# Four years of the Mobile Money Regulatory Index: Insights, opportunities and challenges

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# Contents

**List of figures**

# Executive summary

**Over the past decade, mobile money has become a mainstream financial service, moving millions of households in low- and middle-income countries (LMICs) from the informal cash economy to a more inclusive, digital economy.**

However, despite significant expansion of financial inclusion worldwide, there remain 1.4 billion unbanked adults in the world. Almost one in four adults does not have a financial account.

The financial inclusion gap is larger for underserved populations, including women, the poor and those outside the workforce.[1] Mobile money affords an opportunity to close this gap.

The link between an enabling regulatory framework and a thriving mobile money market has been demonstrated through empirical research. Regulation affects the ease with which new customers can enrol in a mobile money service, the range of services offered, and the commercial and operating environment for providers and investors. The extent to which a country's regulatory framework is enabling or not has been measured by the GSMA Mobile Money Regulatory Index (MMRI) since 2018. As of 2021, it covers 92 countries in which mobile money is active.[2]

Since 2018, 48 countries in the Index have improved their MMRI score, with only one country recording a material reduction. At the end of 2021, the majority of countries had effective and enabling regulations in place in the following areas:

**A level playing field:** 78 countries now permit non-banks to issue e-money and offer mobile money services. This is important as the vast majority of successful mobile money markets have been led by mobile operators. Almost all countries have authorisation instruments in place, while the majority have capital requirements that are assessed as proportionate.

**Safeguarding of funds:** Every country that does not follow a bank-based model requires e-money issuers to set aside funds equal to 100% of outstanding e-money liabilities in licensed banks or other safe liquid investments, and prohibits the intermediation of customer funds.

**Consumer protection:** The vast majority of countries in the MMRI have comprehensive consumer protection rules that provide for disclosure requirements, dispute resolution and recourse processes, and protection of customer data.

**Agent networks:** Almost all countries in the MMRI permit non-bank agents, allowing providers to develop distribution networks, especially in underserved rural areas. The vast majority do not require authorisation for individual agents (instead applying a notification regime) and allow agents to carry out customer registration.

1 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

2 GSMA Mobile Money Metrics

Most countries have enabling regulation, but there remain a significant number that can improve in the following areas:

**International remittances:** 21 countries do not permit the sending or receiving of international money transfers (IMT) using mobile money. This is an increasingly valuable service for mobile money users, and permitting IMT could accelerate the digitisation of remittances.

**Know-your-customer (KYC) requirements:** 16 countries in the MMRI allow operators flexibility in setting the minimum KYC requirements, and 48 require that the customer only needs to present a form of ID and mobile number. However, the remaining 28 countries have additional verification checks and requirements that can make it challenging for underserved populations to access a mobile money account.

**Transaction limits:** 32 countries have at least one set of limits assessed as low and restrictive, either on entry-level or maximum limits.

**Affordability:** 14 countries impose either pricing regulation on mobile money services or a mobile money tax. Taxes increase the cost of provision and act as an additional barrier to financially including the unbanked and those on low incomes.

**Interest payments:** An increasing number of countries have explicitly permitted mobile money providers to earn and utilise interest on mobile money trust accounts. However, in 38 countries, the regulations are either unclear or do not permit the earning of interest.

**Financial inclusion strategy:** There has been a significant increase in the number of countries that have formulated a financial inclusion strategy, from 52 in 2018 to 63 in 2021. However, 29 countries are still without a national financial inclusion strategy (NFIS).

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The majority of countries can enhance their regulatory frameworks in the following areas:

**KYC identification and automated KYC:** 52 countries in the MMRI do not have ubiquitous rollout of national or government-issued ID, and regulations do not allow documents other than these to access mobile money services. Such requirements will continue to exclude underserved populations (who are less likely to have official ID documents) from using financial services. In addition, only 26 countries provide automated KYC verification for mobile money providers (MMPs).

**Deposit insurance:** Only 15 countries provide deposit insurance protection for each mobile money account. This provides for customer funds to be covered if there are insufficient assets to repay customers in the event of service-provider insolvency.

**Settlement access:** In 48 countries where non-banks are allowed to issue e-money, they do not have access to the retail payment settlement infrastructure. This is an important area of improvement as the need grows for mobile money systems to be integrated with other financial systems.

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With the rapid growth and evolution of mobile money, regulators have had to adapt and evolve with new technologies. Many have done so successfully, enabling the expansion of mobile and digital financial services, while some have not kept pace to the same extent. The GSMA will continue to monitor the regulatory environment across countries to assist MMPs, regulators and policymakers in the development of enabling regulation.

This will require the MMRI framework to be re-assessed and updated so that it reflects new considerations that may not have been important before and places less weight on elements that historically were important but are less relevant now. This is an area that the GSMA will continue to work on.

# 1 Introduction

**Over the past decade, mobile money has become a mainstream financial service, moving millions of households in low- and middle-income countries (LMICs) from the informal cash economy to a more inclusive, digital economy. In 2012, there were 169 mobile money deployments in 71 countries.**

By the end of 2021, the number of live deployments had almost doubled to 316 and expanded to 98 countries worldwide, with 1.35 billion registered accounts processing more than $1 trillion in transactions.[3] In Sub-Saharan Africa, 33% of adults have a mobile money account, making it a critical enabler of financial inclusion.[4]

Despite significant expansion in financial inclusion, 1.4 billion adults remain unbanked around the world. Almost one in four adults do not have a financial account. The financial inclusion gap is larger for underserved populations, including women, the poor and those outside the workforce.[5] Mobile money affords an opportunity to close this gap.

Given their role in the provision of basic transactional financial services to populations largely underserved by formal financial institutions, mobile money services are subject to a range of regulations. It has generally been accepted by regulators, mobile money providers and investors that regulation has a material impact on mobile money adoption and usage. Regulation affects the ease with which new customers can enrol in a mobile money service, the range of services offered, and the commercial and operating environment for providers and investors.

The extent to which a country's regulatory framework is enabling or not has been measured by the GSMA Mobile Money Regulatory Index (MMRI) since 2018. As of 2021, it covered 92 countries in which mobile money is active.[6] The Index incorporates a set of metrics to measure six dimensions of mobile money regulation and scores them between 0 and 100, with a higher score associated with more enabling regulation (see Figure 1). Further details are provided in the MMRI methodology document.[7]

3 State of the Industry Report on Mobile Money 2022, GSMA, 2022

4 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

5 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. T*he Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

6 GSMA Mobile Money Metrics

7 Mobile Money Regulation Index Methodology, GSMA Intelligence, 2022

Figure 1

## Mobile Money Regulatory Index structure

Source: GSMA


**1 Authorisation**
Is there clear legal framework? Do providers have commercial flexibility? Are capital requirements proportionate?

**2 Consumer protection**
Are customer funds properly safeguarded? Are there appropriate consumer protection rules?

**3 Transaction limits**
Do mobile money providers have flexbility to meet customer needs with regard to transactions?

**4 Know-Your-Customer (KYC)**
Do mobile money providers have flexbility to meet customer needs with regard to transactions?

**5 Agent network**
Are the requirements for employing and using agents proportionate?

**6 Investment and infrastructure**
Is there sufficient policy and regulatory certainty and flexbility for mobile money providers to invest and innovate?

The link between an enabling regulatory framework and a successful mobile money market is supported by empirical research. A study leveraging the MMRI and the 2017 World Bank Global Findex survey found evidence that an enabling regulatory framework – as measured by the MMRI – is strongly associated with higher mobile money usage.[8] On average, when a country's Index score increases by 10 points, the use of mobile money increases by 3 percentage points. This relationship also becomes stronger as the Index score increases; for example, an increase from 80 to 90 points is associated with a larger increase in mobile money usage than an increase from 50 to 60 points. In addition, there is evidence that a more enabling regulatory framework has a stronger association with mobile money usage among women than men, and that enabling regulation is more closely linked to mobile money use among the poorest populations.

As the MMRI has now been running for four years, there is an opportunity to track long-term trends in mobile money regulation – particularly in light of the Covid-19 pandemic, when several countries adopted measures to support the use of mobile money services. It is also an appropriate time to consider the status of regulation in each dimension, to determine whether the MMRI remains relevant or if certain components should be updated. This is especially the case in a fast-moving sector such as digital financial services, where regulations need to continually adapt and evolve.

8 Exploring the Relationship Between Mobile Money Regulation and Usage, Bahia, Sanchez-Vidal and Taberner, 2020

# 2
# Index trends

**Since 2018, 48 countries in the Index have improved their MMRI score (see Figure 2), including three countries that established mobile money regulatory frameworks for the first time (Argentina, Tunisia and Somalia).**

Eight countries have seen small reductions due to a reduction in transaction values below the indicator thresholds (see Chapter 3), while Zimbabwe is the only country that has seen a material reduction in its Index score (see *Spotlight: Zimbabwe's regulatory framework becomes less enabling*).

The countries that have seen the greatest improvements since 2018, with changes of more than 10 points, are shown in Figure 3.

