

EVALUATION OF ELECTRONIC BILLING MACHINES: EFFECTIVENESS OF TAX ADMINISTRATION



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IN BRIEF

- » Increasing domestic revenues is key to reducing reliance on aid but VAT collection in Rwanda has slowed recently
- » This study investigated whether new Electronic Billing Machines (EBMs) could increase VAT receipts
- » The study finds that (government-mandated) EBM usage increases VAT receipts by on average 5.4%
- » The revenue authority are using the study to inform compliance and enforcement activities, and consider the appropriate scope of firms mandated to use EBMs.

IGC Rwanda was asked by the Rwanda Revenue Authority and Ministry of Finance to evaluate the impact of Electronic Billing Machines (EBMs), to help the Government of Rwanda understand if the expense of the machines is a worthwhile investment, how the EBMs can be made optimally cost-effective, and how they will increase revenues.

The researchers analysed VAT payment data, running regression analyses to see patterns of adoption, and the impact of EBMs on receipts to the revenue authority. This was complemented with a small-scale ‘mystery shopper’ study, where the behaviour of firms with active EBMs was observed to capture compliance, price effects, and reasons for non-compliance.

The study finds that adoption has spread quickly and reached 77.8% of tax-paying firms, but was slowing. The average impact of EBM on firms’ VAT payments was estimated at 5.4%. Estimated impacts vary substantially by sector and size. The mystery shopper study found that - at least for low-cost goods in Kigali retail stores - EBM utilisation is low, but utilization increased substantially when consumers requested a receipt – and with utilization revenues increased. Taken together, the findings suggest that future strategies could appropriately be focused on concentrating the expansion of EBM coverage on specific sectors where both adoption rates are low and potential impacts are highest, while building on existing policies to strengthen firms’ incentives to report transactions through EBMs.

The study was summarised for the Minister of Finance and delivered in detail to the executive management of the RRA, and the Chief Economist and Minister of MINECOFIN. The RRA requested that the IGC undertake a more in-depth study to analyse variations in EBM compliance to guide tax auditing and compliance monitoring.