

# Tanzania Mobile Money Levy Impact Assessment

September 2023



## **GSMA**

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# Contents

Introduction	2
<hr/>	
1 Mobile money levy impact assessment	4
1.1 Price impact	6
1.2 Impact on transactions	10
1.3 Impact on the mobile money sector and the wider economy	14
1.4 Impact on consumers	16
<hr/>	
2 Conclusion and recommendations	18

# Introduction

Mobile money is a key driver of socio-economic growth by creating employment, driving business productivity, facilitating savings and facilitating investment, contributing to formalising the economy, and providing stability during economic downturns.<sup>1</sup> It is a main driver of financial inclusion, contributing directly to Tanzania’s economic growth and social development objectives. As set out in Tanzania’s National Financial Inclusion Framework, “mobile money services have been the main driver in the provision of financial services to the under-served especially women and people living in rural areas”.<sup>2</sup>

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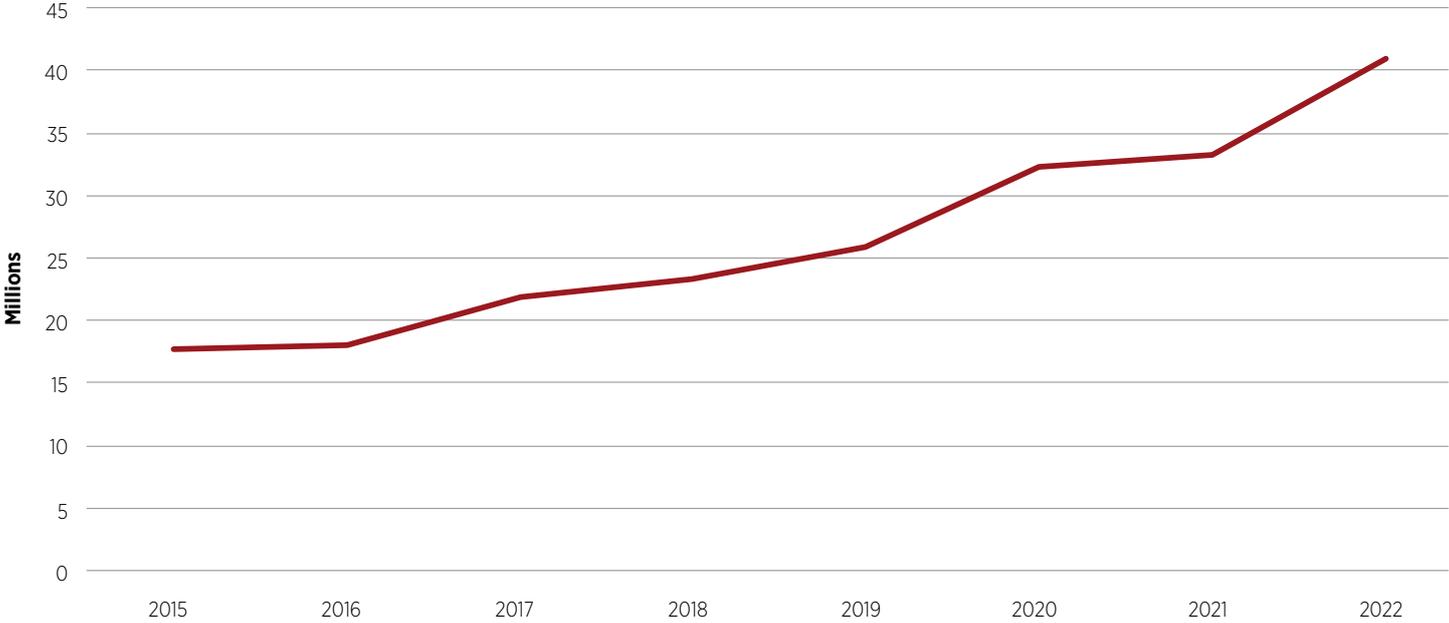
1. GSMA (2019). Harnessing the power of mobile money to achieve the sustainable development goals.  
2. The United Republic of Tanzania (2018). National Financial Inclusion Framework 2018-2022. Page 16

Mobile money stimulates the development of other sectors such as agriculture, health, transport and education by creating convenience of access to services, improving resource management and aiding distribution. As part of the mobile money ecosystem, MSMEs can perform financial transactions with other ecosystem participants, increasing their business opportunities.<sup>3</sup>

The enablement impact of mobile money services has seen the percentage of Tanzanian citizens using formal financial services increase from 16% to 65% between 2009 and 2017, to 76% in 2023.<sup>4</sup> Uptake has been largely driven by mobile money services, with adoption going from 60% of the population in 2017 to 72% in 2023.<sup>5</sup> As of December 2022, Tanzania had over 40 million mobile money accounts relying on a network of agents managing transactions across rural and urban areas.<sup>6</sup>

**FIGURE 1**

**TOTAL NUMBER MOBILE MONEY ACCOUNTS (2015-2022)**



Source: Tanzania Communications Regulatory Authority

With the right policy and regulatory conditions in place, mobile money is set to become the backbone of payments in the digital economy in Tanzania. Policy analysis and assessment of policy reforms are needed to ensure the best outcomes for consumers, mobile money stakeholders and the wider economy.

This report analyses the impact of the levy on mobile money transactions in Tanzania introduced in 2021, based on unique data from mobile money operators, and seeks to contribute evidence to policy decision-making on the economic impact of additional fees on mobile money adoption and financial inclusion.

3. GSMA (2016). Mobile financial services and MSMEs.  
 4. Finscope Tanzania (2009, 2017 and 2023). Insights that drive innovation.  
 5. Ibid.  
 6. Tanzania Communications Regulatory Authority. Quarterly Communications Statistics.

# 1. Mobile money levy impact assessment

From 1 July 2021, the government of Tanzania introduced a tax on mobile money transfer and withdrawal transactions, excluding merchant, business and government payment transactions effective 15th July. This levy applies in addition to VAT (18%) and excise duty on mobile money transfer and withdrawal fees (10%).

In August 2021, the government announced the reduction of the new mobile money transfer and withdrawal transaction levy by 30%, effective from 1st September 2021.<sup>7</sup> On 19 July 2021, the President of Tanzania tasked the Minister of Finance and Planning to review the mobile money levy<sup>8</sup> following concerns from the general public regarding the cost of mobile money transactions. Simultaneously, the application base was extended to include bank and financial institution transactions performed through a mobile phone. Other types of bank and financial

institution transactions such as over the counter, ATM transactions and transactions performed through devices other than mobile phones (e.g., personal computers) are not subject to the mobile money levy.

The levy was subsequently reduced again in September 2021, July 2022 and September 2022.

The rates applicable per transaction are presented in the following schedule.<sup>9</sup>

Value of mobile money transfer or withdrawal (TZS)	Rate of mobile money Levy (TZS)			
	Jul-21	Sep-21	Jul-22	Sep-22
100-999	-	-	-	-
1000-1999	10	10	10	10
2000-2999	16	11	10	10
3000-3999	27	19	15	14
4000-4999	56	39	30	27
5000-6999	100	70	60	54
7000-9999	125	88	70	56
10000-14999	320	224	128	102
15000-19999	610	427	243	195
20000-29999	960	672	383	306
30000-39999	1100	770	439	351
40000-49999	1500	1050	599	419
50000-99999	2050	1435	818	573
100000-199999	2530	1771	1,009	707
200000-299999	2940	2058	1,173	821
300000-399999	3500	2450	1,397	838
400000-499999	4100	2870	1,636	982
500000-599999	5200	3640	2,075	1,245
600000-699999	6400	4480	2,554	1,532
700000-799999	7100	4970	2,833	1,700
800000-899999	7520	5264	3,000	1,750
900000-1000000	8900	6230	3,551	1,776
1000001-3000000	9400	6580	3,751	1,875
3000001-10000000	10000	7000	4,000	2,000

7. The United Republic of Tanzania (2021). Special Supplement. The National Payment Systems (Electronic mobile money transfer and withdrawal transactions levy) (Amendment) regulations, 2021.

8. Find letter in the annex.

9. Sources: The United Republic of Tanzania (5th October 2022). The National Payment Systems (Electronic mobile money transfer and withdrawal transactions levy) regulations, 2021. Pages 7 – 8. The United Republic of Tanzania (2021). Special Supplement. The National Payment Systems (Electronic mobile money transfer and withdrawal transactions levy) (Amendment) regulations, 2021. Page 3. Act (Cap. 437). To The Special Gazette Of The United Republic Of Tanzania No. 39 Vol. 103. Supplement no. 39.