Figure 2

## MMRI Index scores in 2021 and change in Index scores since 2018

Source: GSMA

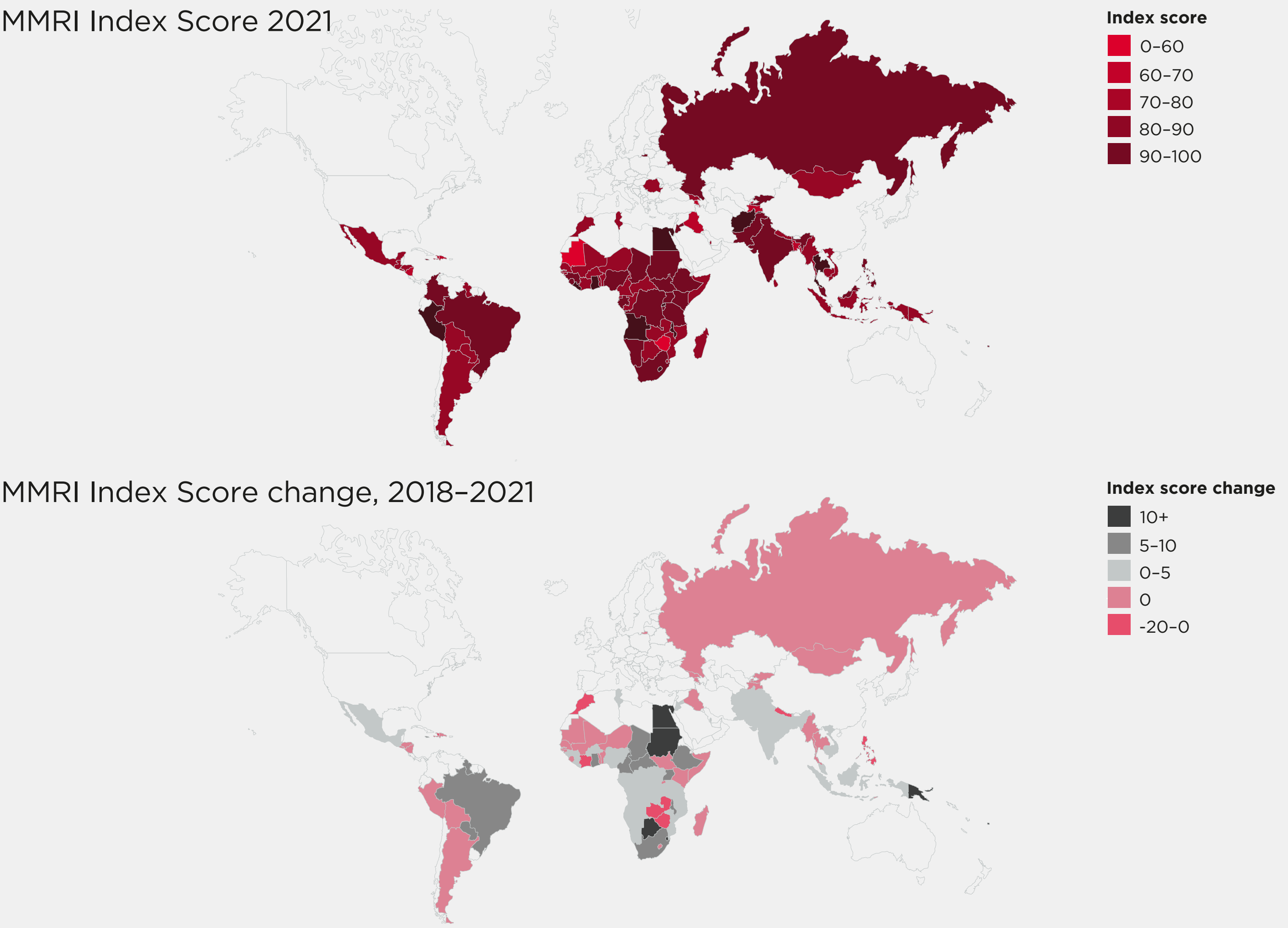


Figure 3

## Countries that have seen the greatest improvements in MMRI scores between 2018 and 2021

Source: GSMA

| Country | Index score increase since 2018 | Regulatory change |
|---|---|---|
| **Singapore** | 26 | The Payment Services Act 2019 allows non-banks (including mobile operators) to provide mobile money services – defined as 'e-money issuance' – including international money transfers. The Monetary Authority of Singapore also issued a notice that allowed payment service providers to perform simplified customer due diligence (CDD) measures where the payment service provider is satisfied that the risks of money laundering and terrorism financing are low. This enabled a more flexible and proportionate KYC process.<br>In 2021, non-bank financial institutions licenced as major payment institutions were also permitted to connect directly to Fast and Secure Transfers (FAST) – the country's retail payment system.<br>Data from the World Bank Findex survey shows that mobile money account usage among adults increased from 10% to 31% between 2017 and 2021. |
| **Eswatini** | 21 | Following the issue of the Practice Note for Mobile Money Service Providers in 2019, mobile money providers were permitted to provide international money transfers, and consumer protection rules were significantly strengthened.<br>In 2020, following the outbreak of Covid-19, the telecoms regulator and central bank harmonised on-boarding requirements for SIM registration and mobile money KYC, which reduced the time to open a mobile money account. KYC verification was also introduced by the government, and the Central Bank plans to launch e-KYC.<br>Data from the IMF Financial Access Survey shows that between 2018 and 2021, the number of registered mobile money accounts as a proportion of adults increased from 85% to 119%. |
| **Botswana** | 20 | The Electronic Payment Services Regulations in 2019 enabled mobile operators and non-banks to offer mobile money services. Previously, there was no regulatory framework to provide authorisation for the provision of mobile money services; rather, letters of no objection were released or permission granted under a regulatory sandbox. The new regulations also provided for enhanced consumer protection rules as well as higher transaction limits.<br>Data from the IMF Financial Access Survey shows that between 2018 and 2021, the number of active mobile money accounts as a proportion of adults increased from 80% to 126%. |
| **Sudan** | 16 | Sudan updated its framework with the Regulations on the licensing and supervision of mobile payments (2020), which allowed mobile operators to offer mobile money services and prohibited the intermediation of customer funds. Mobile money agents were also permitted to carry out more activities for customers, and the notification framework for agents made it easier for providers to grow agent networks (previously the distribution networks required authorisation from the Central Bank). Lastly, the new framework removed a range of pricing restrictions on mobile money products and enabled more flexibility for interoperability. |

Figure 3 continued

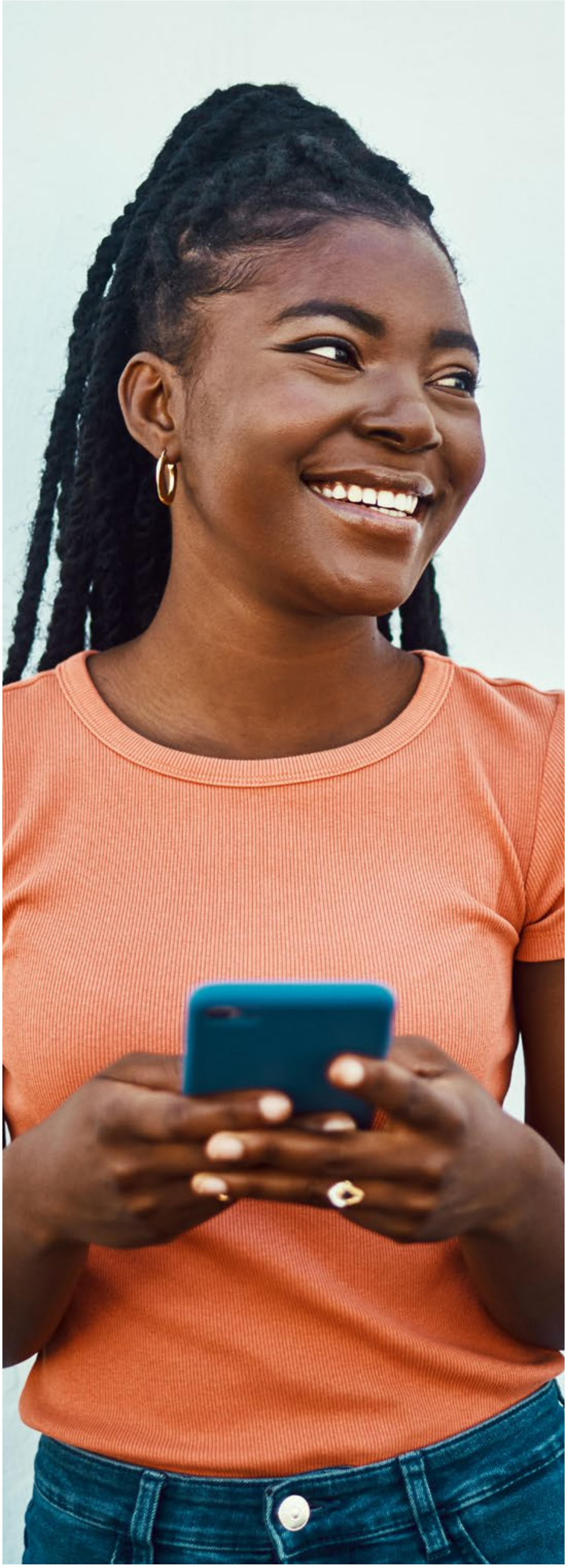
| Country | Index score increase since 2018 | Regulatory change |
|---|---|---|
| **Fiji** | 16 | The National Payment System Act in 2021 set out a formal authorisation framework to provide mobile money services. Previously, mobile money providers relied on conditional approvals (for example, letters of no objection) by the Reserve Bank of Fiji to offer digital wallet services. This framework provided for more extensive consumer protections and ensured providers could not limit their liability for agent actions. |
| **Egypt** | 13 | The Central Bank issued sector law 194 in 2020, which established a deposit insurance scheme for mobile money accounts. There were also new customer due-diligence procedures for mobile payments in response to the Covid-19 pandemic, which have subsequently been made permanent. These allow for remote onboarding and enable more proportionate KYC requirements. Furthermore, from 2020, operators were able to register the new accounts on the spot by connecting directly with the Civil Status Organization Database, enabling online verification. Also in 2020, transaction limits for financial inclusion products were increased, including for mobile money services.<br><br>Data from the IMF Financial Access Survey shows that between 2019 and 2021, the number of active mobile money accounts as a proportion of adults increased from 2% to 8%. There is still therefore wide scope for mobile money to expand, and certain regulatory aspects could still be improved. For example, the issuance of e-money is still restricted to banks; ID documents required for KYC are restrictive for underserved populations; and Egypt lacks a national financial inclusion strategy. The regulations are also prescriptive with regard to interoperability standards, and there remains no regulatory clarity on the earning and utilisation of interest payments on mobile money trust accounts. |
| **Papua New Guinea** | 10 | The Directive on Oversight in 2019 updated regulations from the 2013 National Payments Systems Act. It set out a proportionate minimum initial capital requirement and significantly strengthened consumer protections. The latter included the safeguarding of customer funds and clear consumer protection rules to disclose prices, protect customer data and grant access to recourse and complaint procedures.<br><br>Data from the IMF Financial Access Survey shows that between 2018 and 2021, the number of active mobile money accounts as a proportion of adults increased from 10% to 18%. There is therefore scope to further improve the regulatory framework and drive greater mobile money adoption. For example, Papua New Guinea still has very restrictive transaction limits compared to most other countries, and there remains scope to improve KYC procedures (including the provision of automated KYC verification). |

As noted in some examples in Figure 3, many governments sought to accelerate the digitalisation of payments following the outbreak of Covid-19. LMICs were more exposed to the pandemic, as social distancing is more difficult to achieve and maintain in economies that are reliant on cash and the physical purchase of goods. By expanding mobile money use, governments could disburse social welfare and relief payments during the pandemic, and businesses could maintain continuity by switching to and scaling up digital payments. In addition, mobile money reduces contact with physical cash, thus helping to limit the risk of spreading Covid-19.

Many of the enabling regulations highlighted in the MMRI formed the basis of policy responses to Covid-19. Examples include the following:

- **Relaxing of KYC requirements:** Several regulators relaxed KYC and on-boarding procedures. The Bank of Ghana, for example, allowed mobile operators to use existing mobile phone registration details for on-boarding minimum KYC accounts. It subsequently allowed more flexibility in the ID documents that could be used to access mobile money. These measures were made permanent and are reflected in the country's higher KYC score in the MMRI. This in turn contributed to Ghana having the highest overall Index score in 2021.
- **Increased transaction and balance limits:** Several central banks in Sub-Saharan Africa (e.g. in DRC and Rwanda) and elsewhere (e.g. in Myanmar, Peru and Bangladesh) increased daily and monthly transaction and wallet balance limits, with some of those changes made permanent.
- **Fee waivers:** The removal of charges on certain transactions was a popular short-term policy instrument in response to the pandemic. However, many regulators noted these were not sustainable in the long term and engaged with service providers on a return to the normal approach – for example, in Zambia and Kenya (see *Spotlight: Kenya's emergency Covid-19 response measures*).

In addition to the above, there were other policy interventions, such as fintech booster programmes and the creation of innovation hubs in Malaysia and India, to support fintech providers.[9]



9 See The Impact of Covid-19 Regulatory Measures on Mobile Money Services, GSMA, 2021 and Tracking Mobile Money Regulatory Responses to COVID-19 – Part 2, GSMA, 2020

