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Impact of mobile money taxation on social sector financing in Sub-Saharan Africa

Ranjan, Harshali

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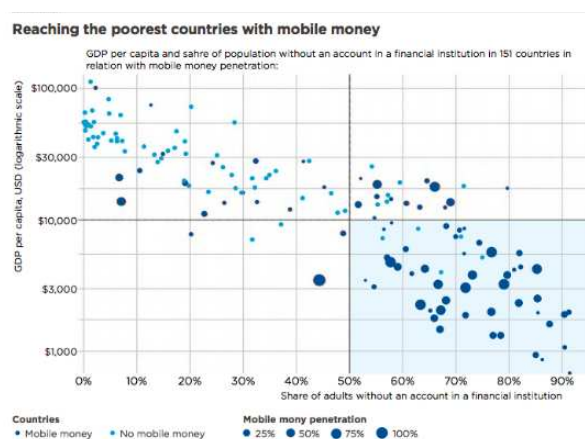
KEY FINDINGS

- ◆ In recent years, mobile money has gained widespread popularity, especially in Sub-Saharan. Its convenience and ease of adoption makes it the transaction of choice for many people with limited access to traditional financial institutions.
- ◆ Due to the sector's rapid growth, size and future potential, mobile money has been seen as an attractive and easy way to increase tax revenues in various Sub-Saharan African countries.
- ◆ In most cases, the introduction of these taxes was justified with the need to increase government revenues to finance social and development projects. However, the capacity of mobile money taxation to generate significant revenues and expand the fiscal space for social sectors remains unclear.
- ◆ Given the deep penetration of mobile money among the poor and vulnerable sections of the society, its taxation is likely to have a regressive effect and its high costs can deter the consumers from using this service.
- ◆ Tanzania introduced mobile money taxation in July 2021. While the effects of the implementation are still unclear, the immediate effects have not been encouraging. Moreover, in light of the experiences faced by other countries, there are concerns about the impact of these taxes on financial inclusion, development efforts and the vulnerability of the poor, as well as the capacity of this tax to significantly contribute to social sector financing.

INTRODUCTION

Mobile money is “a technology that allows people to transfer funds between banks or accounts, deposit or withdraw funds, or pay bills by using a mobile phone” (ben Romdhane et al., 2019). In recent years, mobile money has become the transaction of choice for people with limited access to traditional financial institutions due to necessity, resulting into its widespread use in emerging markets (**Figure 1**). Due to the sector's rapid growth, size and future potential of the sector, mobile money has recently been seen as an attractive and easy way to increase tax revenues (Haidar, 2020).

Figure 1: GDP per capita and share of population without an account in a financial institution in 151 countries relation with mobile money penetration



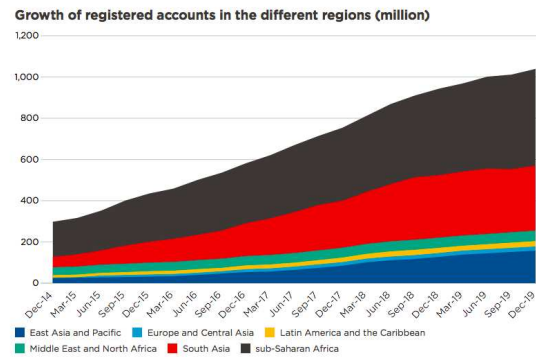
(Source: GSMA, 2020b)

This paper looks at mobile money taxation across Sub-Saharan Africa (SSA). It analyses the experience of various countries in SSA where these taxes have already been introduced, looking at the revenue generation potential of these funding source and the implications for social sector financing. Moreover, it analyses the impact these taxes have on the vulnerable sections of the society. Finally, it discusses the likely implications of the introduction of mobile money taxation in Tanzania.

Mobile money first emerged in Philippines in 2001 when SMART Communications launched SMART Money in partnership with Banco de Oro, as a service which enabled customers to buy airtime, make domestic and international transactions using their mobiles, and pay for goods using a card (Leishman, 2009). Nowadays, its most popular instance is M-Pesa, a company launched in Kenya in 2007 and which grew to 17 million subscribers in the country by the end of 2011 (Wambua, 2012). In November 2014, M-Pesa transactions were valued at KSh 2.1 trillion (US\$ 19.2 billion), a 28% increase from 2013, and almost half the value of the country's GDP (Rolfe, 2019).

