

Digital Merchant Payments as a Medium of Tax Compliance

Kelbesa Megersa, Ludovic Bernad, Yves Nsengiyumva, Benjamin Byinshi, Naphtal Hakizimana and Fabrizio Santoro

Summary of Working Paper 159

Digital merchant payments – transactions between traders, or between traders and customers using digital means of payment – can promote tax compliance by providing access to safer, quicker formal payments for consumers, and leaving a digital trail of sales data that can be accessed by tax administration. This study examines how far the potential of digital merchant payments to increase tax compliance is being realised in Rwanda, and whether fees imposed by mobile network operators on digital financial services (DFS) can hinder both DFS adoption and tax compliance. It uses original survey data from 1,100 merchants country-wide, administrative data from the Rwanda Revenue Authority (RRA), focus group discussions and in-depth interviews.

Rwanda is an interesting context in which to study digital merchant payments, as these are expected to reach 80 per cent of GDP by 2024.¹ Particularly popular are mobile money payments, performed either through the person-to-business payment option MoMo Pay or through standard personal accounts. The country's commitment to creating a cashless economy was accelerated due to the COVID-19 pandemic.

What drives adoption of digital financial services?

We first map the mode of payments accepted most often by merchants in Rwanda. We find that merchants use DFS in parallel with cash. Cash remains the most preferred payment method (88 per cent), but mobile money is also accepted, either through personal accounts (50 per cent) or the business-specific DFS service (45 per cent). The daily amounts transacted through cash and MoMo Pay are surprisingly similar. High charges and fees are the most common reasons cited for not using mobile money in Rwanda.

The factors that drive the adoption of DFS include the usage of DFS with suppliers, business size and operation, traders' IT-sophistication, and interactions with the tax administration. Female, less educated,

and less IT-equipped taxpayers are more likely to use personal accounts, while larger businesses and more knowledgeable taxpayers tend to adopt MoMo Pay. The use of MoMo Pay is positively correlated with tax compliance, while nil- and non-filers are more likely to use personal accounts for partially transacting informally.

How much do fees influence the use of digital financial services?

To further explore the determinants of adoption, we focus on fees. At the start of the pandemic, in March 2020, for 18 months, all fees on MoMo Pay transactions were waived to foster digital payments. In September 2021, fees were reintroduced. The fee waiver led to a significant decline in cash usage and an increase in mobile money payments. However, when fees were reintroduced, usage of mobile money payments declined while cash usage increased. Crucially, we document a decline in usage of the standard MoMo through personal accounts, even if not affected by the fee, hinting at concerning negative spillover effects. The qualitative evidence collected through focus group discussions indicates that traders and clients negotiate payment methods and agree on the cheapest mode for each transaction.

Do digital merchant payments increase tax compliance?

The findings show that the adoption of digital merchant payments has no significant correlation with most taxpayer perceptions, apart from a positive correlation with peer pressure to comply. The use of fee-free digital merchant payment systems improves the feeling of reciprocity, thought to be a key driver of compliance; however, merchants using MoMo Pay tend to feel less reciprocity, and to disagree with the obligation to pay taxes in order to receive public services. This negative correlation is probably due to the fee imposed on MoMo Pay. The use of standard, fee-free mobile money systems also improves the perceived ease of complying with taxes, which is not the case for MoMo Pay.

¹ United Nations Capital Development Fund (2019) The Fintech Landscape in Rwanda, UN Capital Development Fund: 4

The research further shows that while DFS adoption has a short-term positive impact on VAT filing behaviour, the effect dissipates and there is no significant impact on VAT outcomes in the medium term. The fact that merchants adjust both sales and costs margins indicates a perverse filing response to avoid remitting more tax. Even more concerning, the fact that the impact dissipates in the medium term suggests that merchants may be going back to their pre-adoption compliance behaviour, as they might not see any threat of audit or higher enforcement when using DFS. In fact, very few (18 per cent) of merchants believe that the RRA has access to MoMo Pay data.

Conclusions and policy recommendations

Based on our findings, we recommend careful consideration of how DFS usage affects tax perceptions, and then compliance. The fact that reciprocity considerations are negatively correlated with MoMo Pay speaks to the broader effects of mobile money fees on a range of attitudes likely to shape compliance. We recommend that the tax administration better understand the adoption patterns of digital payments and develop more targeted policies incentivising the adoption of digital merchant payments, focusing on less equipped and marginalised income taxpayers. Policy should consider how to ensure merchants' digital payment services, like MoMo Pay, bring the same benefits as

simpler mobile money seems to do. The RRA should also carefully consider the extent of dubious filing practices and perverse behavioural responses to technology adoption. It could be advisable to enhance monitoring and enforcement when introducing a new technology in the tax system, and adequate investment in enforcement is necessary. In this sense, we speak to the broader ongoing debate around the potential of data sharing across public and private institutions to strengthen the enforcement capacity of tax administration. In Rwanda, mobile money data remains particularly difficult to access for both the RRA and researchers: we document strong resistance from the telco industry to sharing data due to concerns about slowing down the development of the cashless ecosystem and losing the trust of clients. The RRA would benefit from improved access to such data to better monitor and enforce merchants' tax compliance.

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Further reading

Santoro, F., Amine, R. and Magongo, T. (2022) *Mandating E-filing and E-payment and Tax Compliance: Evidence from Eswatini*, ICTD Working Paper 140, Brighton: Institute of Development Studies

Santoro, F., Lees, A., Carreras, M., Mukamana, T., Hakizimana, N., and Nsengiyumva, Y. (2023) *Technology and Tax: Adoption and Impacts of E-services in Rwanda*, ICTD Working Paper 153, Brighton: Institute of Development Studies

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Credits

Kelbesa Megersa is a Research Officer at the Institute of Development Studies and at the International Centre for Tax and Development.

Ludovic Bernad is a Supply Chain Specialist living in Rwanda. His interests include freight transport payments via mobile money, streamlining trade, and financial payment mechanisms, with a focus on Africa.

Yves Nsengiyumva is a researcher and community engagement specialist working on socio-economic development initiatives in Rwanda. He's a management consultant and also the in-country analyst for Euromonitor International.

Benjamin Byinshi is a Senior Analyst who uses the mixed method research approach in agriculture and socio-economics related projects. His current focus is tax compliance, value

chains and investment methods and analysis. Surveys he's managed include a trade survey for National AfCFTA Strategy for Rwanda, evaluation of the Local Competitiveness Facility Fund of agriculture value chains, and operationalisation of the Economic Recovery Fund for Manufacturing and MFIs/SACCOs in Rwanda.

Naphtal Hakizimana is a Research and Policy Analyst at the Rwanda Revenue Authority.

Fabrizio Santoro is a Research Fellow at the Institute of Development Studies, and Research Lead for the second component of the ICTD's Digitax Programme. His main research interests relate to governance, public finance, and taxation, with a strong focus on impact evaluation methodologies and statistical analysis. He holds a PhD in Economics from the University of Sussex.

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