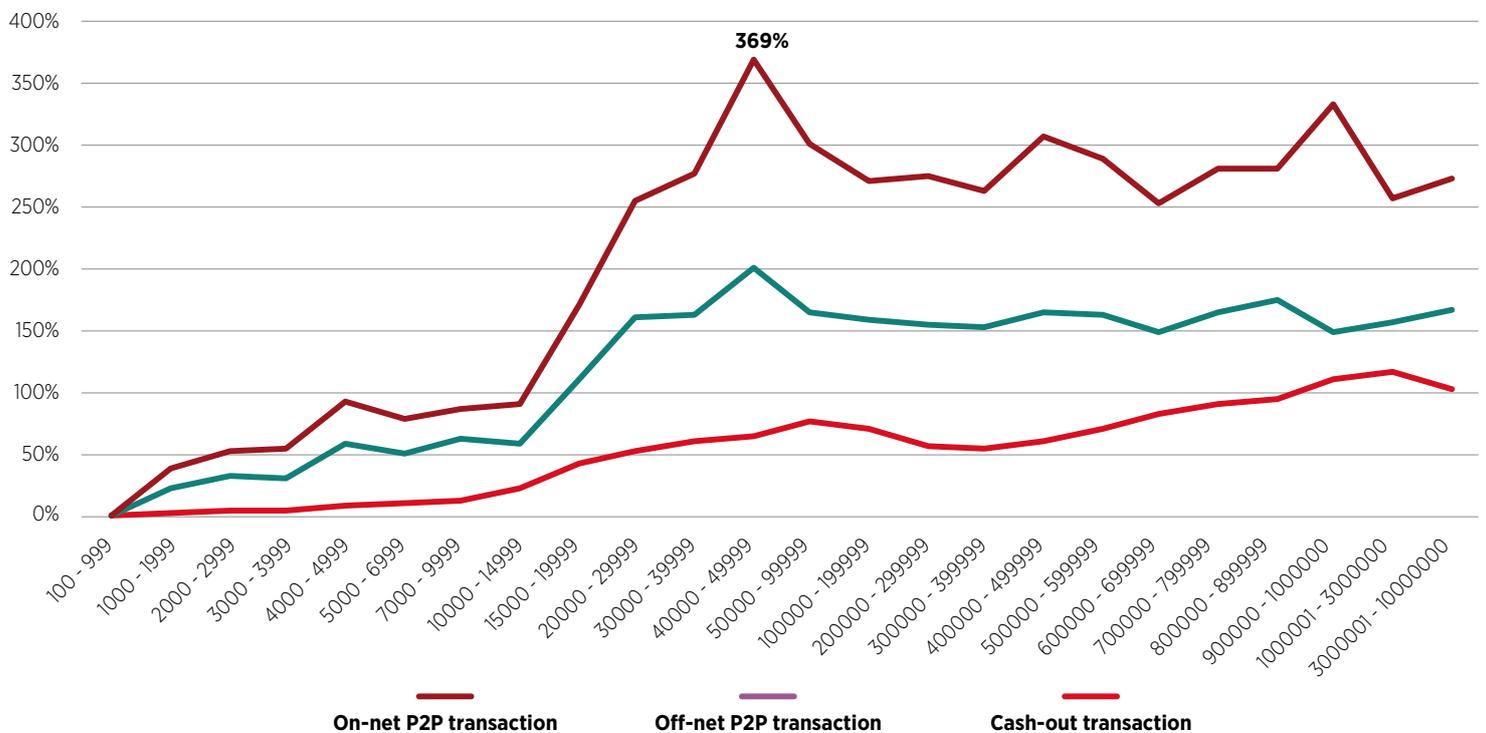
# 1.1 Price impact

Following the introduction of the new mobile money levy, the average transaction fee increased by 3% to 369% depending on the transaction value (see figure 2).

Off-net and cash-out transaction fees increased significantly from 3% to 175%. On-net P2P transfers suffered the highest fee increase ranging from 38% to

369%. On-net transfers above TZS 10,000 (\$4.3) were particularly impacted with fees subject to a twofold to fourfold increase depending of the transaction value. For example, the average fee for a transfer between TZS 40,000 and 49,999 (\$17 - \$22) increased by 369%, from TZS 407 to 1907 (\$0.18 - \$0.83).<sup>10</sup>

**FIGURE 2**  
PERCENTAGE INCREASE OF AVERAGE TRANSACTION FEE IN JULY 2021 COMPARED TO JUNE 2021, PER TRANSACTION VALUE



Source: GSMA analysis and operator's data

Until June 2021, taxes on mobile money fees represented 23% of total transfer cost and included VAT (18%) and excise duty (10%).<sup>11</sup> In July and August 2021, taxes on mobile money fees represented 60% of total transfer cost, on average, due to the new mobile money levy.<sup>12</sup> In particular, the average share of taxes

increased significantly for on-net P2P transactions as taxes represented up to 84% of total transfer cost. From September 2021, the proportion of tax reduced to 56% of mobile money fees following the reduction of the levy by the Government and the reduction of fees by mobile money operators.

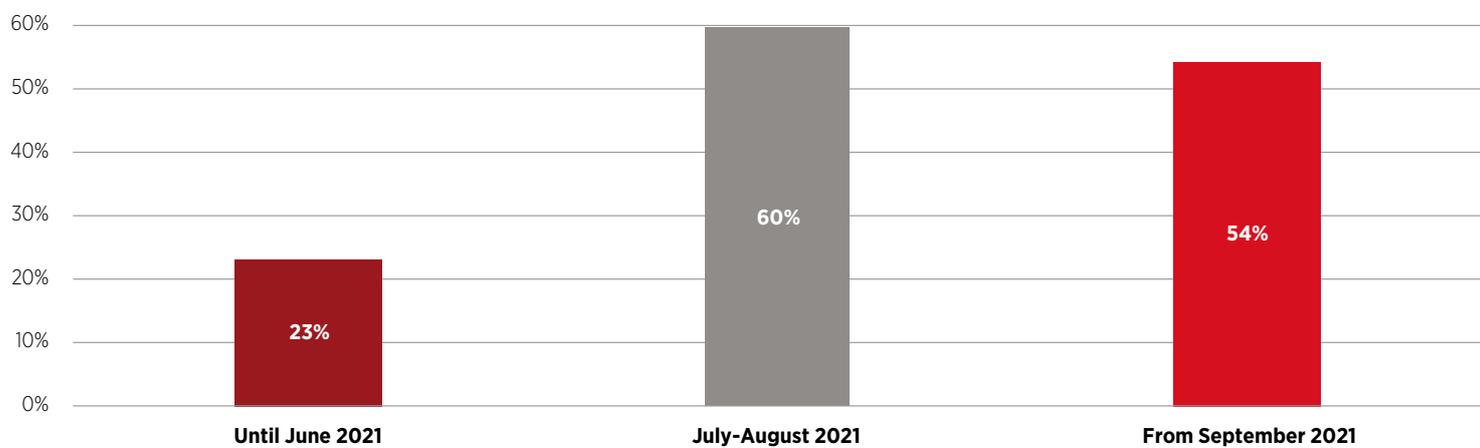
10. In June 2021, the average P2P transaction value was 42,000 TZS.

11. For example, a transaction fee of 130 TZS includes: 20 TZS of VAT, 10 TZS of excise duty and 100 of fee. VAT applies on fee plus excise duty.

12. Average tax proportion for on-net, off-net and cash-out transaction cost.

FIGURE 3

TAXES AS A PROPORTION OF TRANSACTION FEE



Note: The above figure includes the following taxes: VAT (18%), excise duty (10%) and mobile money levy (various rates).

Source: GSMA analysis and operator's data

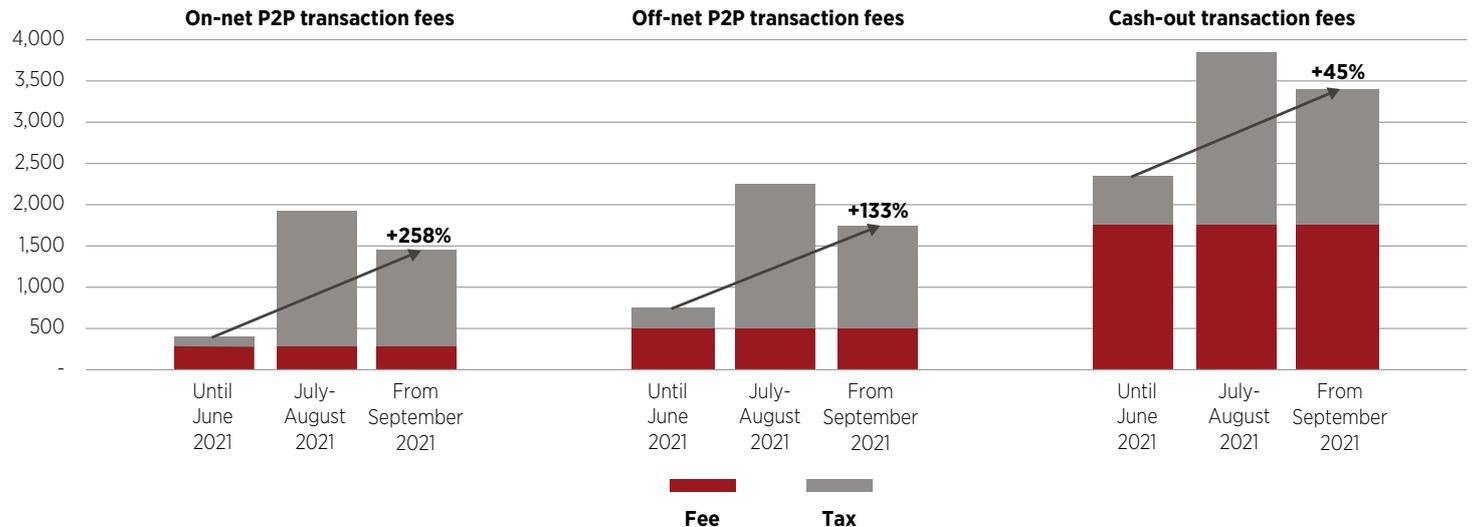
In September 2021, mobile money fees reduced marginally by 15% on average compared to fees applicable in July and August due to the levy reduction by the government and the reduction of fees by mobile money operators.