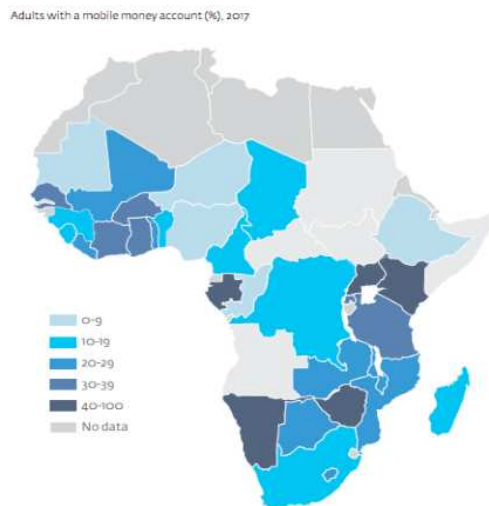
In recent years, Africa has experienced a mobile money revolution and the sector is considered a success story of financial inclusion and economic digitisation on the continent. In 2020, 55.2% of the 310 live mobile money services in operation were in Africa. In the same year, the number of registered mobile money accounts grew by 12.7% globally to 1.2 billion, with most additions being in SSA which accounted for nearly 43% of all new mobile money accounts opened by first time users (Mureithi, 2021). From 2009 to 2019, the number of registered mobile money accounts witnessed an almost 30-fold increase to reach 1.04 billion accounts (**Figure 2**) (GSMA, 2020b). As of 2017, 21% of adults in SSA had a mobile money account, nearly double the share from 2014 (Klapper et al., 2019).

Figure 2: Growth of registered mobile money accounts across different regions (in millions)



(Source: GSMA, 2020b)

Figure 3: Adults in with a mobile money account (%) in different countries of Sub Saharan Africa



(Source: Klapper et al., 2019)

The success of mobile money in Africa can be attributed to a large population with no or limited access to traditional banking and financial services (**Figure 3**). In SSA, traditional banking excluded those who could not carry the minimum account balance necessary to keep the accounts open or provide the proof of identity required to open an account. Mobile money does not have similar rules about new accounts and their ownership, as a result of which it gained widespread popularity very rapidly (GSMA, 2020b). For example, in Uganda, there are 22 million people with mobile money accounts, which is nearly three times as many as those having bank accounts. Mobile money transactions in Uganda in 2020 are estimated to have been on excess of USh 54 trillion (US\$ 15.3 billion), which is more than half of the country's GDP (Kamulegeya, 2018).

Additionally, the low number of bank branches implied long travelling distances, especially for people living in rural areas. Mobile money leverages instead on wide-reaching and low-cost agent networks, affordable feature phones, and mobile network connectivity to overcome problems of costly banking infrastructure, thus serving even the most remote segments in a commercially sustainable way (GSMA, 2020b).

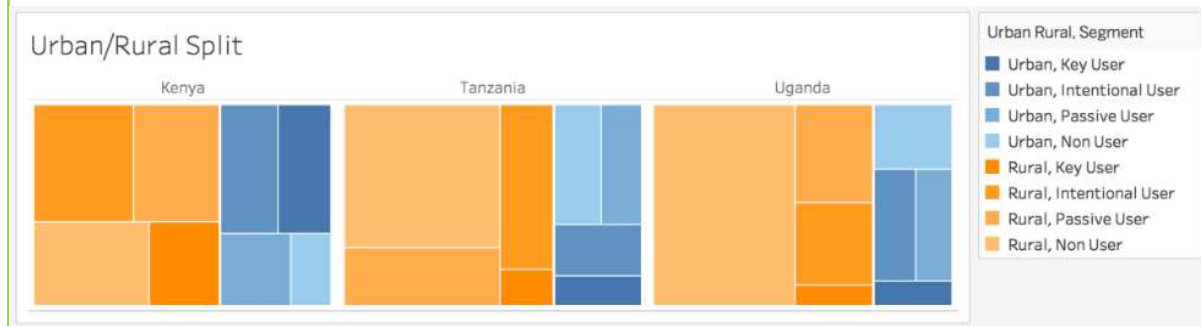
KEY MOBILE MONEY USERS AND DEMOGRAPHIC

In absolute terms, the demographic split of key mobile money users is very diverse.¹ However, there are certain patterns that can be observed. There are relatively fewer key users from disadvantaged populations. A key

¹ A mobile money user is considered to be a key user if they have used mobile money in the past week and report two or more "intentional" use (like transferring money, paying utility bills, saving or conducting business activities)

mobile money user is also more likely to be educated, likely to live in urban areas, financially well off, male, employed in non-farm occupations and less likely to be a teenager or poor. Nevertheless, there are also many key users who are women, low-income, less educated, rural, employed in farming, or otherwise financially excluded. **Figure 4** clearly shows the urban rural split in mobile money users in the three countries of Kenya, Tanzania and Uganda. We can see that a larger proportion of the urban users are key users, yet in total there are about as many key users in rural areas as there are in urban areas, as indicated by the comparable sizes of the dark-orange and dark-blue tiles (Mattsson and Stuart, 2018).