SPOTLIGHT

# Kenya's emergency Covid-19 response measures

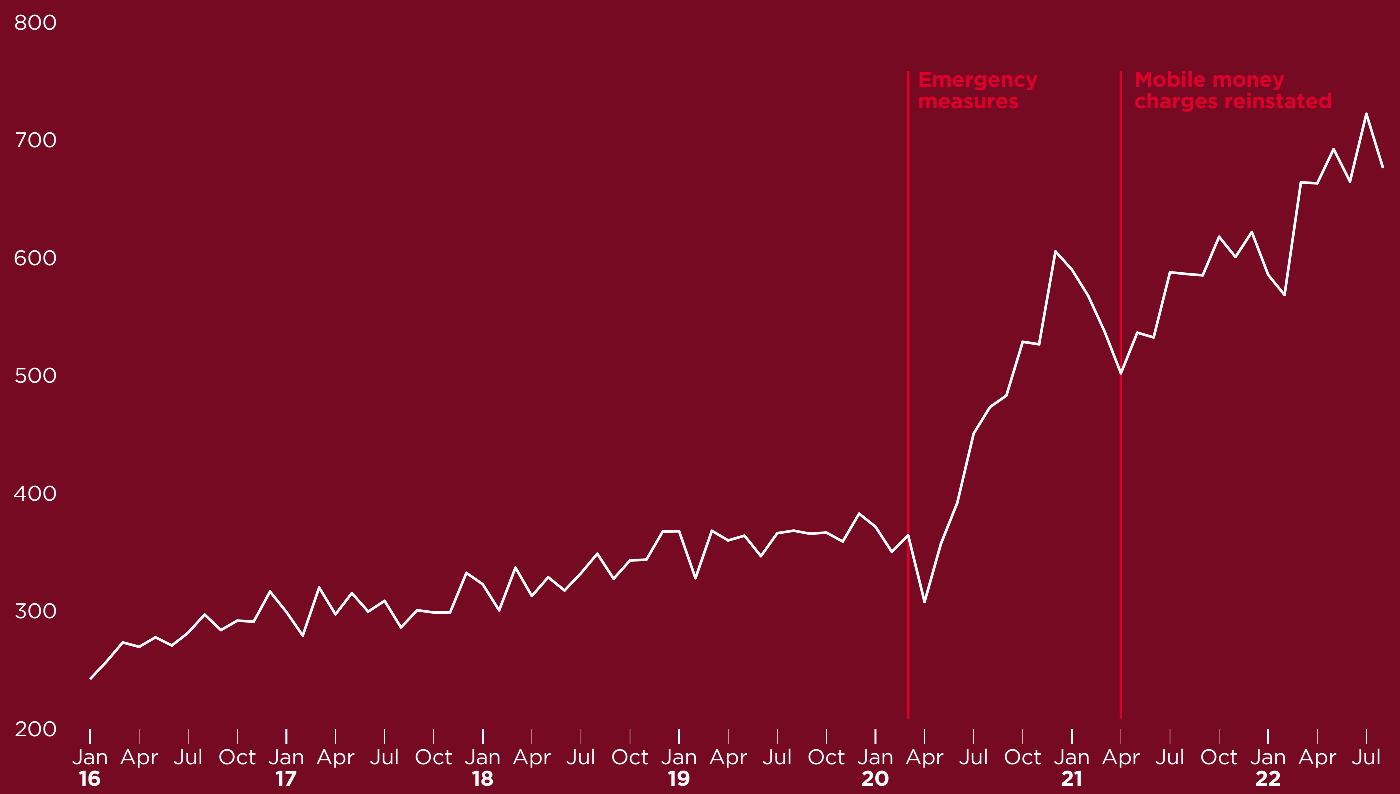
Following the outbreak of Covid-19, the Central Bank of Kenya imposed a number of emergency measures to increase the use of mobile money instead of cash. These had the immediate objective of reducing Covid-19 transmission and the medium-term objective of reducing the use of cash in the economy. The measures included a waiver of charges for mobile money transactions up to KES1,000, eliminating charges for transfers between mobile money wallets and bank accounts, and increasing transaction limits, daily limits and monthly limits.[10]

Figure 4 shows that following the implementation of measures, mobile money transactions increased significantly. All measures were subsequently made permanent, with the exception of fee waivers,[11] which were removed in April 2021. When mobile money transaction charges were reinstated, transaction values continued to increase and did not decline to pre-pandemic levels. This is important, as long-term fee waivers can jeopardise the commercial viability of mobile money providers. However, the experience in Kenya shows that mobile money use can increase after fees are re-imposed, particularly if other enabling conditions are present, such as higher transaction limits.

**Figure 4**

## Value of agent cash-in, cash-out transactions in Kenya (KES billion)

Source: Central Bank of Kenya




10 See "Emergency Measures to Facilitate Mobile Money Transactions", Central Bank of Kenya, March 2020

11 The one exception is that there remains no charge for P2P transfers of up to KES100.

# 3
# Analysis by dimension

# 3.1 Authorisation

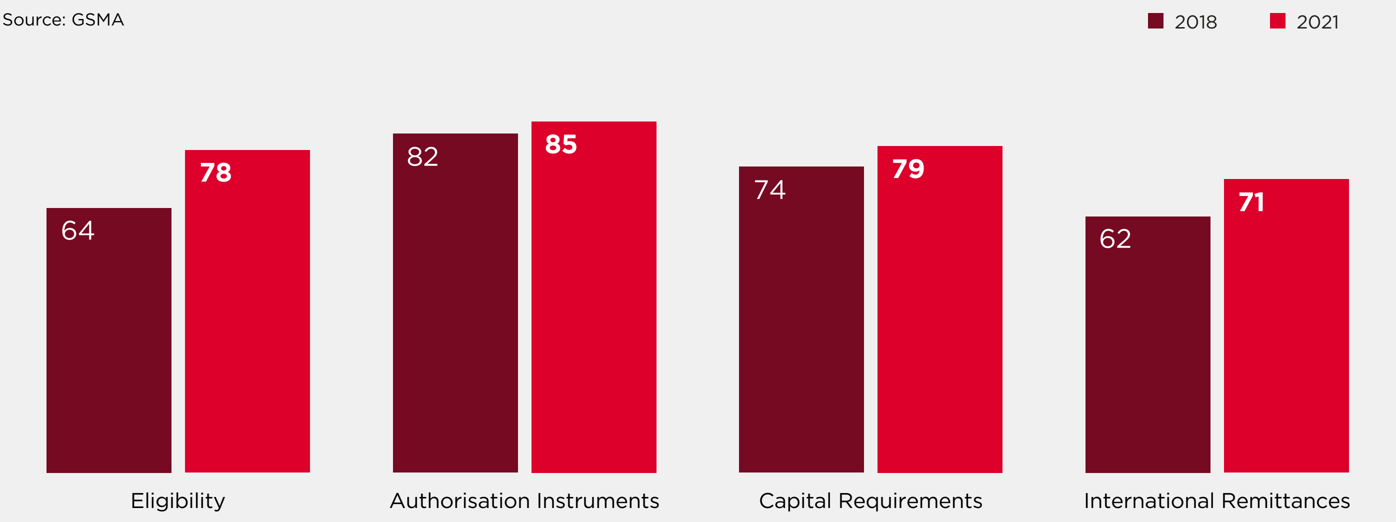
Figure 5 shows the number of countries achieving the maximum score for each indicator in the Authorisation dimension of the MMRI in 2018 and 2021. A total of 92 countries are included in the 2021 MMRI, and the maxima are defined as follows:

- **Eligibility:** Non-banks (including mobile operators) are eligible to issue e-money/offer mobile money services directly or through a subsidiary, with the involvement of a bank or similar institution as a custodian of customer funds.
- **Authorisation Instruments:** There exists a formal authorisation to provide mobile money services, which is based on a regulatory framework, and authorisations have been given.
- **Capital Requirements:** Mobile money regulations provide for initial capital requirements and are either less than $2 million (in PPP), lower than 10% of requirements for commercial banks, or are lower than 0.0025% of country GDP. Ongoing capital requirements do not exceed 3% of outstanding balances.[12]
- **International Remittances:** Regulations explicitly provide for mobile money customers to send and/or receive international money transfers, or they are permitted in practice.

Figure 5

## Number of countries with maximum score for each Authorisation indicator

Source: GSMA




12 See MMRI methodology for further details on how these thresholds were derived.

A fundamental regulatory proposition for mobile money to succeed is creating an open and level playing field that allows non-bank mobile money providers (MMPs), including mobile operators, to enter the market and issue e-money (or equivalent). The analysis shows a significant increase in the number of countries that now allow non-banks to issue e-money and offer mobile money directly. This is a positive development, as the vast majority of successful mobile money markets have been led by mobile operators, rather than traditional financial service providers.

Of the 14 countries that do not allow non-banks to directly provide mobile money, six countries allow non-banks to offer mobile money services in partnership with a prudentially regulated institution, while a further six do not permit non-banks to provide mobile money and are therefore entirely bank-based. Two markets, India and Nigeria, have followed an approach based on payment banks (see *Spotlight: Payment service banks in Nigeria*).

Almost all countries have authorisation instruments in place, while the majority have capital requirements that are assessed as proportionate. Of the 13 countries that do not, nine have no capital requirements at all. This is not desirable, as an initial capital requirement ensures that providers can cover operational costs and have sufficient assets to insure their creditors (including depositors) against insolvency risk and minimise subsequent system disruptions. However, it is also important that capital requirements are proportionate, as mobile money transactions are mostly low value and low risk. They therefore do not need to be as stringent as for prudentially regulated institutions. Excessive capital requirements can increase compliance costs to a level that stifles innovation and reduces competition. Four countries are assessed as having capital requirements that are not proportionate – DRC, Nigeria, Malaysia and Myanmar. For example, Malaysia has a requirement to maintain, at all times, minimum shareholder funds unimpaired by losses of RM5 million or 8% of their outstanding e-money liabilities (whichever is higher). In comparison, other countries that have ongoing capital requirements based on outstanding liabilities have set the proportion at 2–3%.

There has been an increase in the number of countries that now permit the sending or receiving of international money transfers using mobile money. This is an increasingly valuable service to the livelihoods of hundreds of millions of people in LMICs. The number of international remittances sent and received via mobile money grew by 48% in 2021, reaching $16 billion.[13] In the 21 countries where mobile money remittances are currently not permitted, changing this would go some way towards digitising remittances further, particularly as (despite recent growth) mobile money represents less than 3% of all remittances globally.

13 State of the Industry Report on Mobile Money, GSMA, 2022

SPOTLIGHT

# Payment service banks in Nigeria

At the end of 2020, 45% of adults in Nigeria were banked and only 6% were using other formal financial services (including mobile money).[14] The country did not achieve the target it set in its National Financial Inclusion Strategy to have 80% of the population financially included by 2020.

Despite being the largest mobile market in Africa, with 86% of the adult population subscribing to a mobile service, mobile money has not scaled in Nigeria in the same way as in other West African markets (for example, in Ghana and Côte d'Ivoire). Until 2018, the regulatory framework for mobile money permitted either a bank-led model, where a bank offered a mobile payment system, or a non-bank licensed by the Central Bank of Nigeria (CBN) to deliver mobile money. However, telecoms operators were prohibited from providing mobile money services, unless they hosted a CBN-approved provider on their infrastructure. This was a key reason why the regulation did not enable the use of digital financial services.

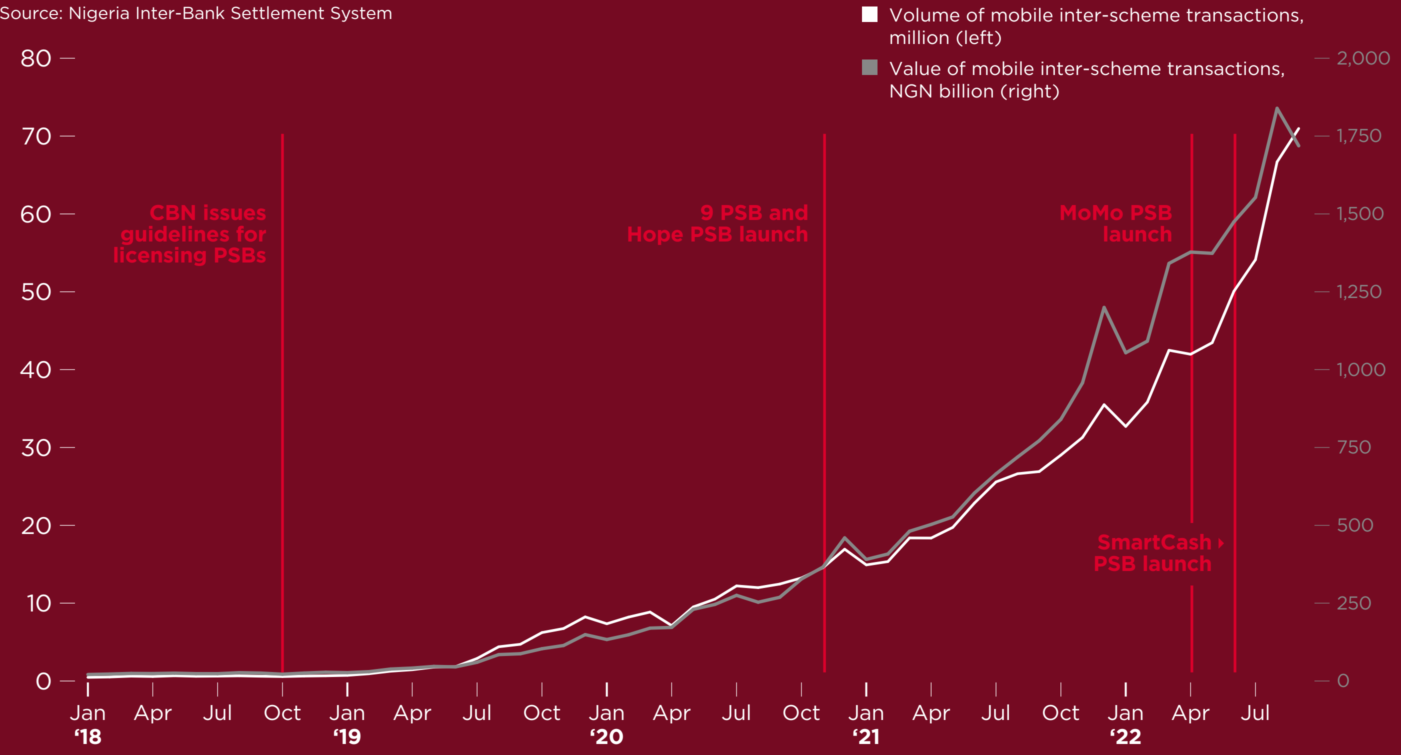
In October 2018, the CBN announced a new licence category of payment service banks (PSBs), which would facilitate high-volume, low-value transactions for payments, micro-savings and withdrawals. Modelled on India's payment banks, PSBs are intended to provide a cost-effective way for rural residents in Nigeria to access financial services through a combination of physical, mobile and digital channels. Telecoms subsidiaries, banking agents, retail chains and mobile money operators are eligible to apply for PSB licences, which permit them to accept deposits, carry out payments and operate electronic wallets, among other services.