Mobile money users still faced significant increase in transaction cost compared to June 2021.<sup>13</sup> For example, the average fee for a transfer between TZS

40,000 and 49,999 (\$17 - \$22) evolved between June and September 2021.<sup>14</sup> Between June and September 2021, the cost of P2P transfer increased by 258% (on-net transactions) and 133% (off-net transactions). The cost of cash-out transactions increased by 45% over the same period. Figure 4 shows that increased cost is entirely driven by the tax increase, as the fee element of the transaction cost decreases or remains stable depending on the type of transaction.

FIGURE 4

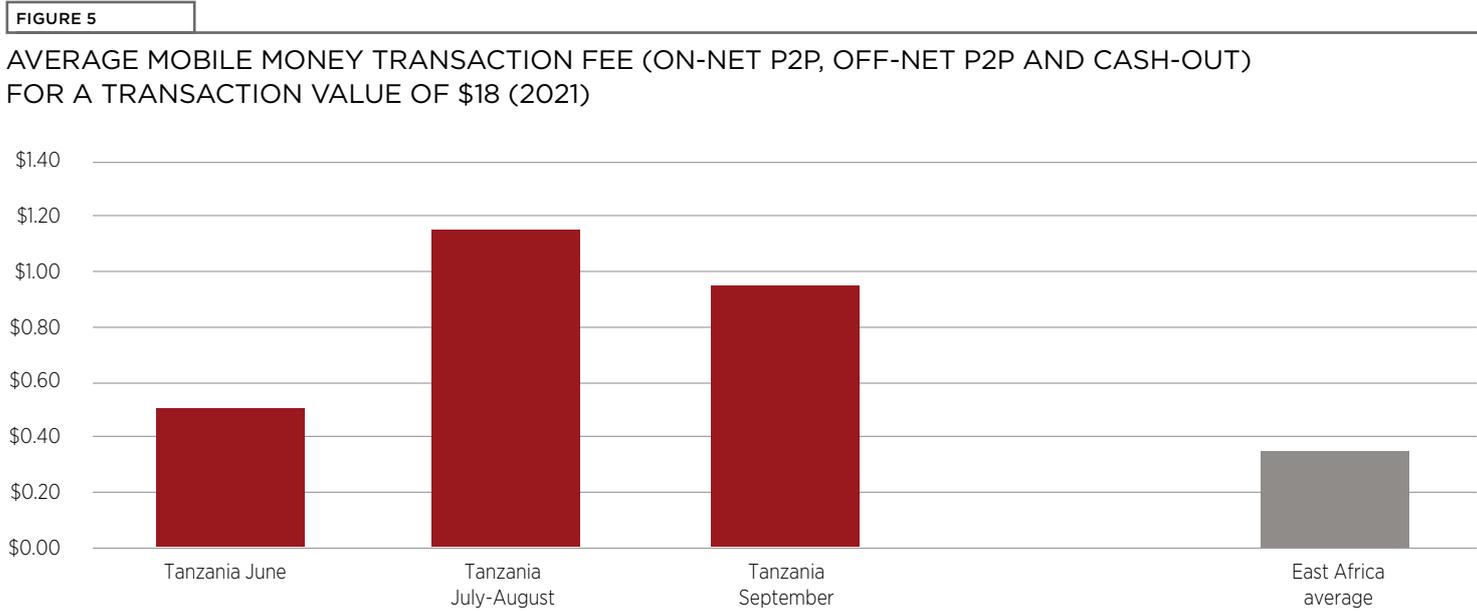
AVERAGE FEE, PER TRANSFER TYPE, FOR A TRANSACTION VALUE FROM TZS 40,000 TO 49,999



Source: GSMA analysis and operator's data

13. Between June and September 2021, average fee increase ranges from 3% to 258% (average of 87%), across all types of transactions (on-net, off-net and cash-out).  
 14. In June 2021, the average transaction fee was about 42,000 TZS.

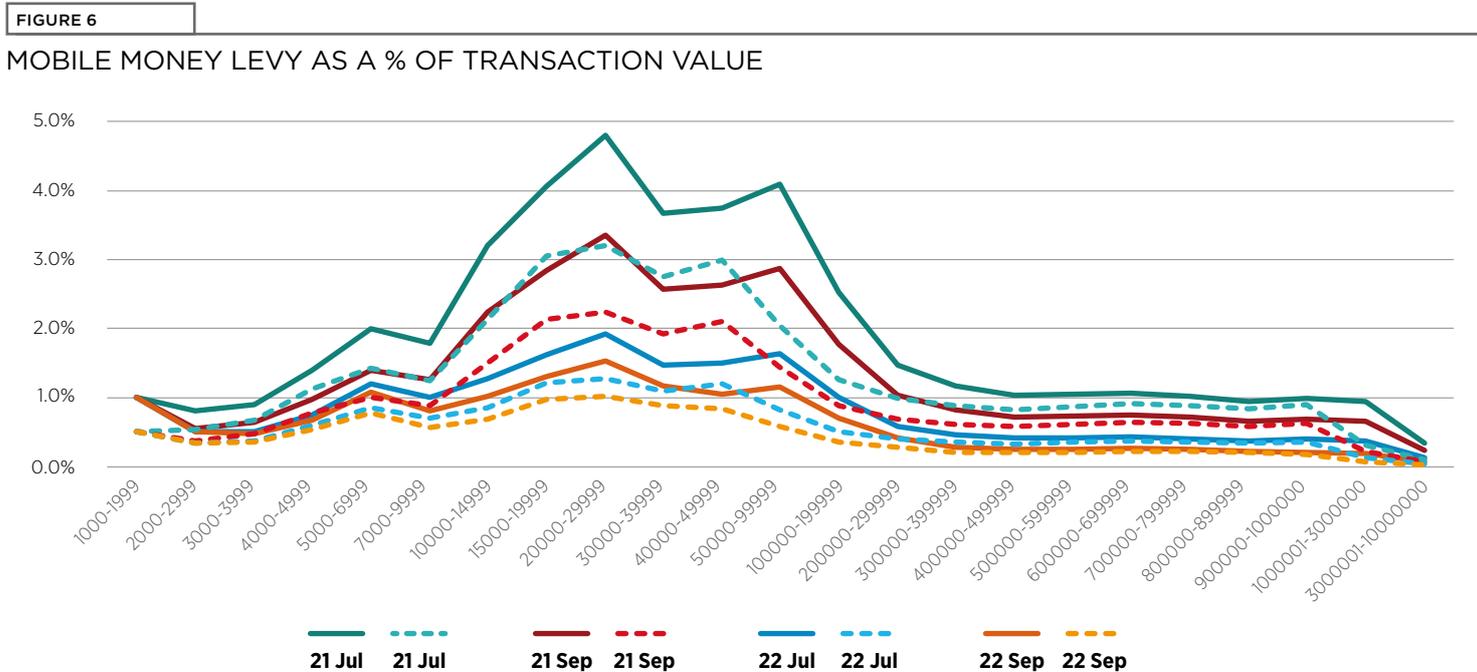
Until June 2021, Tanzania's average transaction fee was in line with the average for East Africa. However, from July 2021 Tanzania's average transaction increases to about 3 times the average fee for East Africa.



Source: Mobile money operator data collected by the GSMA<sup>15</sup>

Subsequent reductions in the rate of the levy in 2022, resulted in a reduction of the levy amount as a percentage of transaction value. The levy was up to 5% of transaction value when first introduced

Reductions in the rate were steeper for middle-value transactions. They are now around 1% of transaction value for most bands.