Figure 4: Urban/ rural split in mobile money users in Kenya, Tanzanian and Uganda



Source: Mattsson and Stuart, 2018)

WHY WERE THE TAXES INTRODUCED?

Faced with unstable tax structures and funding of huge infrastructure projects, sub-Saharan countries have been consistently introducing higher taxes on mobile money transactions since Kenya first introduced it in 2013 via a 10% excise tax. Amidst the pressure to broaden the tax revenues base, the growing digital finance sector, especially mobile money, has emerged as an attractive and easy source to fill tax revenue gaps by the governments (Kiruga, 2019). For example, Uganda initially introduced a 1% taxation on every mobile money transaction in 2018 to meet its USh16.2 trillion (US\$4.3 billion) revenue target for the 2018/2019 fiscal year. This tax has since been amended due to public outcry to apply a 0.5% tax on withdrawals only (GSMA, 2020b).

SSA has a huge informal sector, making up 40% of economic activity and employing over 85% employment of the population whereas the formal economy represents just 34% of the population. There is also a perception that the informal sector does not adequately contribute its tax share. Therefore, the introduction of mobile money taxes has been justified as a means to tax this sector in a quick and easy manner (Clifford, 2020).

There is also a lack of research capacity at the policy level and a lack of evidence-based frameworks to guide the implementation of such reforms (Haidar, 2020). As such, government's capacity to accurately model the impact of this new tax on the long term revenue generation objectives is limited (Clifford, 2020).

HOW MUCH ADDITIONAL REVENUE DO THESE TAXES GENERATE?

The overall outlook for positive contribution of mobile money taxation towards long run government revenue seems bleak. Sharp drops in transaction values were generally observed immediately after the tax introduction. Despite initially exceeding the revenue target for mobile money taxation by 37% when it was first introduced in 2020, Uganda reported an overall decline in tax receipts from the telecoms sector, caused in part by the reduction in mobile money activity (GSMA, 2020b). These taxes could reduce activity and possibly reverse the benefits recorded so far in the long run instead of increasing revenues, particularly in improving financial inclusion. Many customers also migrated to the banking system which does not have a similar tax, with monthly transactions showing a 171% increase since 2019 to June 2020 to about Ush 2.5 trillion (US\$ 708 million) (Ladu, 2021).

Additionally, countries which introduced these taxes showed only a small positive impact on the revenue base, as seen in the case of Kenya where this tax accounts for only about 1% of total revenue (Ahmad et al., 2020). There are also concerns regarding potential negative effects that could include a reversal of gains made in

financial inclusion in developing countries, such as Kenya, and, more importantly, reverse the electronic payments developments that have taken place in the last 12 years. In other words, the taxation might encourage Kenyans to return to cash transactions to avoid those taxes (Ndung'u, 2019).

Finally, it does not seem like special accounts have been created to earmark the revenue collected for specific projects. As a result, it is difficult to understand whether these taxes are actually used for the stated purpose of their introduction.

DO THESE TAXES INCREASE SOCIAL SECTOR FINANCING IN ANY WAY?

Aside from a few instances detailed below, there is a lack of evidence on the extent to which mobile money taxation contributes to the expansion of the fiscal space for the social sector. For example, Ivory Coast introduced mobile money taxes that totalled up to 7.2% of each transaction. Out of this, 2% goes towards rural digital development, 0.2% towards cultural expenditure and 0.25% towards combating fraud within the industry (GSMA, 2020b). While the idea initially looked encouraging on paper, the tax was sector specific and introduced on mobile operators who bore the brunt of it. As a result, investments by these operators and mobile money providers in mobile money network were delayed due to reduced profits. Therefore, these taxes ultimately undermined national development targets (Clifford, 2020).

