, particularly for income taxes – for which the incentive to evade is higher. SSA countries need to improve collection of income taxes, which are preferable to indirect taxes in terms of fairness and equity.

Letter experiment

In collaboration with the Eswatini Revenue Authority (SRA), this study implemented a nationwide randomised controlled trial (RCT), nudging more than 20,000 corporate and personal income tax payers with letters that were tailored by their previous tax filing behaviour. This significantly contributes to the literature in three ways:

- It is the first of its kind to target three different categories of taxpayers at the same time – *non-filer*, *nil-filer* and *active*. Most existing literature focuses only on active filers. Non-filing refers to failure to file a tax return,

a widespread phenomenon both in Eswatini (almost half the registered taxpayers fail to file every year) and SSA. Nil-filing consists of filing zero income and zero tax liability, which happens with about a quarter of income tax returns in Eswatini. This means that only a third of all registered income taxpayers remit a positive tax (actives). This behaviour can hide tax avoidance/evasion – it is important to consider the three categories together when studying tax compliance.

- We tailored the content of letters to each taxpayer category – see Table 1 below. Non-filers were randomly assigned to five types of nudge: (T1) deterrence, (T2) educational input on how to file a return, (T3) deregistration (educational input on how to exit the system), (T4) fiscal exchange and (T5) social norms. Nil-filers, fewer in number, were assigned to deterrence and deregistration nudges. Actives were assigned to deterrence and fiscal exchange nudges. A smaller group of actives with turnover information that diverged from VAT returns were only targeted with the deterrence nudge. The SRA communicated that it was aware of a given taxpayer's filing behaviour.

- We were able to target both companies (20% of the total) and individuals (80%) – most studies focus on only one taxpayer type. We explored the heterogeneity of results along a number of dimensions, including past filing behaviour. Thanks to a wealth of tax return data, we were able to identify so-called *perpetual* taxpayers – taxpayers who have filed in the same way since registration. This dimension has rarely been studied in the literature.

> **" Understanding what motivates compliance is crucial, particularly for income taxes – for which the incentive to evade is higher. "**

Table 1 Treatment groups

Category	T0 Control	T1 Deterrence	T2 Costs	T3 Deregistration	T4 Exchange	T5 Norms	Total
Non-filers	15,266	2,431	2,429	2,424	1,373	1,366	25,289
Nil-filers	1,182	1,162		1,164			3,508
Active	3,607	3,574			3,578		10,759
VAT disc.	477	472					949

Key findings

We group our findings into main and ancillary ones. Among the main findings:

- Non-filers significantly respond to the nudges, while nil- and active filers do not.

- Non-filers increase filing over the control group mean by 2.6 percentage points when receiving T1, and 1.3 percentage points when receiving T2 or T3. The control group filing is quite low – 7% - so the magnitudes of impact are relevant.

- Companies only react significantly to deterrence (T1), whereas individuals respond to all T1-T5 treatments.

- Nudges are not effective in pushing nil-filers to start filing positively, and have the opposite of the intended effect with active companies – who are 15% less likely to increase tax declared.

There are many ancillary results:

- Non-filers are more likely to file past (2013–2018) returns and to register for the e-tax platform.

- Despite the null effect on tax amounts, nudges increase the probability of active filers filing positive – preventing some of them from falling back into nil-filing.

- Heterogeneity plays a major role.

  - Non-perpetual non-filers react much more than perpetual ones, while non-perpetual actives increase tax due – the negative impact for actives is totally driven by perpetuals.

  - Newly-registered taxpayers react less than older ones, probably because they would benefit from more assistance than a one-page letter.

  - Location is important – rural non-filers are only influenced by deterrence, while urban ones react to all treatments.

- Company size is relevant. The unintended response from active companies is totally driven by the largest taxpayers.

Policy recommendations

Based on the causal evidence produced in this nationwide RCT, we are able to formulate key policy-relevant recommendations.

- The authority should continue targeting non-filers. Pooling all treatments together shows that receiving any type of message induces a 20-24% increase in filing.

- The SRA should find more credible strategies for nil-filers – who still remain a puzzle – and active payers, paying attention to the unintended response of companies. Active companies enjoy more sophisticated accounting services – when nudged, they increase their turnover but also report more costs, with a zero/negative effect on their tax liability.

- Relatedly, our results suggest that the SRA should leverage deterrence to improve compliance from companies. It could also use alternative approaches, based on education and morality, when targeting individuals.

- The SRA should take into account the heterogeneity of results when formulating its compliance strategy. For example, it should put more effort towards those taxpayers who have consistently filed in the same way since registration.

- The delivery method could be improved, with alternative methods of delivery being tried – such as SMS or telephone. Letter take-up was 93% for companies, but only 21% for individuals. This was probably due to poor contact information in the taxpayer registry – this needs to be kept up-to-date.