Since the new regulatory framework took effect, fives PSBs have obtained licences, four of which are subsidiaries of mobile network operators. In that time, both the volume and value of mobile transactions have increased significantly, as shown in Figure 6.

Figure 6

## Mobile transactions in Nigeria

Source: Nigeria Inter-Bank Settlement System




14 Financial Services Agent Survey 2020, Enhancing Financial Innovation & Access (EFinA), 2020. Furthermore, a significant proportion of bank accounts are dormant according to NIBSS.

While this represents important progress, there remain areas where the regulatory framework in Nigeria can be improved. For example, the regulation contains pricing restrictions on most PSB transactions and services, which limits commercial flexibility, and the NIBSS prescribes specific technical standards for interoperability. Furthermore, Nigeria's decision to adopt a PSB approach rather than a mobile operator-led approach, as followed in most other African markets, will require it to follow a different regulatory path.

In India, payment banks (PBs) incurred several years of financial losses as a result of operational and regulatory challenges. The Central Bank subsequently updated the regulatory framework by allowing PBs to convert to Small Finance Banks after three years, allowing them to offer credit.[15] In August 2021, the Securities and Exchange Board of India (SEBI) also approved payments for initial public offerings (IPOs) through PBs, effectively allowing them to carry out the activities of investment bankers.

PSBs in Nigeria are currently required to have at least 25% of physical activity in rural areas and are limited in the financial products they can provide. For example, they are unable to provide loans or engage in foreign exchange transactions (except for inbound remittances). To ensure PSBs can expand financial inclusion in a manner that is commercially sustainable, it will be important to continuously monitor and evolve the regulatory framework to enable PSBs to develop partnerships that can enhance revenue streams over time.[16]

15 A regulatory model assessment of Payments Banks in India: The story of a glass half full, yet half empty, GSMA, 2020
16 Payment Service Banks in Nigeria: Opportunities and Challenges, GSMA, 2022

# 3.2 Consumer Protection

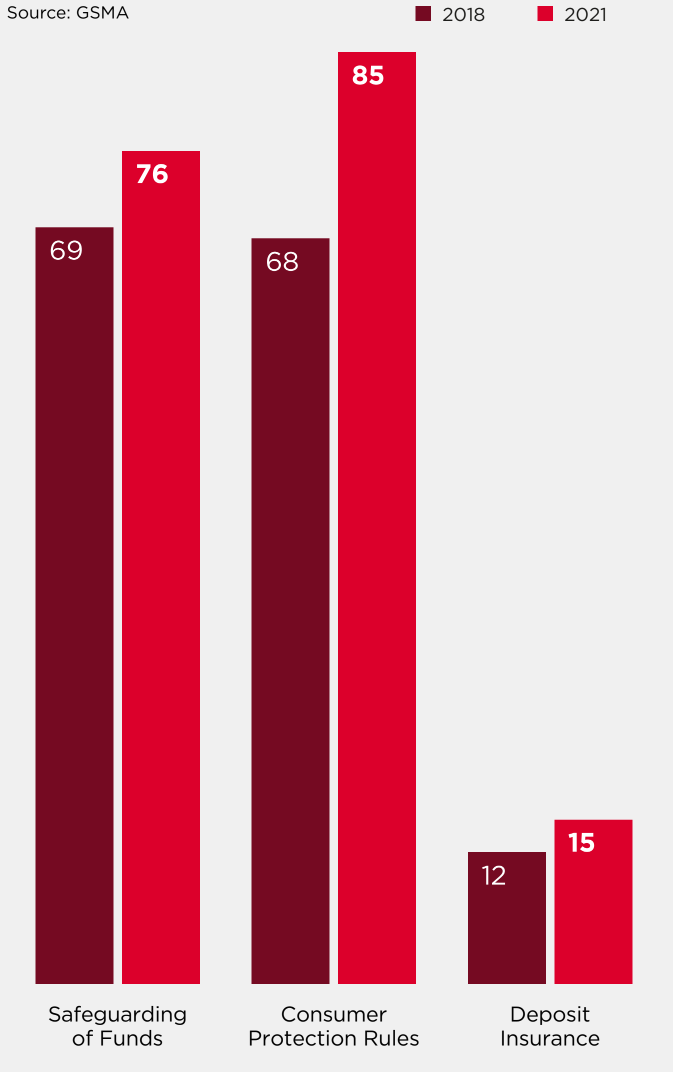
Figure 7 shows the number of countries achieving the maximum score for each indicator in the Consumer Protection dimension of the MMRI in 2018 and 2021. The maxima are defined as follows:

- **Safeguarding of Funds:** (i) Mobile operators and other non-banks providing mobile money have to keep 100% of their e-money liabilities in liquid assets; (ii) mobile operators and other non-banks must implement ring-fencing arrangements that protect the float against claims of creditors of the mobile money provider; and (iii) mobile operators and other non-banks, as mobile money providers, cannot intermediate customer funds.
- **Consumer Protection Rules:** All of the following apply.
  - **i** There are consumer protection rules that apply to mobile money services (either in the mobile money regulatory framework or in other consumer protection regulations or legislation).
  - **ii** The consumer protection rules require that customers are granted access to recourse and complaint procedures in order to resolve disputes.
  - **iii** The consumer protection rules require price disclosures for mobile money transactions.
  - **iv** The consumer protection rules provide a general disclosure requirement to make the terms of the service available to customers.
  - **v** The consumer protection rules provide for the protection of mobile money customers' data.
- **Deposit Insurance:** Deposit insurance protection is provided for each mobile money account.

**Figure 7**

## Number of countries with the maximum score for each Consumer Protection indicator

Source: GSMA



It is important for regulators to mitigate the risk to customer funds, especially when non-banks provide mobile money, to ensure financial integrity and stability. The three main risks that arise are liquidity[17], issuer insolvency[18] and bank insolvency.[19] If some customers lose their funds, current and potential customers could lose confidence in mobile money, limiting its potential to advance financial inclusion. Furthermore, to give customers more confidence to use mobile money, they can be granted even more protection through greater transparency, customer recourse processes, and privacy & data security measures.

The analysis shows that the majority of countries provide a complete safeguarding of customer funds through trust accounts. The money in these trust accounts (fiduciary account in civil law countries) is equivalent to the total electronic money (e-money) issued to the customer and is ring-fenced primarily to mitigate any financial systemic risks. These procedures mitigate liquidity and issuer insolvency risks and therefore give consumers more trust and confidence to use mobile money.

The remaining 16 countries that do not have the maximum score do not have ring-fencing arrangements that protect against claims of creditors. However, every country that does not follow a bank-based model now requires e-money issuers to set aside funds equal to 100% of outstanding e-money liabilities in licensed banks or other safe liquid investments and prohibits the intermediation of customer funds.

The vast majority of countries in the MMRI also have comprehensive consumer protection rules. This has been one of the most improved indicators in the MMRI since 2018, with 17 countries strengthening their consumer protection frameworks. This can improve trust among consumers to use mobile money – especially those that are reluctant to move away from cash. The preference for cash remains a key barrier preventing mobile owners having a mobile money account.[20]

The number of countries providing deposit insurance protection for each account remains limited. Furthermore, almost half of the countries that provide it have bank-based mobile money frameworks. However, some countries provide deposit insurance protection in non-bank frameworks, including Kenya, Guinea, Ethiopia, El Salvador and Colombia. This is a relatively new regulatory development but an important one as it provides for customer funds to be covered if there are insufficient assets to repay customers in the event of bank insolvency. It also contributes to financial stability by limiting contagion and systemic risks.

17 Insufficient funds set aside in safe liquid investments to repay customers
18 Insufficient assets to repay customers in the event of issuer (or trustee) insolvency
19 Insufficient assets to repay customers in the event of bank insolvency
20 State of the Industry Report on Mobile Money 2022, GSMA, 2022

# 3.3 KYC

Figure 8 shows the number of countries achieving the following for each indicator in the KYC dimension of the MMRI in 2018 and 2021:

- **Permitted Identifications:** Documents beyond government-issued IDs can be used as minimum requirements in the context of accessing mobile money services (e.g. employment ID, or a letter from a ward or village executive), or a national ID must be used, all of the population above the cut-off age are registered and at least 90% of a country's adult population has a national ID.
- **KYC Requirements:** The regulation allows operators flexibility in setting the minimum KYC requirements, subject to regulatory review or approval or according to regulations providing risk-based KYC tiers, or the consumer only needs to present an ID and/or mobile number (any additional requested information need not be verified).
- **KYC Proportionality:** KYC requirements for opening an entry-level mobile money account are less strict than the KYC requirements for standard bank accounts.