In 2018, the Republic of Congo introduced a mobile money tax with the intention to fund a newly installed transaction monitoring system called the digital HUB, managed by ARPCE², on behalf of the Congolese tax authority whereby a 1% fee would be charged on all transactions that flow through the HUB system. The fee would be remitted to the ARPCE by the operators and is shared between the government treasury, various regulatory bodies and the system operator. However, the implementation of this tax in Congo was very confusing and lacked organised management. The public and the providers were unsure about the various aspects of this taxation when it was first introduced in 2018 and the tax law was amended on 30th December 2019 to explicitly reflect all the specifications and details to prevent further confusion (GSMA, 2020b).

WHAT IS THE IMPACT OF MOBILE MONEY TAXATION ON THE VULNERABILITY OF THE POOR?

For many underserved groups in Africa, mobile money is not a convenience but rather a necessity as it bridges a gap for the huge unbanked population, especially those working in the informal sector, that traditional financial institutions cannot. As such, any disproportionate increase in mobile money taxation will strike the lowest strata of society the most and can effectively undermine any previous efforts in financial inclusion, social inclusion and national development (GSMA, 2019). Increasing mobile money usage has the potential to expand financial inclusion, as we saw from examples above, while levying taxes, particularly on transactions, is likely to have a regressive effect as higher costs can deter the consumers from using this service (Ndung'u, 2019).

Due to ease of use, mobile money is used by fintechs and other agencies to roll out businesses for small and medium enterprises as well as poor households. For example, the rollout of social development programs such as M-Kopa³ for solar energy, water vending machines in slum areas in Nairobi, and M-Tiba⁴ for health services. Higher taxes could undermine these economic drive efforts (Ndung'u, 2019). Similarly, mobile money services also boost financial inclusion for smallholder farmers by providing access to agricultural enterprise tools. It enables agribusinesses to pay smallholder farmers for their crops which, in turn, create vital transactional data and digital footprints that enable smallholder farmers to access financial services and financial institutions to assess their creditworthiness. Increasingly, mobile money providers are also offering enterprise solutions for the agricultural sector, facilitating the provision of secure, traceable and fast payments to farmers. Therefore, increased expenditure in the form of higher mobile money taxations can increase costs for these small and rural farmers, limit their options and affect their ability to sell and carry out trade (GSMA, 2020a).

For marginalised groups traditionally excluded from formal financial systems (e.g. women, young people, rural poor and displaced persons), mobile money offers safety and privacy improvements over cash.

² ARPCE is the state market regulator of post and electronic communications in the Republic of Congo.

³ The M-Kopa solar program helps low-income consumers acquire and own high-quality, affordable energy solutions. The program was initiated in 2010 and so far has connected over 500,000 households to affordable solar power and employed 1,000 full time staff and 1,500 sales agents in East Africa.

⁴ M-TIBA is a mobile phone service that allows you to put funds aside for healthcare.

Additionally, they also help these vulnerable groups access basic public services (e.g. healthcare, education, utilities, and social welfare) that might otherwise be out of their reach (GSMA, 2020b).

Countries where mobile money services have been present for some time now like Senegal, Uganda and Zimbabwe women are either as or more likely to own only a mobile money account than men (GSMA, 2020b). This is notably seen in the case of Senegal where 59% of financially included women have only mobile money account ownership. A financial inclusion analysis in eight countries (i.e. Burkina Faso, Côte d'Ivoire, Gabon, Kenya, Senegal, Tanzania, Uganda, and Zimbabwe) with a mobile money penetration of 20% and above showed the benefits money can bring to financial inclusion efforts and that a disproportionate taxation could undermine these efforts, especially for women. In all sampled countries but Burkina Faso and Tanzania there was a gender gap in favour of men for general financial account ownership. (Klapper et al., 2019)

Mobile money has higher penetration in rural areas, areas with poor infrastructure and areas with lack of access to traditional financial institutions, making it more accessible to the rural poor. In Uganda, Tanzania and Kenya, a huge number of regular mobile money users fall in the category of rural poor: 45% of mobile money users in these countries live in rural areas while 40%, 72%, and 32 per cent of key users respectively falling below the \$2.50/day, 2005 PPP income poverty line. Increase in mobile money taxation will burden this section of population, especially because their economic status will prevent them from migrating to other untaxed transaction forms, leaving them in a vicious cycle of necessity and inability to afford while bearing a disproportionate burden of these taxes (GSMA, 2020b).