Source: Mobile money operators data collected by the GSMA. Horizontal axis shows transaction bands in TZS. Vertical axis is the levy rate as a % of transaction value. Dotted lines are the lower thresholds of the bands, continuous lines are the upper thresholds.

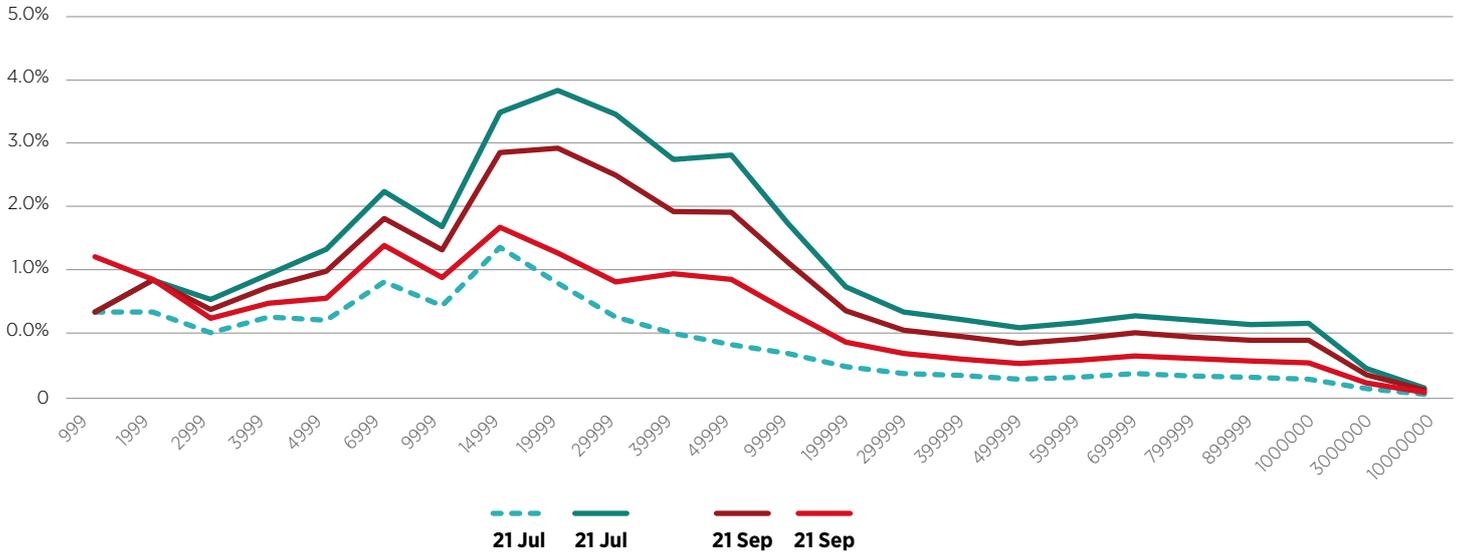
15. The East Africa average include data from Kenya, Rwanda and Uganda. The average transaction fee consists in the average fee for an on-net P2P transaction, off-net P2P transaction and cash-out transaction, for a value of \$18 (\$18 being the average transaction value in Tanzania).

Operators have responded to levy reductions by reducing the price to consumers, therefore passing on the saving from the reduction in tax. Prices have

decreased significantly since September 2021 but are still higher than before the levy: 66% for on-net, 25% for off-net, 11% for cash-out.

FIGURE 7

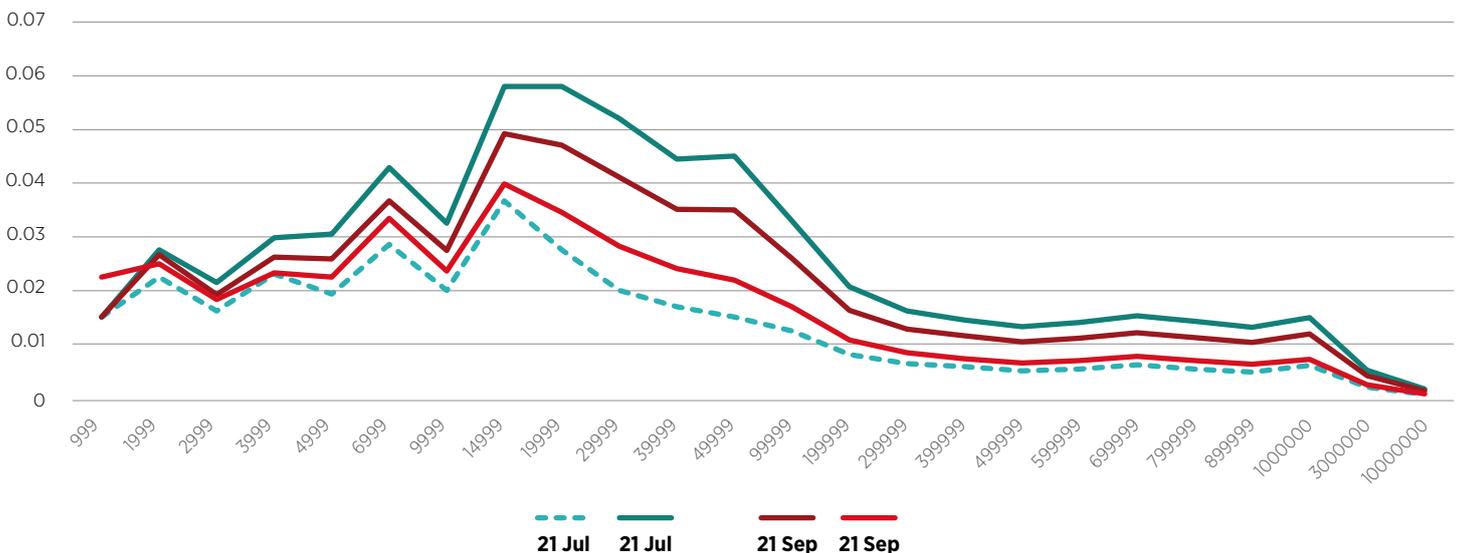
TOTAL TRANSACTION FEE AS % OF TRANSACTION VALUE, ON-NET



Source: Mobile money operators data collected by the GSMA. Showing fee as a % of transaction value for the upper threshold.

FIGURE 8

TOTAL TRANSACTION FEE AS A % OF TRANSACTION VALUE, OFF-NET



Source: Mobile money operators data collected by the GSMA. Showing fee as a % of transaction value for the upper threshold.

15. The East Africa average include data from Kenya, Rwanda and Uganda. The average transaction fee consists in the average fee for an on-net P2P transaction, off-net P2P transaction and cash-out transaction, for a value of \$18 (\$18 being the average transaction value in Tanzania).



## 1.2 Impact on transactions

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Following the introduction of the mobile money levy, the number of P2P transfers and cash-out transactions fell sharply in July and August 2021. They have somewhat recovered after the more recent reduction albeit on a lower growth path.

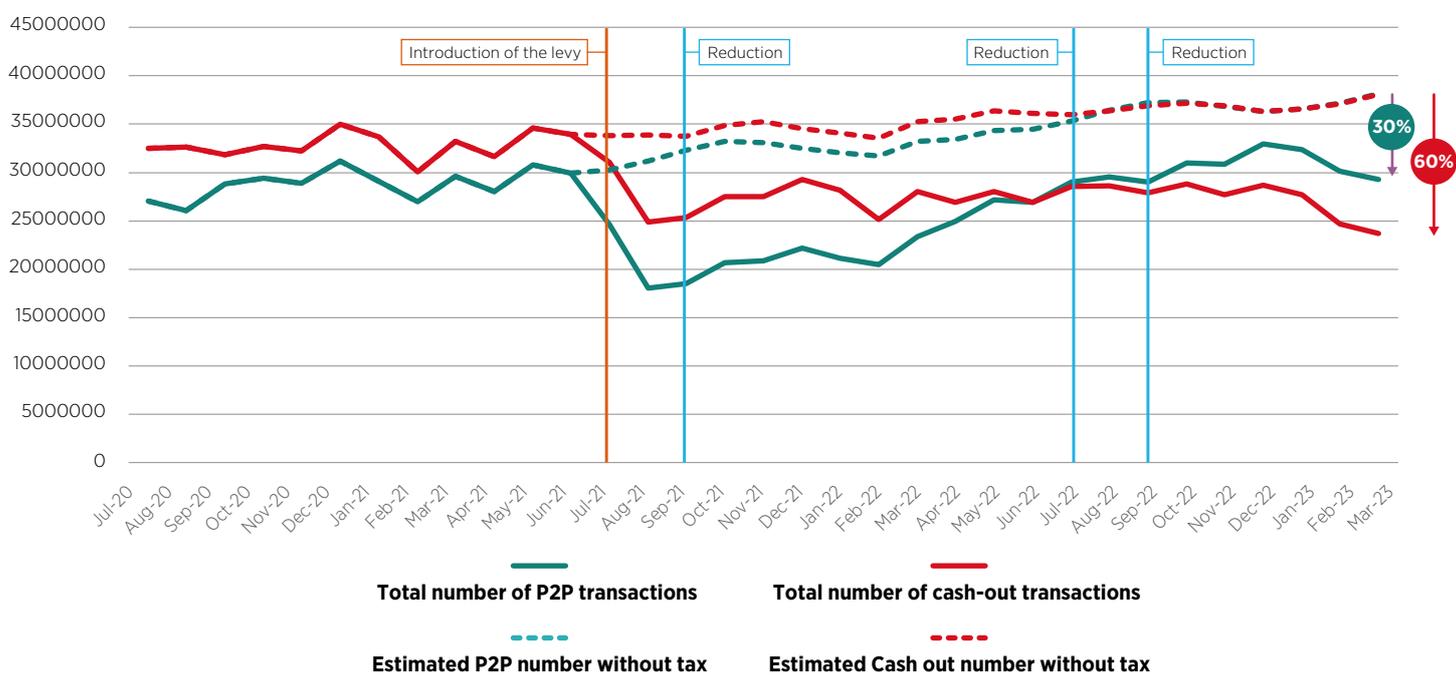
As mobile money transactions became more expensive on account of the levy, mobile money users rapidly reduced their usage of mobile money in favour of alternative payment methods such as cash. This is reflected by the sharp decrease in the total number of P2P transactions (-38%). The change in consumer behaviour likely lead to an increase in the use of cash, reversing gains in financial inclusion and the progress towards a cashless economy in Tanzania.

