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Finding the Missing Stone: Mobile Money and the Quality of Tax Policy and Administration

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Introduction

Digital financial services like mobile money are increasingly prevalent in developing countries as an alternative to traditional financial services. For many governments, they have become critical components of domestic revenue mobilisation, tax administration modernisation, and broader tax reform. However, making tax administration more efficient and maximising voluntary compliance is a very difficult task. The existing literature on the relationship between mobile money and tax performance in developing countries is limited, although it does show the potential of mobile money to improve tax performance. This paper aims to fill the gap by investigating the relationship between mobile money and the quality of tax policy and administration in developing economies and highlighting some mechanisms underlying these findings, including a lower tax compliance burden, a smaller informal sector, and lower corruption.

How can mobile money improve tax policy and administration?

Mobile money can influence the quality of the tax system, i.e., tax policy and administration, in several ways.

- Facilitating compliance and limiting administrative burdens. In most developing countries, tax regimes are very complex and poorly drafted, and bureaucratic hassle and long wait times can repel even the most loyal taxpayer. Mobile money can enable both individuals and businesses to pay their taxes seamlessly and remotely.
- Reducing the size of the informal sector. Mobile money can widen the tax base by increasing firms' productivity and profitability, reducing their operational costs, and making commercial transactions more secure, more fluid, and less costly, thus increasing the 'opportunity cost' of staying in the informal sector. By reducing the informal sector and making transactions more transparent, mobile money can improve the efficiency of revenue mobilisation by facilitating taxpayers' identification, reducing opportunities for tax evasion, and broadening the tax base.
- Reducing corruption. In many developing countries the main problem is less the shortcomings of the statute than the ways taxpayers find to evade it. While no tax system is entirely free from corrupt practices, the conditions in many developing countries tend to make such practices even more prevalent. By offering the ability to pay taxes electronically, mobile money payments are likely to reduce the conditions under which petty corruption thrives, by limiting physical interaction between taxpayers and collectors and the frequency of meetings with tax officials, and hence incidences of fraud and evasion.

Research design and data

To analyse the effect of mobile money payments we use a panel of 82 developing countries over the period of 2006–2020. The mobile money variable is measured by a dummy constructed based on GSMA's data tracker. To measure the quality of tax policy and administration, we use the World Bank's Country Policy and Institutional Assessments (CPIA) ratings, especially those related to question 14, entitled "Efficiency of Revenue Mobilization" (ERM). The ERM assesses the overall pattern of revenue mobilization, not only the tax structure as it exists on paper but revenues from all sources, as they are actually collected. Our empirical approach relies on entropy balancing to control for potential endogeneity.

A positive impact

We find that mobile money improves tax policy and administration in developing countries. In particular, we find that, on average, a country's adoption of mobile money payments is associated with a 3% improvement in the quality of its tax administration and policy relative to non-mobile money countries. These results are robust to various robustness tests including sample alteration, alternative measures of mobile money, controlling for other aspects of tax policy, and alternative estimation methods such as GMM-system, event study approach and ordinary least square. Furthermore, our results show that the positive impact of mobile money payments on tax administration and policy may depend on various factors, including the type of mobile money services, the number of mobile money operators, and certain structural considerations such as the level of development, financial development, institutional quality, state legitimacy and public debt levels.

Policy implications

At a time when tax authorities in developing countries are increasingly looking to take advantage of digital payment solutions, our findings have several economic policy implications for governments and tax authorities.

- Digital payments allow developing countries to improve access to and/or usage of taxpayers' data, including data from third parties and transaction data. Consequently, mobile money reduces administrative costs and enhances the efficiency of data management systems and processes.
- By offering the ability to pay taxes digitally, mobile money simplifies the tax payment process and reduces the tax compliance burden for taxpayers and businesses.
- Mobile money can help limit opportunities for corruption and collusion by making data more transparent.

However, despite this promise, the use of digital payment instruments as a tool for developing an effective tax system has certain challenges that policymakers must address.

- Data sharing between telecommunication companies and tax administrations remains incomplete. Collaborative efforts between tax authorities and mobile network operators are vital to establish data sharing protocols that support tax policy and administration.
- The lack of appropriate infrastructure can hinder the effective deployment of mobile money. Hence, this paper calls for government support to telecommunications companies to improve the deployment of mobile money, maximizing its economic and fiscal impacts.
- Taxpayers and tax officials may resist adopting new technology due to factors like insufficient training, high adoption costs, or concerns about losing opportunities for informal behaviour. Effective communication strategies and regulatory frameworks are necessary to promote digital and tax literacy and encourage the use of digital payments for tax purposes.
- While digital tools offer opportunities to improve transparency and efficiency in tax systems, they also present new avenues for corruption, especially when proper safeguards and oversight mechanisms are lacking. Tax administrations must develop robust policies to mitigate the risk of corruption through the misuse of digital tools by technically skilled tax officials who have lost the opportunity of rent-seeking and corruption involving taxpayers.

'The study shows that mobile money payments can improve the quality of tax policy and administration in developing countries by improving tax compliance, widening the tax base and limiting opportunities for corruption among tax officials and taxpayers.'

Further reading

Apeti, A.E. and Edoh, E.D. (2024) *Finding the Missing Stone: Mobile Money and the Quality of Tax Policy and Administration*, ICTD Working Paper 178, Brighton: Institute of Development Studies, DOI: 10.19088/ICTD.2024.006

Credits

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