In brief

- The Value Added Tax (VAT) is one of the main tax instruments in Rwanda and, in the last few years, the Rwandan government and the Rwanda Revenue Authority (RRA) have developed a series of tax enforcement initiatives intended to reduce VAT evasion. Most notably, Rwanda introduced Electronic Billing Machines (EBMs), which VAT-registered firms are legally required to use when invoicing both firms and final consumers. However, VAT compliance remains low.
- The issue is particularly severe at the last stage of the value chain—when firms sell to final consumers—because final consumers have limited incentives to request official invoices. The RRA has implemented some consumer incentive strategies to encourage consumers to ask for receipts, including an EBM receipt lottery in 2015, but are seeking new solutions to incentivise consumers.
- To understand the constraints on receipt requesting and to the potential usefulness of alternative consumer incentive approaches in raising compliance, we conducted a survey of more than 500 consumers in Rwanda.
- The findings suggest that a lack of information among consumers regarding the availability of EBM receipts and about the EBM lottery system constrains their potential to enforce compliance.
- Knowledge is not the only barrier: when consumers do ask for a receipt, at least 30 percent encounter a “price penalty”, where they are asked to pay a higher price to obtain a receipt.
- The potential for implementation of alternative consumer incentive programmes is high: consumers express higher willingness to participate in smaller, more frequent lotteries or a VAT rebate system and they possess the technologies required to do so.
Overview of the research

The focus of this project is to explore strategies that may be particularly effective in addressing low levels of Value Added Tax (VAT) compliance in Rwanda. The VAT is one of the main tax instruments in Rwanda and, in the last few years, the Rwandan government and the Rwandan Revenue Authority (RRA) have developed a series of tax enforcement initiatives intended to reduce VAT evasion. Most notably, Rwanda introduced Electronic Billing Machines (EBMs), which VAT-registered firms are legally required to use when invoicing both firms and final consumers. EBMs constitute powerful compliance tools, as they provide detailed information to the RRA about the recorded invoices.

However, a concern remains that EBMs are not always used by VAT-registered firms. This issue is particularly severe at the last stage of the value chain—when firms sell to final consumers—because final consumers have limited incentives to request official invoices. Consumer audit incentives exist to some extent in Rwanda, but are relatively ineffective: an EBM Lottery initiated in September 2015, offering prizes for EBM receipts submitted by consumers, has not produced substantial improvements in enforcement due to low take-up. Low EBM usage is a particular challenge outside of Kigali, where roll-out is incomplete. Similarly, many firms have operating revenues just below the VAT-eligibility criteria (either truthfully, or through fraudulent reporting) and so do not have EBMs. This makes it easier for them to operate without charging VAT, thus further contributing to market distortions.

This project, in collaboration with the RRA, aims to explore the potential for strengthening consumers’ participation in VAT compliance strategies in Rwanda. In November 2017, we completed 566 interviews with consumers across Rwanda. Respondents were drawn from high EBM intensity areas in each location and from consumer-facing shops, including wholesale/retail, services, and accommodation/food services. The goal of the survey was to collect detailed information on:

- Knowledge about EBMs
- Constraints on consumers requesting receipts
- Participation in, and beliefs about, the EBM receipt lottery
- Beliefs about alternative consumer incentive approaches, including VAT rebates

The results of the survey provide detailed information on the challenges that exist in enlisting consumers in boosting the VAT compliance of firms and shed light on the potential viability of alternative consumer incentives approaches.
Policy motivation for research

A crucial challenge for governments around the world is the raising of revenue through taxation and the prevention of tax evasion and avoidance. Governments in developing and middle income country governments face a particularly difficult task, given the high levels of informality in their economies and (frequently) the lack of a strong tax-paying culture. In the context of the VAT, extensive evidence indicates that tax evasion is greater in business-to-consumer transactions than in business-to-business transactions. This challenge—known as the “last mile” problem—exists in developing and developed countries alike. While direct enforcement of tax compliance through audits is effective to reduce tax evasion, it is a highly costly policy response. Governments around the world have therefore pursued a deterrence approach through the creation of incentives programs that aim to enlist consumers in efforts against tax evasion.

In this project, we undertake a systematic analysis of international experience with policies that incentivise consumers’ participation in VAT compliance strategies, and we conduct an analysis of administrative data from the RRA’s current EBM lottery. In addition, we synthesise results from the original survey of Rwandan consumers, to better understand their views and concerns in relation to both existing VAT compliance strategies and potential reforms to these strategies, including the strengthening of consumer incentives.

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<th>Key research questions</th>
<th>Summary of the key findings</th>
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<td>What are the constraints on the participation of consumers in VAT compliance?</td>
<td>Consumers lack information about (1) the businesses that are legally required to grant EBM receipts and (2) about the existing EBM lottery system; at least 30 percent of consumers sometimes encounter “price penalties” if they request a receipt.</td>
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<td>What are the reasons for low levels of participation in the existing EBM Lottery?</td>
<td>Forty percent don’t know the lottery system exists; only 10 percent who are aware have participated, suggesting the incentive (e.g., likelihood of winning, size of prize) is not sufficient to motivate take-up.</td>
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<td>What alternative programmes would consumers be willing to participate in?</td>
<td>Consumers most prefer smaller, more frequent, and more certain lotteries, or a VAT rebate system that would guarantee a reward for each receipt submitted.</td>
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<td>Would consumers be eligible to participate in alternative incentive programs?</td>
<td>More than 95 percent of consumers possess a phone and bank or mobile money account, suggesting that consumers incentives that required both would reach the majority of potential participants; however, 31 percent of consumers lack access to the internet, meaning internet-based platforms would exclude them.</td>
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Policy Recommendations

- Information dissemination is key to engaging consumers. Knowledge about firms legally required to grant receipts is low. In a VAT rebate setting, it could be confusing for customers which purchases are eligible. Upon introducing a new consumer incentives programme (or alteration to the existing EBM Lottery), it is important to widely disseminate information, as there are still gaps in knowledge and awareness.

- Reward to consumers must be sufficiently high. The likelihood of asking for a receipt in an EBM store is low and seems driven by a potential price penalty. In future design of incentives programmes, it may be necessary to incorporate this price penalty when setting a sufficiently high rebate rate. Additionally, 90 percent of people who know about the existing EBM Lottery do not participate in it, suggesting the incentives are too low. Consumers may be willing to invest in understanding the participation details of a given incentive programme, but the reward must be high enough to make that investment worthwhile.

- Design future systems to accord with ability of consumers to participate. Consumers have relatively high eligibility for systems that require mobile phone and financial technology use, but lack of internet access may constrain the “sign-up” step. New approaches must take these constraints into account.