One of the main obstacles to providing financial services or products to unbanked customers is the lack of reliable identity documentation and data verification. Low-income individuals and displaced persons, such as refugees, often do not have the formal ID to meet traditional CDD requirements. Customers without these forms of ID cannot sign up for mobile money unless the KYC regulation allows the service provider to accept an alternative form of ID. The 2021 World Bank Global Findex survey showed that, in Sub-Saharan Africa, 30% of unbanked adults did not have the documentation needed to open a mobile money account.[21]

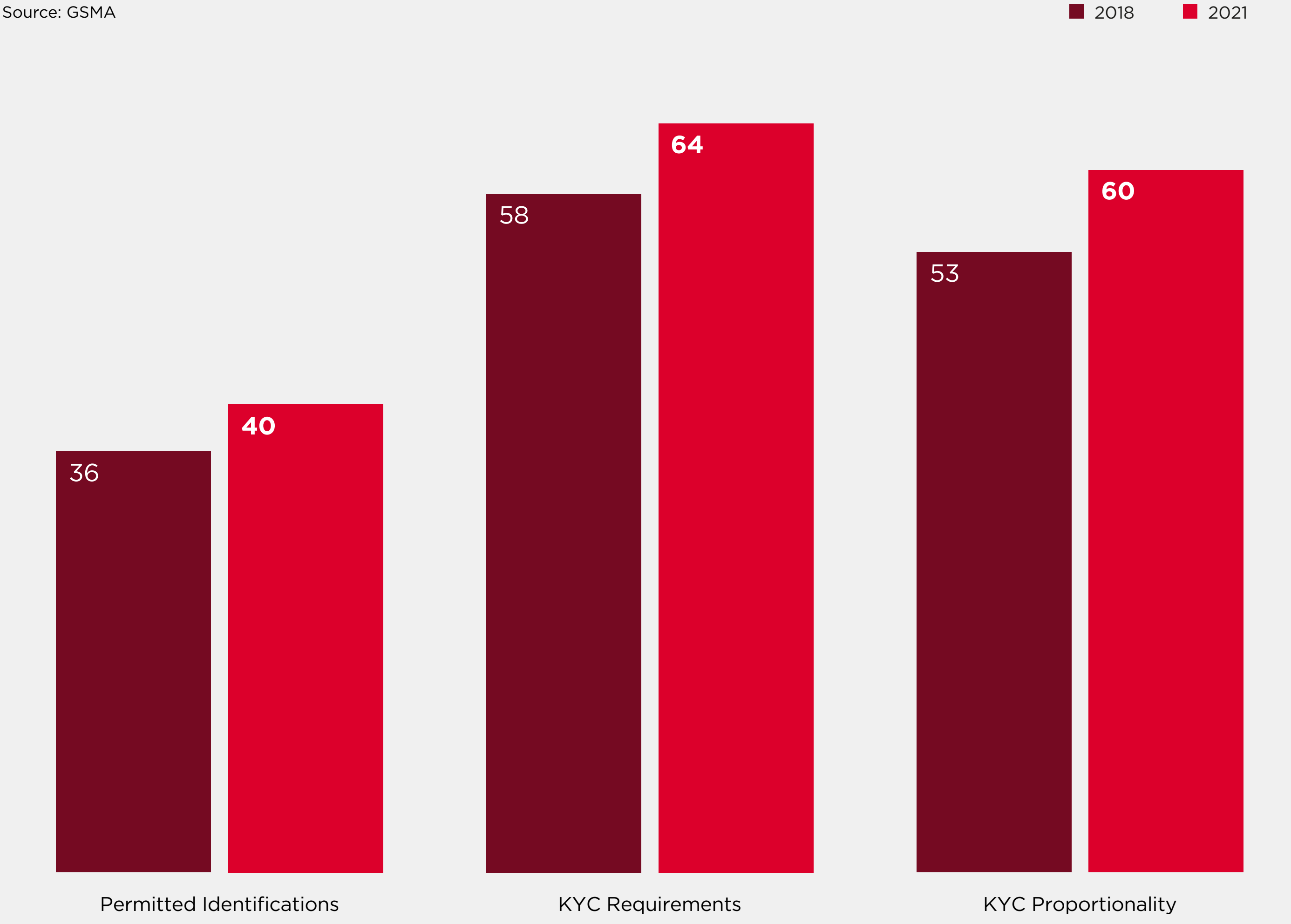
A risk-based approach allows some flexibility in providing access to basic regulated financial products to a larger proportion of the population – for example, allowing for tiered accounts in countries that do not have a universal ID system and for remote account opening (leveraging the information provided by the customer for SIM-card registration).

21 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

**Figure 8**

## Number of countries with benchmark score for each KYC indicator

Source: GSMA




The analysis shows there have been improvements across each of the KYC indicators. Sixteen countries in the MMRI allow operators flexibility in setting the minimum KYC requirements and 48 state that the customer only needs to present an ID and mobile number.

However, 52 countries in the MMRI do not have ubiquitous rollout of national or government-issued IDs, and the regulations do not allow documents other than these for accessing mobile money services. Such requirements will continue to exclude underserved populations (who are less likely to have official ID documents) from using financial services. This is also supported by evidence showing that some of the regulatory factors linked to higher usage among the financially underserved, particularly women and the poor, include less strict KYC requirements.[22] This was also recognised during the Covid-19 pandemic, when many regulators eased KYC requirements.

22 Exploring the Relationship Between Mobile Money Regulation and Usage, Bahia, Sanchez-Vidal and Taberner, 2020

# 3.4 Transaction Limits

When it comes to mobile money transactions, higher limits can increase consumer usage and incentivise individuals to use mobile money. Furthermore, by allowing different limits based on KYC and customer due-diligence (CDD) requirements, mobile money providers have commercial flexibility to target different customer segments, including poorer and underserved populations. At the same time, however, setting proportionate transaction limits is an important regulatory tool to mitigate the risks associated with money laundering and financing of terrorism (ML/FT), as well as monitoring transaction flows at the system level.

For this reason, the MMRI gathers data on transaction limits for entry-level accounts (i.e. accounts with minimum KYC requirements) and maximum limits (i.e. the highest limit available with enhanced KYC).[23] Based on a benchmarking exercise comparing transaction limits across countries, taking into account both purchasing power parity and average incomes, the Index assigns a maximum score for each indicator if a country sets proportionate transaction limits.[24]

Figure 9 shows the number of countries achieving the following for each indicator in the Transaction Limits dimension of the MMRI in 2018 and 2021:

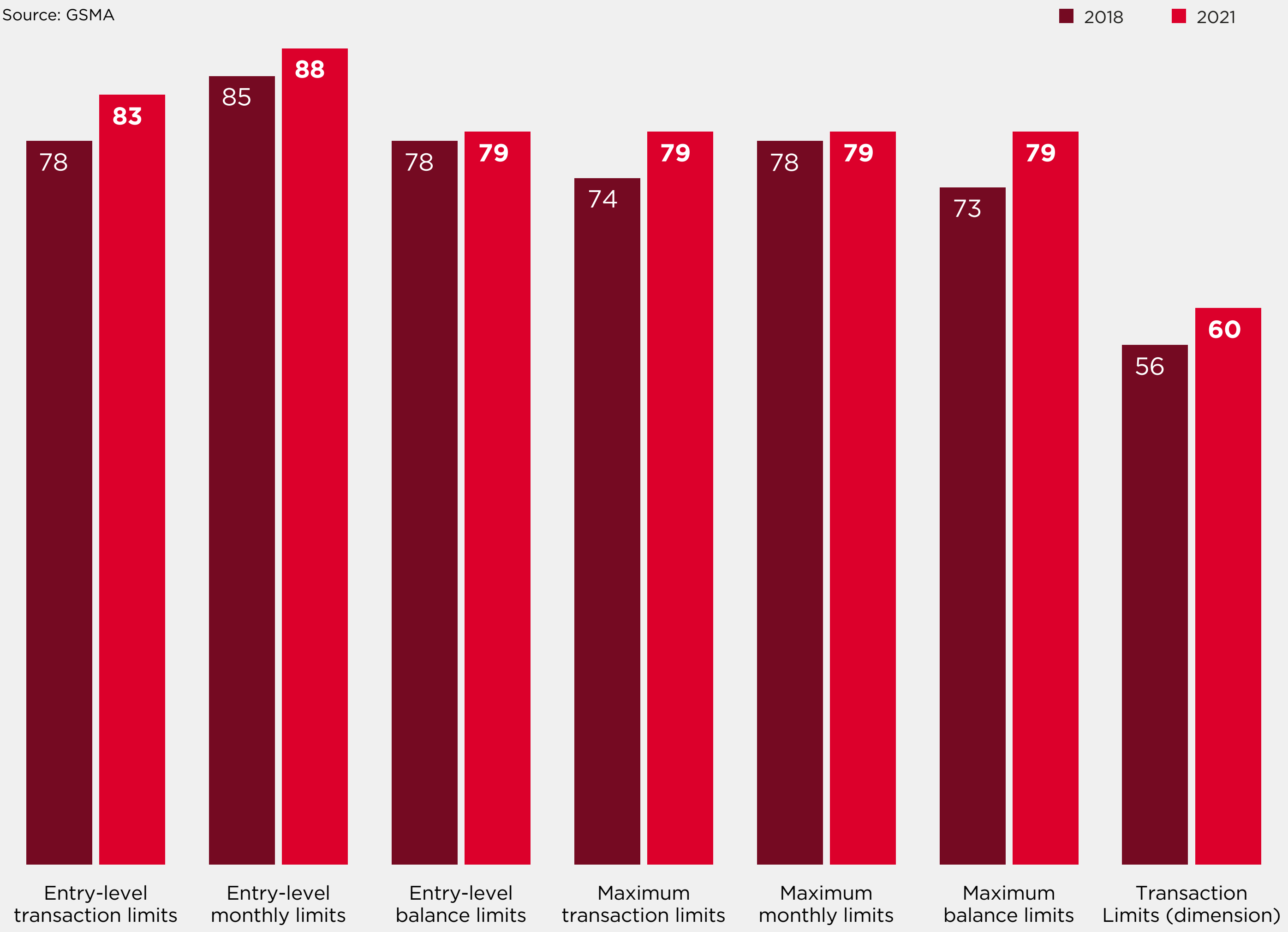
- **Entry-level Transaction Limits:** Limits are either greater than $500 (PPP) or above 10% of GDP per capita.
- **Entry-level Monthly Limits:** Limits are either greater than $1,500 (PPP) or above 20% of GDP per capita.
- **Entry-level Balance Limits:** Limits are either greater than $1,500 (PPP) or above 20% of GDP per capita.
- **Maximum Transaction Limits:** Limits are either greater than $1,500 (PPP) or above 20% of GDP per capita.
- **Maximum Monthly Limits:** Limits are either greater than $5,000 (PPP) or above 100% of GDP per capita.
- **Maximum Balance Limits:** Limits are either greater than $5,000 (PPP) or above 100% of GDP per capita.
- **Transaction Limits Dimension Score:** This refers to countries that have the maximum score for each indicator (i.e. they have achieved all the above six criteria).

23 Both types refer to consumer rather than enterprise accounts.
24 See MMRI methodology for further details on how the specific thresholds were derived.

**Figure 9**

## Number of countries with maximum score for each Transaction Limit indicator and the overall dimension

Source: GSMA




There have been improvements across all the indicators for transaction limits, partly as a response to Covid-19, as regulators sought to increase digital payments. South Africa, Jamaica and Botswana have achieved the biggest improvements on this indicator since 2018. In South Africa, the maximum balance on an e-wallet was ZAR5,000, or around $300, based on the Position Paper on Electronic Money, 2009. In 2021, MMPs were permitted to allow higher balances at ZAR40,000 on enhanced KYC accounts. In Jamaica, maximum balance limits in 2018 were JMD150,000 or around $1,100. The updated guidelines for electronic retail payments in 2019 increased them to JMD300,000 as a standard limit, or JMD1 million if the provider seeks and obtains approval from the Central Bank.

There remain 32 countries that have at least one set of limits that are assessed as low and restrictive, either on entry-level or maximum limits. The lowest scoring countries are Papua New Guinea, El Salvador, Haiti and Sri Lanka, all of which score less than 50 on this dimension. Furthermore, some countries have imposed more restrictive limits in recent years – for example, Nepal and Zimbabwe (see *Spotlight: Zimbabwe's regulatory framework becomes less enabling*).