Between June and September 2021, the total number of P2P transactions reduced drastically from 30 to 18 million (-38%) per month, while the total number cash-out transactions reduced from 33 to 25 million (-25%) per month.

It took 16 months for P2P transaction to recover their peak volumes of June 2021. Cash-out volumes still have not recovered. We estimate that the loss in growth, had the tax not been introduced, is equivalent to 30% less transactions in March 2023 for P2P and 60% for cash-out.

**FIGURE 9**

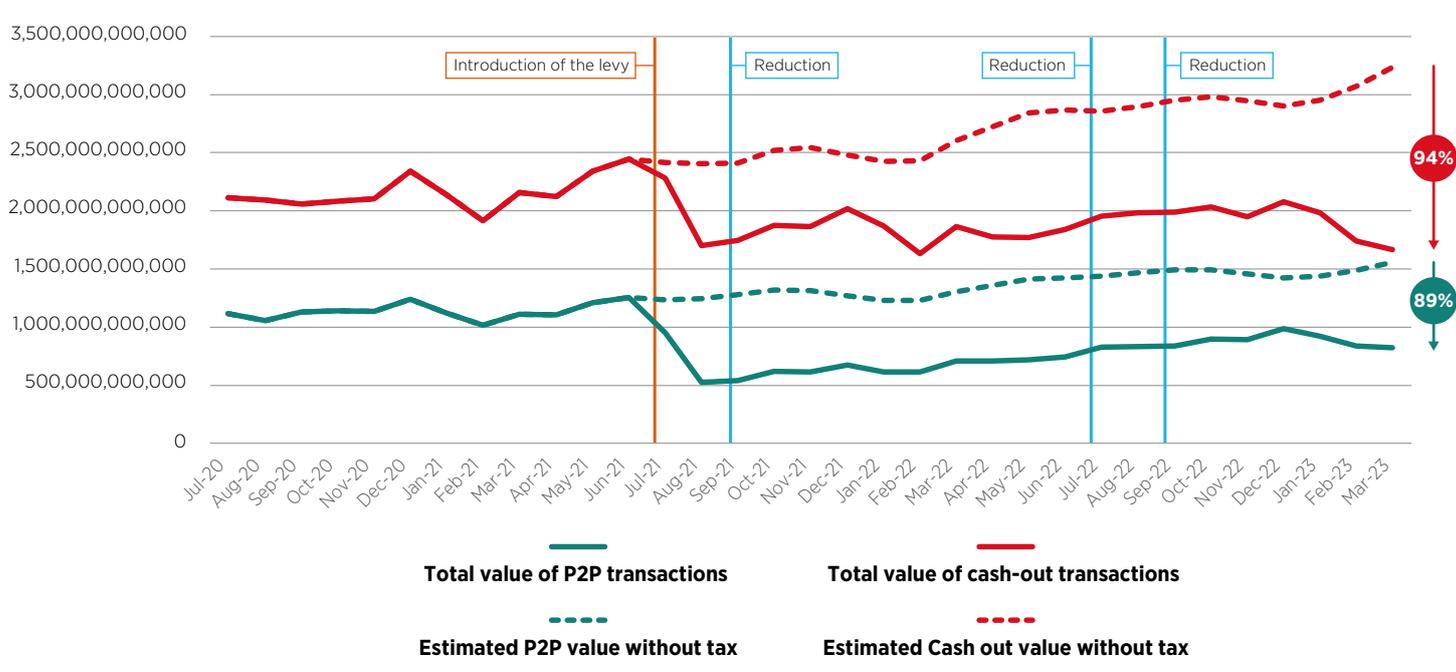
**TOTAL NUMBER OF TRANSACTIONS, BY TRANSACTION TYPE**



Source: GSMA analysis and operator's data. The vertical lines denote the timeline of the reforms: red for the introduction of the levy in June 2021 and orange for subsequent reductions. Estimation of the counterfactuals are based on rolling average of the growth rates of the previous 12 months.

**FIGURE 10**

**TOTAL VALUE OF TRANSACTIONS (TZS), BY TRANSACTION TYPE**



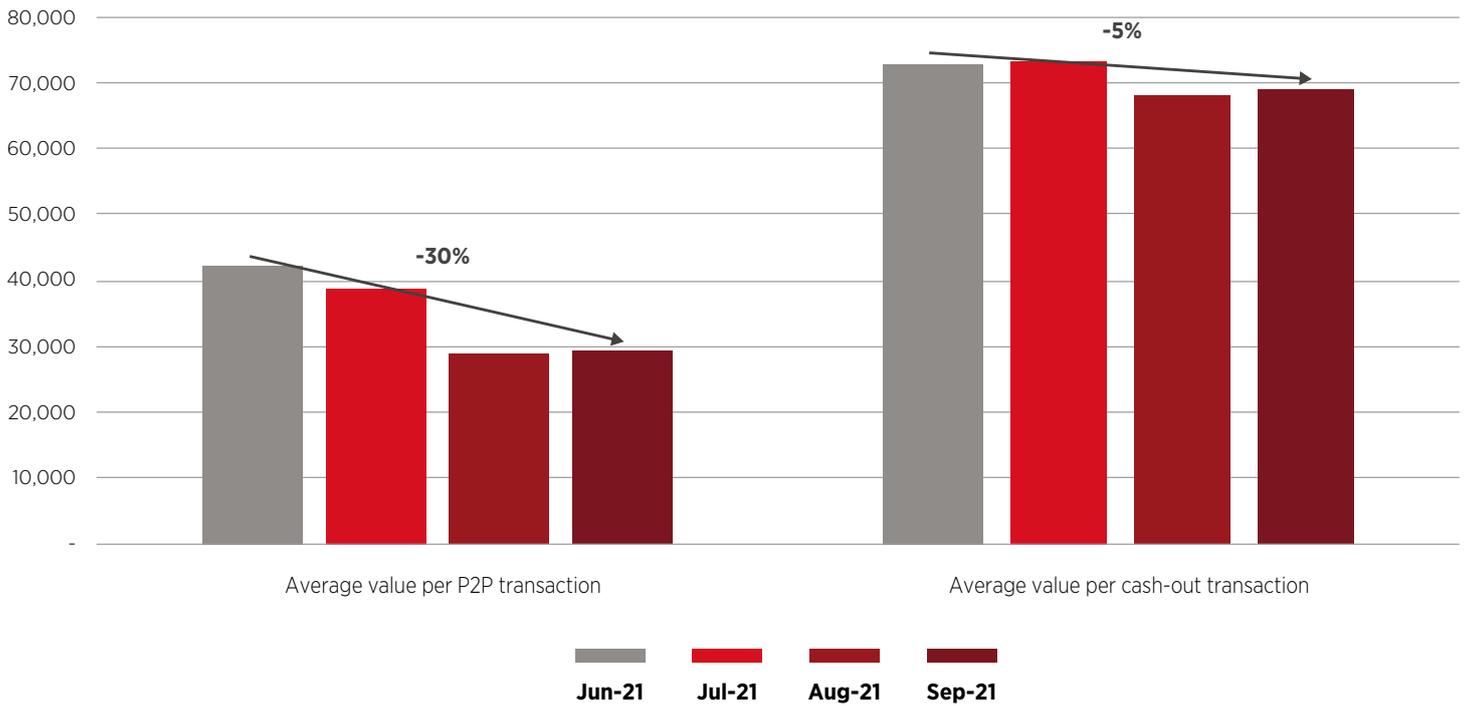
Source: GSMA analysis and operator's data. The vertical lines denote the timeline of the reforms: red for the introduction of the levy in June 2021 and orange for subsequent reductions. Estimation of the counterfactuals are based on rolling average of the growth rates of the previous 12 months.