IMPLICATIONS FOR TANZANIA

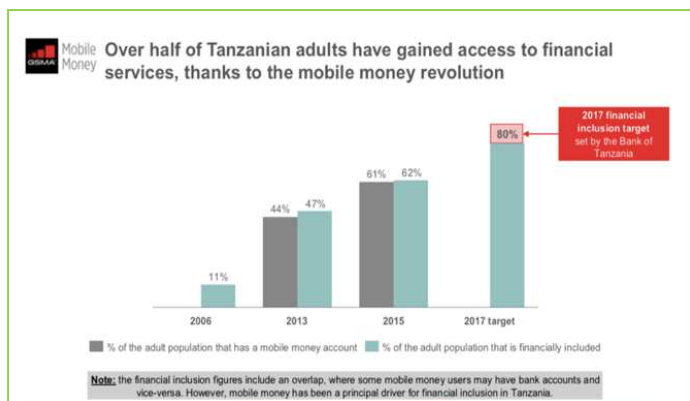
Tanzania has recently introduced a new mobile money taxation that took effect from June 2021. These taxes were introduced with the aim to increase government revenues to fund development projects. Revenues collected through mobile sector taxes, including the new mobile money transaction tax, will be used towards the TSh 2.03 trillion (US\$ 876 million) budget allotted to finance the implementation of Mwalimu Nyerere Hydropower and Standard Gauge Railway projects (Muganyizi, 2020). According to Dr. Mwigulu Nchemba, the Minister for Finance and Planning, Dr Mwigulu Nchemba, additional projects that will be funded by the revenues generated through mobile money taxation include health insurance for all, providing running water to all schools, and enabling more students to get college education (Mshomba, 2021).

The implementation of this new tax will mean an increase in cost for sending, withdrawing and transferring payments through mobile money. With 26 million mobile money consumers, almost half the country's population, the increase in costs have been widely felt and the introduction of this tax has been met with uproar from the common population. While it is yet to be seen whether Tanzania will follow in the footsteps of those countries that have amended this tax, at the moment there are a lot of concerns, especially given the experiences faced by other countries that have introduced this bill previously (Sippy, 2021).

Even though it has just been a month since its implementation, mobile money operators have already started witnessing a change in revenues. Just four days after the tax came into effect, the Tanzania Mobile Network Operators Association has given a statement mentioning a sudden drastic fall in business as many consumers have stopped using the service already (The Citizen, 2021).

In Tanzania, the success of mobile money has been a principal driver for financial inclusion as a result of which over half of Tanzanian adults had access to financial services by 2015 (**Figure 5**) (GSMA, 2017). It should also be noted that Tanzania's level of financial inclusion, as measured by access to bank accounts, is the lowest in the region at just 28% of the adult population (Mwangi, 2021). As such, mobile money has a huge potential to service and effectively develop this section of the society. At the same time, Tanzania is already subject to a higher level of sector specific taxation than the Sub-Saharan average (10%) (GSMA, 2021). Hence, any further increase in cost can lead this section to lose access to the only transaction form they have access to other than cash. Any migration to other forms of transaction (e.g. banking) is not a choice unless there is a major improvement in the country's infrastructure as at this moment, this section of the population does not have easy access to traditional financial institutions and their services.

Figure 5: Adult financial inclusion and mobile money account ownership in Tanzania



(Source: GSMA, 2017)

There are also concerns this tax can strike Tanzania's budding start-up ecosystem. In the words of Zahoro Muhaji, the CEO of the Tanzanian Startup Association, mobile money is integral to Tanzanian start-ups. This is because considering their efficiency compared to cash, most start-ups rely on mobile money for payments. Online businesses have been affected the most as instead of online mobile money transactions, people have started going to shops and paying in cash for services. This can constitute an obstacle on the path of development and transition to a digital economy (Sippy, 2021).

While it is yet to be determined whether this tax's introduction will be of any concrete help to the revenue generating efforts for 2020/2021, at this stage the reaction among the common population seems far from positive. The sudden fall in users immediately after the taxes were introduced and a change in consumer behaviour away from mobile/online payments are the first indicators of discontent among the public and should be observed with caution. As appreciated by the Tanzanian government itself in its national strategy, the telecommunication sector is extremely important for Tanzania's Vision 2025 and for its efforts in transition to a digital economy. As such, any major discontent among the general public can cause a fall in the number of consumers and effectively undermine the development of the economy (GSMA, 2021).

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