# 3.5
# Agent Networks

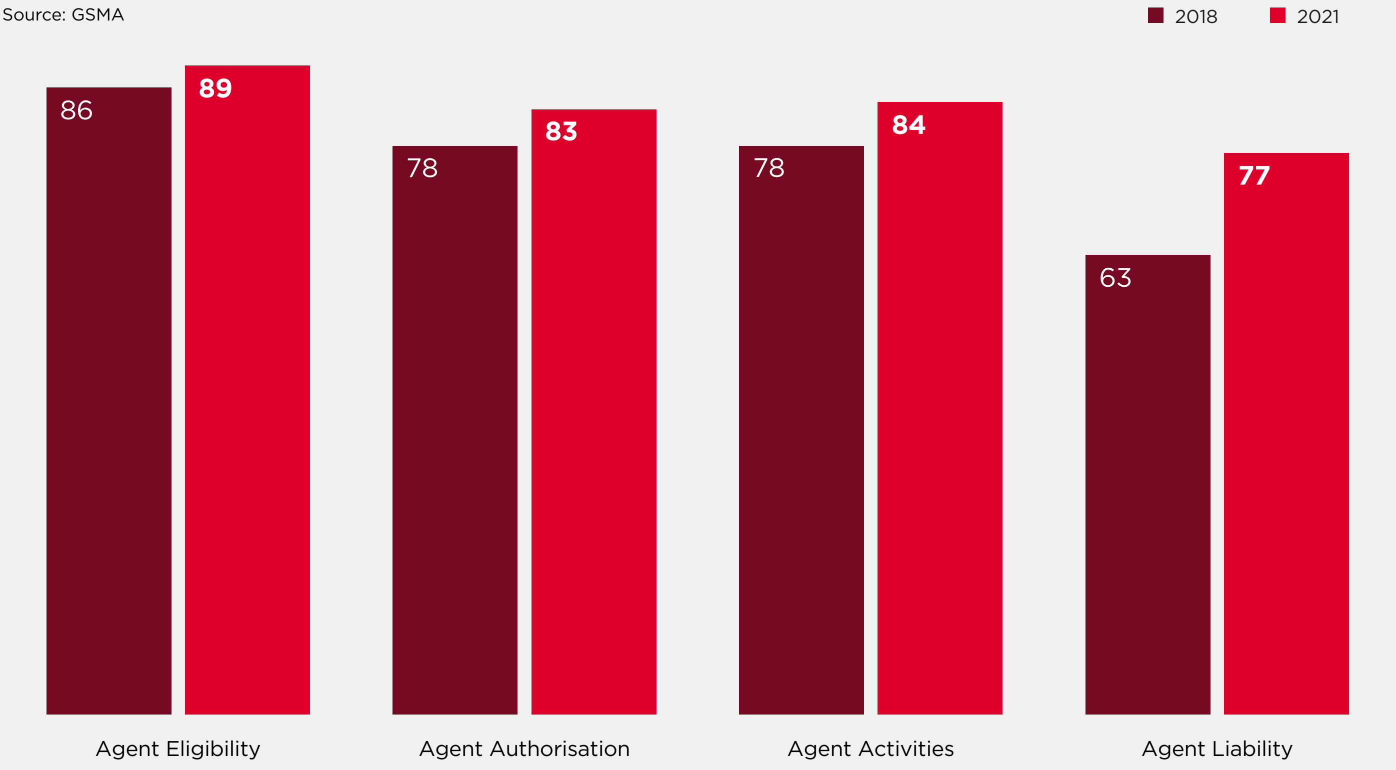
Figure 10 shows the number of countries achieving the following for each indicator in the Agent Networks dimension of the MMRI in 2018 and 2021:

- **Agent Eligibility:** the regulatory framework permits non-bank agents.
- **Agent Authorisation:** mobile money providers do not have to request and receive authorisation to appoint individual (or bulk) agents.
- **Agent Activities:** agents are allowed to perform the following activities and possibly others beyond these: cash in, cash out and customer enrolment.
- **Agent Liability:** mobile money regulations explicitly state that the mobile money provider cannot limit its liability with respect to its agents' actions.

**Figure 10**

## Number of countries with benchmark score for each Agent Network indicator

Source: GSMA




Mobile money agents are an essential asset for MMPs and have been key to the growth of the industry. The regulatory framework needs to strike an appropriate balance between adequately spread distribution networks, ensuring the eligibility of agents and maintaining high-quality agents through regular training and monitoring.

The analysis shows that the majority of countries in the MMRI perform well on most agent indicators. Almost all permit non-bank agents, allowing providers to develop distribution networks, especially in underserved rural areas. The only countries that do not are Mauritania, Vietnam and Zimbabwe (see *Spotlight: Zimbabwe's regulatory framework becomes less enabling*).

A total of 83 countries do not require authorisation for individual agents, applying a notification regime instead. This provides a similar level of protection but at a lower cost for the regulator, MMP and consumers. Some 84 countries allow agents to carry out customer registration. Expanding permitted agent activities to register customers and conduct CDD has been found to be an important factor in driving higher usage among underserved groups.[25] However, only 44 of these countries are not prescriptive with regard to permitted agent activities.

Another important element of an enabling regulatory framework is to require that agent liability lies with the MMP. There has been a significant increase in the number of countries that now ensure providers cannot limit their liability with respect to their agent actions; there are now only 15 countries that do not have this in place. If service providers cannot limit liability, they take full responsibility for the agents they contract and cannot be indemnified from their acts. Any liability accruing as a result of agents' actions is therefore borne by mobile money providers. The FATF has provided guidance supporting this approach to give central banks some comfort in allowing financial institutions to sub-contract their services. Agents (in the traditional legal sense) are viewed by FATF as simply an extension of the financial services provider. Consequently, the conduct of issues such as CDD by these agents is treated as if it were conducted by the principal financial institution.

25 Exploring the Relationship Between Mobile Money Regulation and Usage, Bahia, Sanchez-Vidal and Taberner, 2020

SPOTLIGHT

# Zimbabwe's regulatory framework becomes less enabling

Of all the countries assessed in the MMRI, Zimbabwe saw the biggest reduction in score, from 74 to 57 between 2018 and 2021. The causes were a significant reduction in transaction limits and the suspension of mobile money agents in 2020, as well as the introduction of technical standards for interoperability without stakeholder consultation.

Zimbabwe has faced a macro-economic crisis in recent years, following the re-introduction of the Zimbabwe dollar in 2019. Inflation grew to more than 500% in 2020 and was 99% in 2021. Reserve Bank of Zimbabwe (RBZ) data for August 2022 shows continuing annual inflation rates above 100%. GDP declined in 2019 (before Covid-19) and remained negative in 2020, though it grew by 6% in 2021 and is expected to grow by around 3% in 2022.[26]

In an effort to clamp down on illegal foreign currency trading, the RBZ banned mobile money agents in the last quarter of 2020, which affected all mobile money providers. Cash-in, cash-out and other payment services could subsequently only be done through banks. This reduced access to financial services for many consumers, especially in rural areas where there are no banks. Transaction limits were also reduced to ZWD5,000 (around $14), while weekly limits were set at ZWD35,000 (around $97). These are among the lowest set across all countries in the MMRI when considering both purchasing power and average incomes. This limits the flexibility that operators have to offer mobile money and discourages consumer demand, as customers cannot carry out the transactions they need.

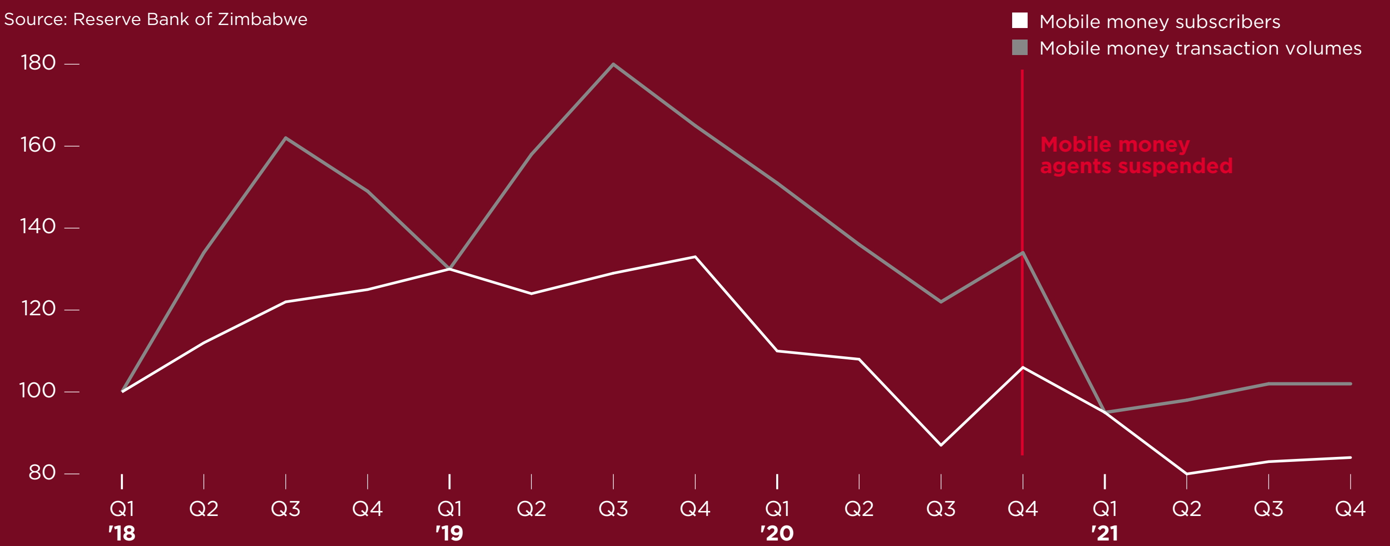
Figure 11 shows that following the implementation of these measures, there was a significant reduction in mobile money subscribers (below 2018 levels) as well as transaction volumes. Zimbabwe's MMRI score is now the second lowest (after Mauritania). In addition to the low scores for Agent Networks and Transaction Limits, Zimbabwe already had a low score for KYC and the Infrastructure and Investment environment. The latter is partly driven by a mobile money tax that is equivalent to 2% of the value of each payment. This is one of the highest taxes imposed on mobile money worldwide. Such discriminatory taxation distorts the market and disproportionately impacts the poorest consumers, who typically have more limited payment and transfer options.

**Figure 11**

## Growth in mobile money subscribers and transaction volumes

Indexed to Q1 2018

Source: Reserve Bank of Zimbabwe




26 Source: Calculations based on data sourced from the World Bank and IMF World Economic Outlook

# 3.6 Infrastructure and Investment

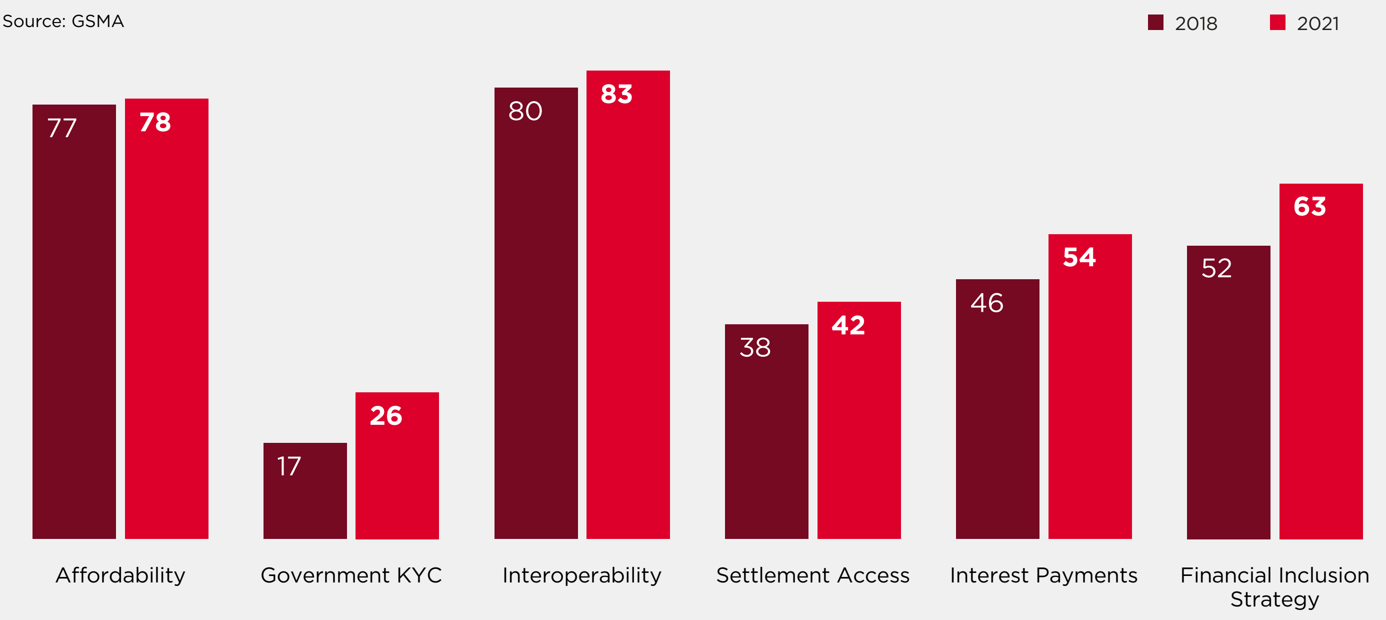
Figure 12 shows the number of countries achieving the following for each indicator in the Infrastructure and Investment dimension of the MMRI in 2018 and 2021:[27]

- **Affordability:** No discriminatory taxation (mobile-specific taxes) is imposed on mobile money services, and no pricing regulation is imposed on any type of mobile money transaction.
- **Government KYC:** Government provides automated KYC verification for mobile money providers.
- **Interoperability:** Regulation does not prescribe the technical standards for interoperability.
- **Settlement Access:** Mobile money providers have direct access to the country's retail payment settlement infrastructure.
- **Interest Payments:** The regulatory framework explicitly permits mobile money providers to earn interest on mobile money trust accounts.
- **Financial Inclusion Strategy:** The country has or has had in place a written national financial inclusion policy or strategy.