In addition to reducing their usage of mobile money, users also removed their assets from their mobile money accounts to use them through alternative payment methods such as cash. Indeed, despite the transaction cost increase and the high reduction in cash-out transactions, the average value per cash-

out transaction increased by 7% from TZS 72,700 to 73,400 between June and July 2021. This suggests that while mobile money users made less cash-out transactions to avoid paying the increased fees, they cashed-out higher amount in July compared to June.

FIGURE 11

AVERAGE VALUE PER TRANSACTION TYPE



Source: GSMA analysis and operator's data.

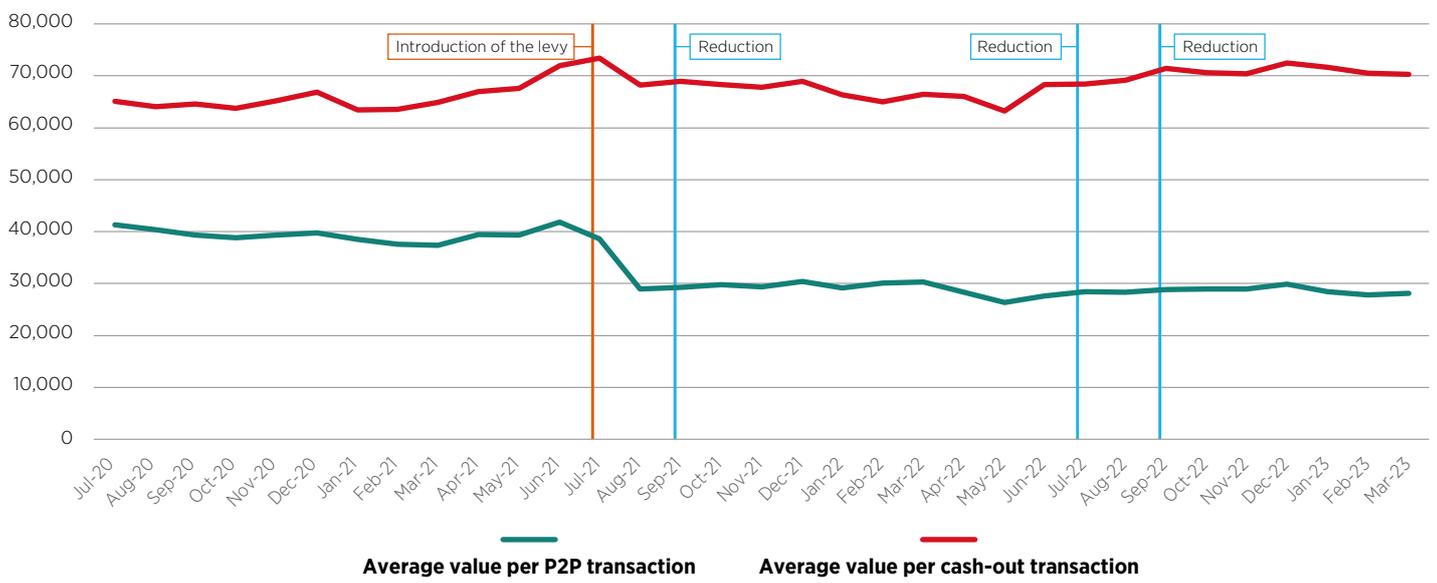
Transactions in the middle (TZS 15,000 - TZS 399,999) and high (above TZS 400,00) bands suffered the highest reductions in P2P transfers. While the number of low-value P2P transactions reduced by 26% between June and September, the number of middle and high-value transactions reduced by 54% and 63% respectively.<sup>16</sup> This may reflect the sensitivity of mobile money users to price. As shown on Figure 2, transactions in the bands above TZS 15,000 supported the highest transaction cost increases.

Since 2023, average value per cash out transaction was roughly in line in March 2023 to the level of June 2021. However, average value for P2P transactions has remained significantly lower since the levy was first introduced.

16. Low, middle and high value transactions are defined as follow: low: transactions below 14,999 TZS; middle: transactions between 15,000 and 399,999 TZS; high: transactions above 400,000 TZS.

FIGURE 12

AVERAGE VALUE PER TRANSACTION (TZS)



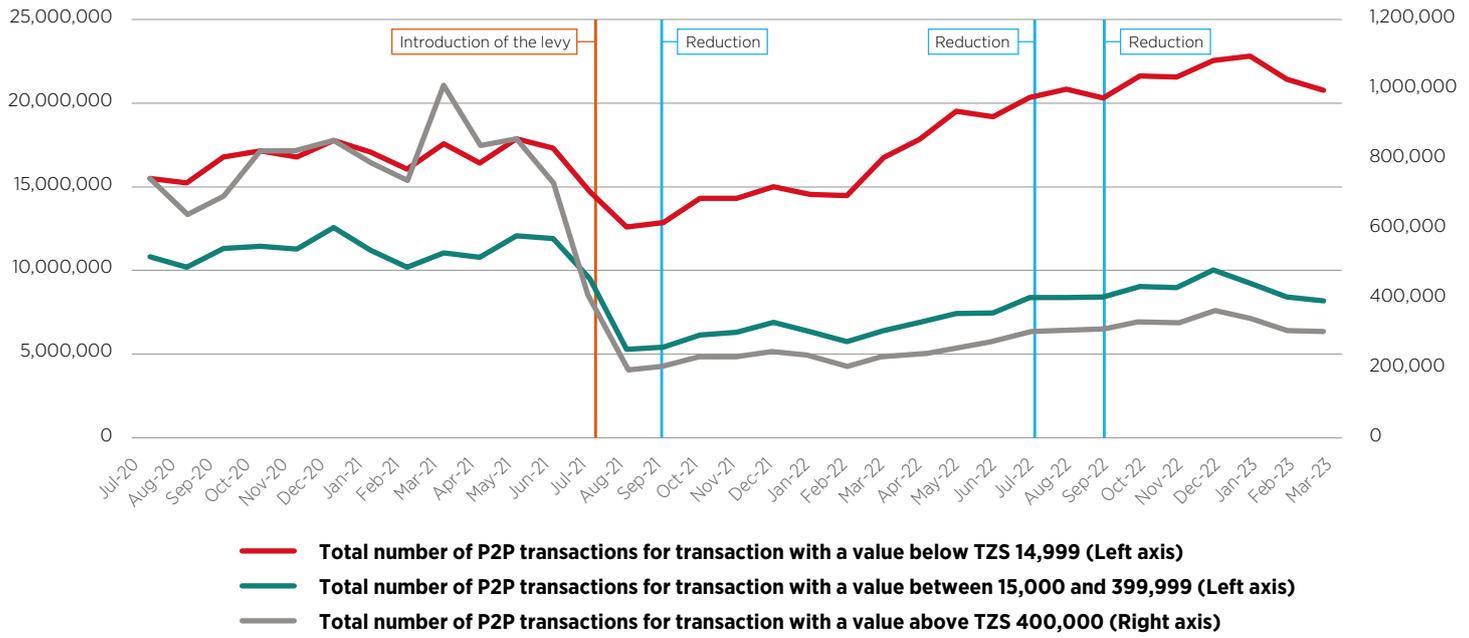
Source: GSMA analysis and operator's data.

For P2P transactions, Lower value transactions are driving the recovery in volumes and have rebounded slightly above their levels pre-tax. Middle and higher

value transaction have still not recovered their pre-tax levels and are, respectively, 31% and 58% lower than in June 2021.