**Figure 12**

Number of countries with benchmark score for each Infrastructure and Investment indicator

Source: GSMA




27 See MMRI methodology for further details on how the specific thresholds were derived.

## 3.6.1 Affordability

While the majority of countries in the MMRI do not impose a mobile money tax or price regulation, the policies are being discussed in several markets. In 2021, regulations on pricing were in place in Iraq, Kenya, Malaysia, Mexico, Morocco, Nigeria, Romania, Tunisia and Zambia. Long-term pricing restrictions limit the flexibility providers have to offer mobile money products in a sustainable manner.

Meanwhile, six countries had a mobile money tax in 2021: Congo, Côte d'Ivoire, Kenya, Tanzania, Uganda and Zimbabwe. In 2022, taxes have also been introduced in Cameroon and Ghana. While governments typically target mobile money to raise revenues, taxes increase the cost of provision and act as an additional barrier to financially including the unbanked and low-income population. In markets that have imposed taxes, transaction volumes and values have often declined – for example, in Tanzania[28] and Uganda (see *Spotlight: Mobile money taxation in Uganda*).[29] To advance financial inclusion and the wider digitalisation of economies, it is critical that taxation does not make services unaffordable or disincentivise efficient investment and competition in the mobile money industry.

## 3.6.2 Government KYC

Support from the government for the purpose of identity verification is highly desirable in the mobile money market as it eases the KYC process and improves security. This is an area where some countries have made significant progress. In 2021, 26 countries provided automated KYC verification for MMPs, and a further eight countries provided KYC verification that was not automated. However, this remains an area where the majority of countries in the MMRI could improve. It is important in driving efficiency in mobile money consumer onboarding processes and subsequently driving mobile money adoption. Automated government ID systems are also crucial in mitigating identity-related fraud incidences.

## 3.6.3 Interoperability

In terms of interoperability, a common use case is for customers to be able to transfer money between different MMPs, as well as between mobile money and bank accounts. In most countries, interoperability is market-led as MMPs see an opportunity to grow their business and make products more relevant to consumers. In this context, the regulator's main responsibility is to ensure MMPs apply efficient and safe payment systems and allow them to explore different commercial and technical models so they can determine which is best suited to their market. Prescribing the technical standards for interoperability can therefore hinder development by not allowing a flexible and market-led approach (although regulators can and should be consulted as solutions are developed). It is therefore encouraging that the vast majority of countries in the MMRI do not do so. The nine countries that do prescribe technical standards are Egypt, Haiti, Indonesia, Iraq, Jordan, Malaysia, Morocco, Nigeria and Zimbabwe.

## 3.6.4 Settlement Access

Since 2018, there has been a small increase in the number of countries that permit non-banks to have direct access to the retail payment settlement infrastructure. However, in 48 countries where non-banks are allowed to issue e-money, they do not have access. This is an area that is important to improve as mobile money continues to become systemically significant and more integrated into the financial system. To drive greater efficiency, central banks should consider allowing mobile money providers direct settlement by opening a settlement account at the central bank, allowing mobile money providers to settle through a settlement agent with access to a settlement account or integration into the national switching infrastructure, such as national switches and clearing houses.

28 Tanzania Mobile Money Levy Impact Analysis, GSMA, 2022

29 Further discussion and case studies of mobile money taxation can be found in The causes and consequences of mobile money taxation: An examination of mobile money transaction taxes in sub-Saharan Africa, GSMA, 2020

SPOTLIGHT

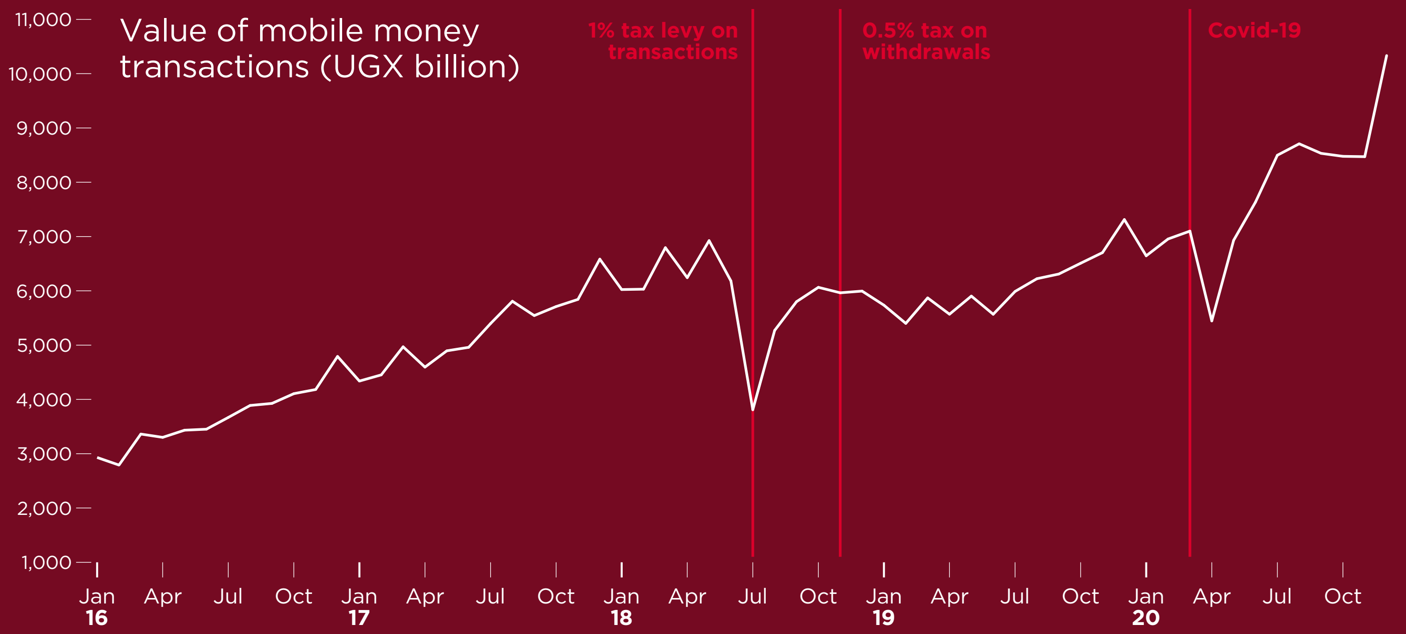
# Mobile money taxation in Uganda

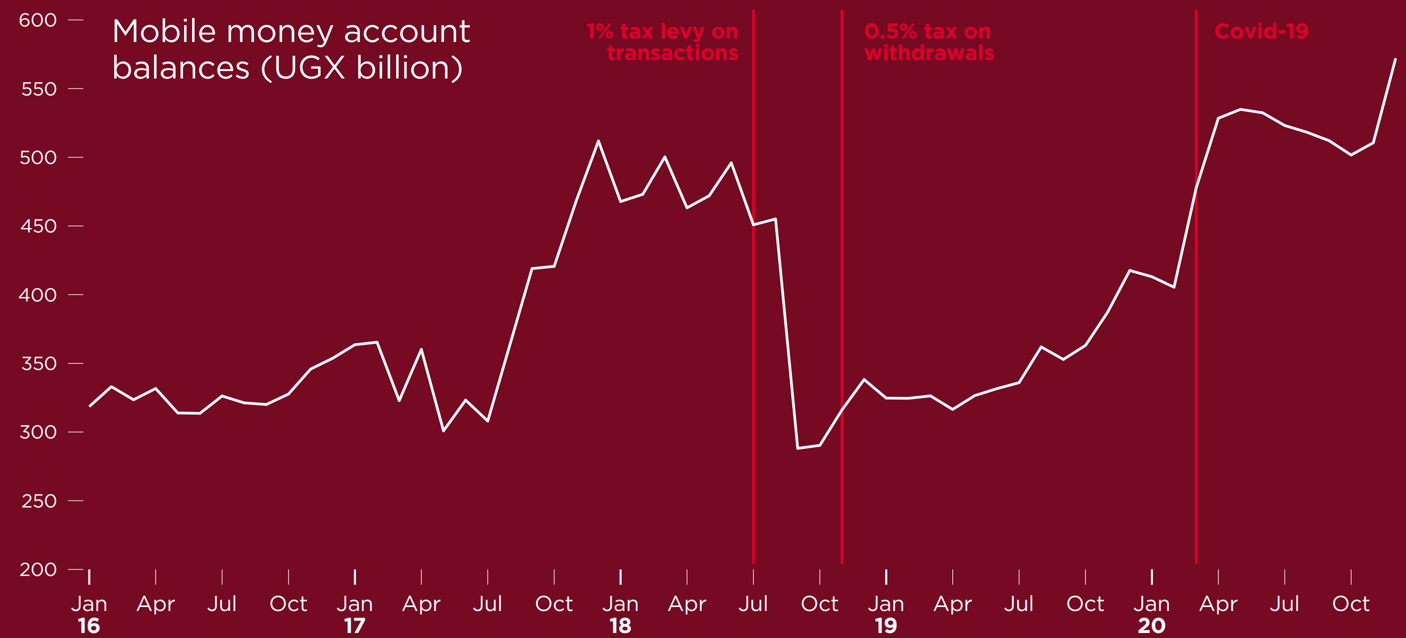
In May 2018, the government of Uganda proposed legislation that placed a 1% tax levy on the value of all mobile money transactions. Introduced in July, the tax law was subsequently amended in November 2018 to apply a 0.5% tax on the value of withdrawals only. Figure 13 shows that the 1% tax led to a significant drop in transaction value and account balances. The subsequent change stabilised transaction values, but they did not return to levels seen before the tax reform until 2020, when Covid-19 drove greater use of mobile money payments.

**Figure 13**

Mobile money transactions and account balances

Source: Bank of Uganda



## 3.6.5 Interest payments

Whether to permit payment and utilisation of interest on mobile money is a topic being debated in many countries. Most regulators prohibit non-banks, such as mobile money services, from paying interest in the same way as bank savings accounts, as they consider paying interest an activity that requires a banking licence. As a result, regulators typically allow MMPs to offer basic value storage functions linked to the mobile money accounts they offer, but ban interest payments to customers.

However, there are a number of benefits of MMPs receiving and utilising the interest payments on mobile money trust accounts. For example, they can be used to defray customer transaction costs. Alternatively, if they are distributed to customers, they can allow low-income users an opportunity to receive money based on the income they have generated. They can also encourage customers to retain funds in a digital form. The latter could promote agent liquidity by encouraging agents to keep money in their float. For regulators, providing an added incentive for consumers to use digital financial services encourages the flow of funds into the formal and traceable economy.[30]

Since 2018, an increasing number of countries have explicitly permitted mobile money providers to earn interest on mobile money trust accounts. By 2021, 39 countries did so with restrictions (e.g. requiring they are used for customer benefit) and 15 countries did so with no restrictions on how the interest is utilised or distributed.