FIGURE 13

NUMBER OF P2P TRANSACTIONS BY VALUE



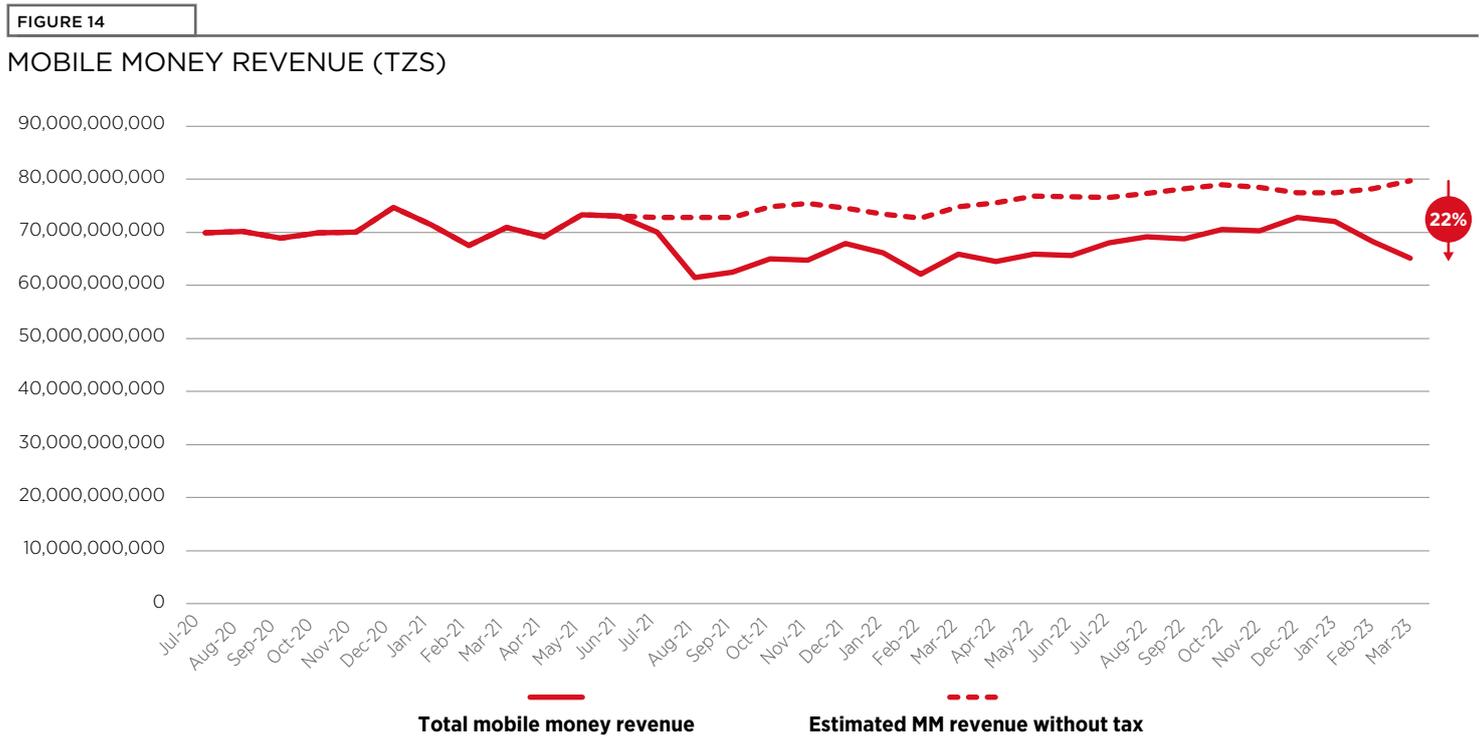
Source: GSMA analysis and operator's data.

### 1.3 Impacts on the mobile money sector and the wider economy

Following the introduction of the mobile money levy, mobile money revenue reduced sharply from TZS 73 to 61 billion (-16%) per month between June and August, to only stabilise to around TZS 65 billion from October 2021. It has since started to grow back again, but on a lower growth trajectory. It took 18 months to recover to the levels of June 2021. We estimate that in March 2023,

mobile money revenues would have been 22% higher, had the levy not been introduced at all.

Because mobile money agents' revenue consists of a percentage of MNOs' revenues, it is likely that their revenue has also reduced significantly, leading some of them to stop their mobile money activity.



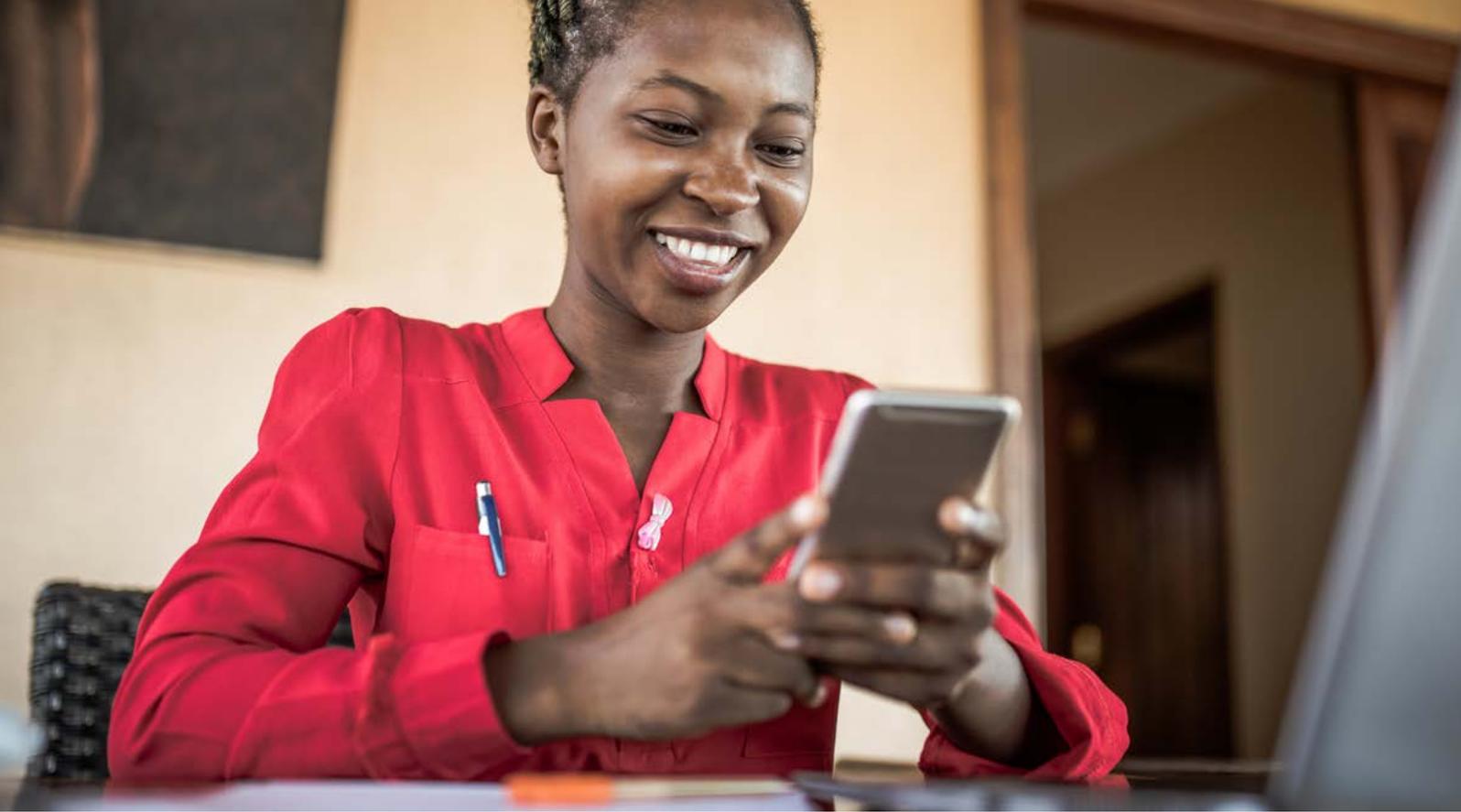
Source: GSMA analysis and operator's data. Estimation of the counterfactuals are based on rolling average of the growth rates of the previous 12 months.

The reduced revenues will discourage investment in the sector therefore slowing down innovation of new products and the general development of mobile money services in Tanzania. The new levy therefore threatens to reverse the commendable financial inclusion gains as Tanzanians revert to cash. By increasing the cost of mobile money, the new levy makes it more difficult for Tanzanians, and the poor in particular, to use financial services pushing them to revert to cash-based alternatives. According to Finscope (2017), mobile money is the main way for Tanzanians to access formal financial services with 60% of Tanzanians reporting using mobile money services and 13% reporting using commercial bank services. The reduction in mobile money usage could have a negative impact on the wider financial sectors.

Indeed, Finscope (2017) reports that the increment in bank service uptake between 2013 and 2017 can be attributed to the collaboration between banks and mobile money providers.<sup>17</sup>

The levy is regressive and impacts the poorest the most. Tanzanians on lower incomes and living in rural areas particularly suffer from the introduction of the new levy as mobile money is often the only way to access financial services. By reverting to cash and moving away from mobile money, these users lose wider benefits such as savings, loans, government benefits and insurance.

17. Finscope Tanzania (2017) Insights that drive innovation.



The reduction of mobile money revenue and usage means that the economy will not reap the productivity benefits of mobile money services. Several studies on the macroeconomic impacts of mobile money find that it can increase economic growth. For example, the International Monetary Fund (IMF) has found that digital financial inclusion can accelerate GDP growth,<sup>18</sup> while a study by Vodafone, Safaricom and the United Nations Development Programme (UNDP) found that countries with successful mobile money adoption experienced higher GDP growth compared to countries without mobile money.<sup>19</sup> Recent studies have shown that in markets with mobile money services versus those without, mobile money can increase tax revenue by increasing GDP per capita, improving institutional capacity and simplifying tax collection payment processes.<sup>20</sup> Further research has found that since mobile money was launched in Kenya, total factor productivity (TFP) and real per capita income has grown an estimated 3.3% and 14% respectively, between 2006 and 2013.<sup>21</sup>

Finally, mobile money greatly increases the visibility of the government on money circulation and the monitoring of transactions against money laundering and terrorist financing.<sup>22</sup> As some customers revert to cash as a result of the levy, such visibility is hindered and can reduce the governments' ability to formulate economic strategies and fight illegal activities.

The analysis above, points to longer term impacts of the levy on mobile connections and the wider economy, which could imply up to 1.5% lost GDP per year. In terms of tax revenues to the government, it collected 252 billion TZS from the E-levy in 2022. However, due the resulting decline in mobile money revenues and the implied loss of corporation tax and other taxes on mobile operators, the direct contribution of the mobile sector to tax revenues has reduced by 36 million TZS. Considering the indirect and induced contribution of mobile money to GDP growth and tax revenues, the resulting loss from the E-levy is estimated at 530 billion TZS per year. Therefore, net revenue from the tax would be negative at - 280 billion TZS per year.

18. IMF. (2021). Is Digital Financial Inclusion Unlocking Growth?

19. Vodafone, Safaricom and UNDP. (2022). Digital finance platforms to empower all; accelerating the SDG impact of digital financial inclusion in sub-Saharan Africa.

20. Apeti, A.E. and Edoh, E.D. (March 2023). "Tax revenue and mobile money in developing countries". Journal of Development Economics. Vol. 161.

21. Beck, T (2015). How mobile money is driving economic growth. World Economic Forum.

22. Mutual Evaluation Report June 2021 - Executive Summary, Findings (<https://www.fiu.go.tz/MER%20of%20Tanzania-June%202021.pdf>)

FIGURE 15

## ECONOMIC IMPACT OF THE LEVY

Economic impacts in 2022 on the mobile sector	
Tax payments for the levy (TZS millions)	252,000
Estimated loss in mobile revenue compared to pre-tax	-12%
Loss in government revenues from mobile sector (TZS millions)	-36,000
Estimated economic impacts per year on the wider economy	
Loss in GDP per year (%)	-1.53%
Induced loss in government revenue per year (TZS millions)	-493,000
Total loss in tax revenue per year (TSZ millions)	-530,000

GSMA analysis based on operator data, economic modelling and IMF data.

The economic impact analysis is based on the following assumptions:

- The additional costs from the tax are assumed to be distributed uniformly across all mobile services (not only MM)
- Elasticities of demand of mobile services are assumed to be between -1.08 and -1.24
- The economic impact coefficient is assumed to be 0.28% (for 1% increase in mobile penetration, there is a 0.28% increase in GDP)
- Pass-through of cost is 50%

## 1.4 Impact on consumers

Despite the very low levels of bank penetration in Tanzania, mobile money has addressed the financial inclusion needs of more than 33 million<sup>23</sup> people who lack viable alternatives. These are ordinary Tanzanians who would otherwise have depended on cash. As the evidence above points out, consumers have shown an aversion to the use of mobile money since the introduction of the mobile money levy and despite mobile money providers' efforts to reduce the impact on the consumer by lowering their fee tariffs.

As per Tanzania's National Financial Inclusion Framework, affordability is one of the main barriers to the frequent use of financial solutions. The Framework

identifies affordability as one of the five drivers that will promote usage of financial inclusion, along with appropriateness, convenience, safety and reliability and financial capability. From our analysis it is clear that this levy impacts the vulnerable and the poorest the most leading to reversal of the digital and financial inclusion gains that Tanzania has achieved over time, the potential exclusion from the formal economy for millions of Tanzanians and the increased risk to financial integrity brought on by the heightened use of cash.

The multiplier effects of financial exclusion and/or the reduced usage of mobile money services can be felt across other sectors of the economy.

23. Tanzania Communications Regulatory Authority. Quarterly Communications Statistics.



## 2. Conclusion and recommendations

Mobile money contributes a great deal to gross value added to the Tanzanian economy; employment of tens of thousands of Tanzanians; reduced cash handling costs to the government and government owned utilities; and direct investment into Tanzania by providers of mobile money services and their ecosystem partners. Indeed, the Tanzania National Financial Inclusion Framework 2018-2022 (TNFI) and the National Council for Financial inclusion, recognise the key role of mobile money in achieving universal financial inclusion in the country.<sup>24</sup>

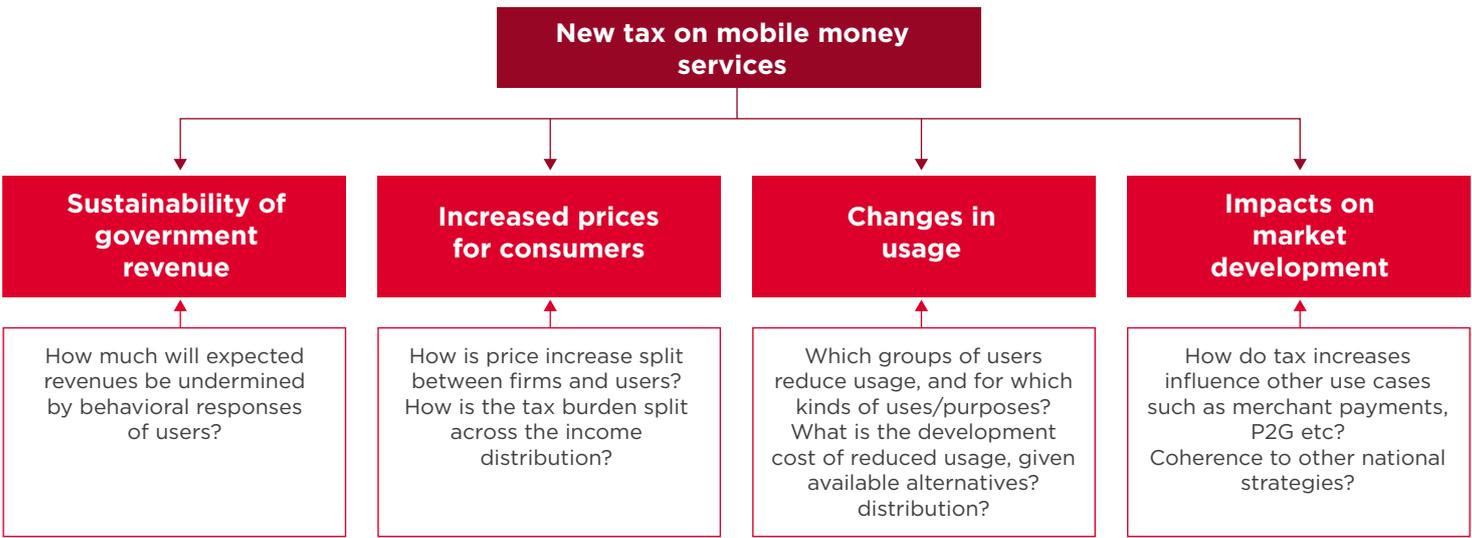
However, based on the findings of this report, there is a clear need to more closely assess the potential impacts of policy reforms and the risks that the mobile money levy still presents for the attainment of Tanzania's digital development objectives.

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24. Tanzania National Financial Inclusion Framework (2018 -2022)

FIGURE 16

CONSIDERATIONS OF POTENTIAL IMPACTS OF FISCAL POLICIES ON MOBILE MONEY:



In order to balance fiscal policy and digital development, while promoting fair and effective domestic revenue mobilization, the GSMA recommends:

- The removal of the E-levy on mobile money to foster financial inclusion and economic growth
- Policies must be balanced with the long-term health of the telecoms and digital sectors in Tanzania and its development and potential for contributing to economic growth
- Reduce sector-specific taxation and minimise tax-induced barriers to the affordability of mobile and mobile services, therefore broadening the tax base in order to improve efficiency, achieve higher revenues in the medium term and encourage the formalisation of the economy
- Rationalise taxes on the mobile sector to account for positive externalities of the sector
- Ensure predictability and certainty of tax policy to increase certainty and make the tax system more conducive to investment in the mobile sector

Reforming taxation policy has the potential to accelerate financial inclusion and Tanzania’s transition to a digital economy, while keeping in line with best practice principles of taxation:

-  Taxes should be as **broad based** as possible
-  **Specific taxes should be limited** and based on a **clear rationale of externalities**
-  Taxes system should be **equitable**
-  Taxes system should be **easy to collect**
-  Taxes should **not discourage investment**
-  Taxes systems should be **simple and certain**





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