## 3.6.6 Financial inclusion strategy

Through national financial inclusion strategies (NFISs), governments have the capacity to implement transformative reforms to ensure the wide availability of financial services. They are typically used to initiate policy reform to improve quality and boost access to financial services. There has been a significant increase in the number of countries that have formulated a financial inclusion strategy, from 52 in 2018 to 63 in 2021. Of the latter, 51 countries have a strategy that includes a specific mobile element and also have targets to address the gender gap.

Creating and implementing of a successful NFIS is far from straightforward, as highlighted in the Spotlight: Payment service banks in Nigeria. It is a resource-intensive undertaking that requires detailed planning to succeed. It is therefore important to have in place the key enablers of a successful NFIS for mobile money. This includes high-level project sponsorship, project planning, issue framing for excluded groups, stakeholder mapping, public participation and monitoring and evaluation.[31]

30 Regulatory Approaches to the Interest Earned on E-Money Float Accounts, CGAP, 2021

31 For further details, see Mobile money: Key success factors of a National Financial Inclusion Strategy, GSMA, 2019

# 3.7 New indicators included in 2021 MMRI

For the 2021 MMRI, two new indicators were included in the Infrastructure and Investment environment dimension: Data Sovereignty and Gender Equality. They were added for 44 countries.[32]

## 3.7.1 Data Sovereignty

Consumer concerns around data privacy and security have an impact on trust. MMPs now hold vast amounts of data, including ID, transaction history and geographical location, which is subject to regulatory considerations. As the value of data grows, so does the need to safeguard the use of data to protect consumers. Data protection also benefits MMPs as it maintains market integrity and confidence in mobile money services.

The key areas of data protection affecting mobile money services include:

- data processing – the legal basis for processing personal data
- data security – the physical and logical security of the data
- data localisation – the limitations of cross-border data transfer
- data sharing – the sharing of data between industry players and how this affects the need for privacy.

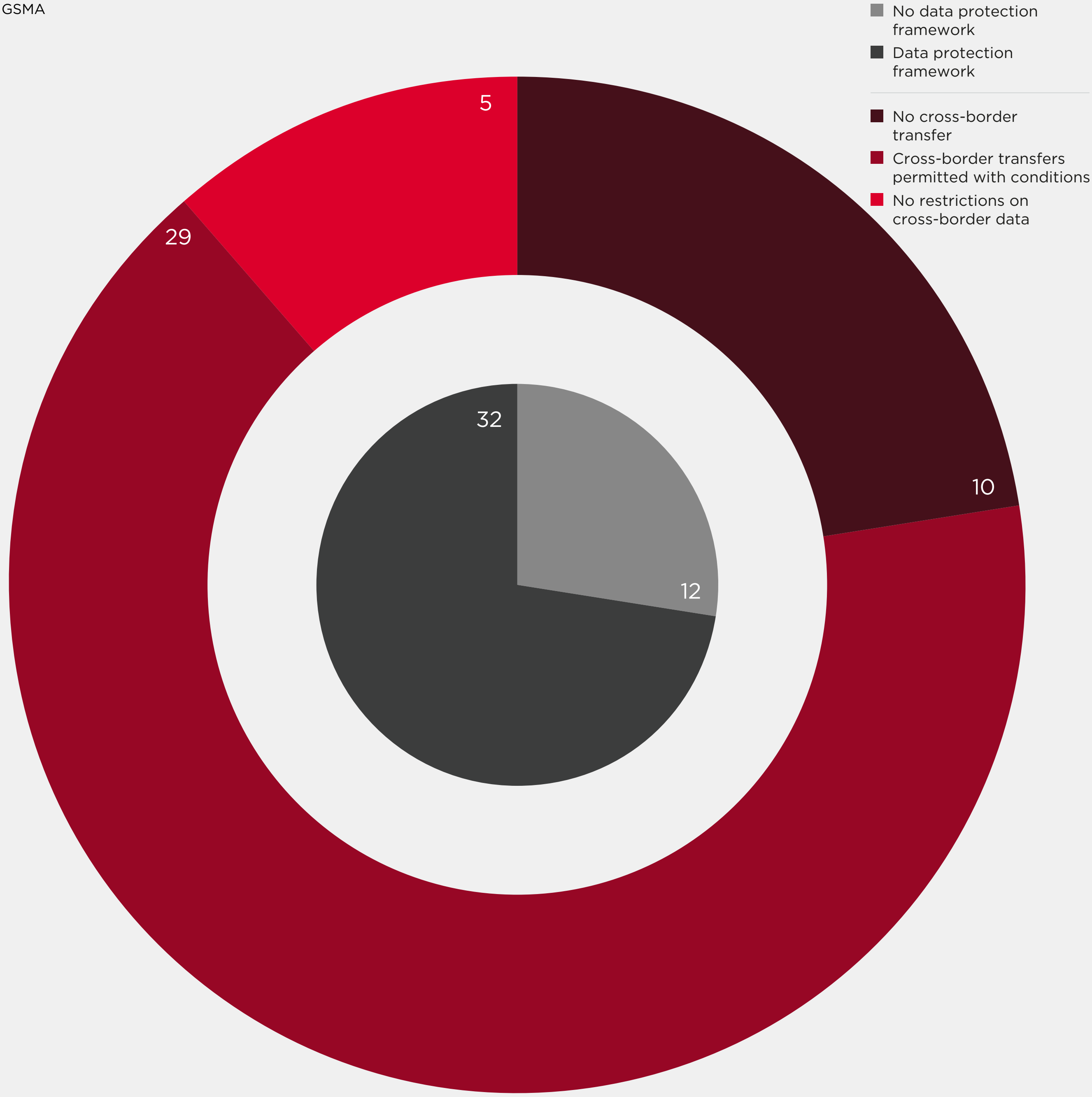
In many countries, policymakers and regulators are developing or revising legal and regulatory frameworks for data protection, with some introducing limitations on the cross-border movement of personal data (i.e. data localisation). Data localisation requires customers' personal data collected within a particular jurisdiction to be stored or processed within its boundaries. The rationale is to safeguard citizens' privacy and security.

32 For further details, see Mobile Money Regulation Index Methodology, GSMA Intelligence, 2022

Figure 14

## Number of countries with data protection framework and number of countries split by cross-border regulations

Source: GSMA




However, data localisation can also be detrimental to the provision of mobile money services because MMPs need to develop data storage facilities that require increased investment in infrastructure, which in turn can create a barrier to innovation, force smaller players out of markets and lead to higher costs for consumers. A centralised security approach can be more cost-effective as it uses a wider range of infrastructure and skills. This may also foster the capacity needed to improve security and safeguard the privacy of personal data.

Based on the 44 countries assessed in 2021, the majority have data protection legislation in place that governs the use, processing and archiving of personal data, with 12 countries having no applicable legislation (see Figure 14). Ten countries either completely restrict cross-border transfer of data, or otherwise do not have clear provisions on cross-border data flows. Five countries do not impose any form of restriction on cross-border transfer of data (Ghana, Lesotho, Mongolia, Nepal and Sri Lanka), while the other 29 countries permit cross-border transfer with conditions – these can include keeping a copy of all personal data in the home country, transferring data abroad for centralised analysis or subject to seeking prior permission from regulatory authorities and consent from consumers.

## 3.7.2 Gender Equality

Over the last decade, there have been significant gains in mobile-led financial inclusion for women. The World Bank Findex survey shows that the proportion of women with a financial account in developing countries increased from 37% to 68% between 2011 and 2021. The gender gap in account access had been persistent at around 9 percentage points (pp) between 2011 and 2017, but in 2021 declined to 6 pp. However, there are significant differences by region, with Sub-Saharan Africa and MENA reporting gender gaps twice as large as the developing economy average, and three times larger than the global average.[33]

Mobile money provides an opportunity to close the gender gap in financial services. In Sub-Saharan Africa, the gender gap in mobile money account access is 6 pp, compared to 12 pp for having an account at a financial institution, while in MENA it is 4 pp (compared to 13 pp for all accounts). While the gender gap for mobile money is lower in these regions than other types of financial account, it has not declined in either region since 2017 (in percentage point terms).[34] Women have lower access to – and use of – financial services due to a variety of reasons, including lack of awareness of mobile money, not owning a mobile phone, and low literacy, digital and financial skills.

Ensuring that women can access and use mobile money on par with men will bring benefits to individual women and their households, as well as to the mobile industry and the economy. It would also contribute to the achievement of the Sustainable Development Goals, in particular SDG 5 (Achieve gender equality and empower all women and girls). It is therefore important for governments and policymakers to take concerted actions to close the mobile money gender gap, particularly as there is evidence that a more enabling regulatory framework has a stronger association with greater mobile money usage among women than men.[35]

In 2021, the MMRI included a new indicator assessing whether a country had a policy or regulatory initiative to drive financial inclusion among women. Of the 44 countries assessed, only six countries did not have such a policy: Benin, Cameroon, Equatorial Guinea, Malaysia, Philippines and Singapore. The majority of countries assessed recognised the importance of accelerating financial inclusion for women and had a policy or regulatory initiative to start the process of achieving that. However, in a similar way to the development of NFIS, it is important to have in place the right framework and enablers so policies can achieve their desired outcomes.

33 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

34 Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, and Saniya Ansar. 2022. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1897-4.

35 Exploring the Relationship Between Mobile Money Regulation and Usage, Bahia, Sanchez-Vidal and Taberner, 2020

# 4
# Conclusions

**Since 2018, the number of registered mobile money accounts has increased from 940 million to 1.35 billion, while the transaction amount has doubled to $1 trillion.[36]**

Over the same time, there has been a significant improvement in the effectiveness of enabling regulatory frameworks, with 48 countries improving their MMRI score and only one country seeing a significant reduction.

The vast majority of countries now have effective and enabling regulations in place in the following areas:

**Level-playing field:** 78 countries now permit non-banks to issue e-money and offer mobile money services. This is important as the vast majority of successful mobile money markets have been led by mobile operators. Most of the remaining countries either allow non-banks to offer mobile money in partnership with a prudentially regulated institution or follow an approach based on payment banks. Almost all countries have authorisation instruments in place, while the majority have capital requirements that are assessed as proportionate.

**Safeguarding of funds:** Every country that does not follow a bank-based model requires e-money issuers to set aside funds equal to 100% of outstanding e-money liabilities in licensed banks or other safe liquid investments, and prohibits the intermediation of customer funds.

**Consumer protection:** The vast majority of countries in the MMRI also have comprehensive consumer protection rules that provide for disclosure requirements, dispute resolution and recourse processes, and protection of customer data.

**Agent networks:** Almost all countries in the MMRI (89 in total) permit non-bank agents, which allows providers to develop distribution networks, especially in underserved rural areas. 83 countries do not require authorisation for individual agents, applying a notification regime instead, while 84 countries allow agents to carry out customer registration. Expanding permitted agent activities to register customers and conduct CDD has been found to be an important factor driving higher usage among underserved groups.

36 State of the Industry Report on Mobile Money 2022, GSMA, 2022

Most countries have enabling regulation, but there remain a significant number that can improve in the following areas:

**International remittances:** 21 countries do not permit the sending or receiving of international money transfers using mobile money. This is an increasingly valuable service to mobile money users; permitting IMT could accelerate the digitisation of remittances.

**KYC requirements:** 16 countries in the MMRI allow operators flexibility in setting the minimum KYC requirements, and 48 state that the customer only needs to present an ID and mobile number. However, the remaining 28 countries have additional verification checks and requirements that can make it challenging for underserved populations to access a mobile money account.

**Transaction limits:** 32 countries have at least one set of limits that are assessed as low and restrictive, either on entry-level or maximum limits. Having proportionate transaction limits is important to increase consumer usage and incentivise individuals to use mobile money.

**Affordability:** 14 countries impose either pricing regulation on mobile money services or a mobile money tax. Taxes increase the cost of provision and act as an additional barrier to financially including the unbanked and low-income population.

**Interest payments:** An increasing number of countries have explicitly permitted mobile money providers to earn and utilise interest on mobile money trust accounts. By 2021, 39 countries did so with restrictions, and 15 countries did so with no restrictions. However, in 38 countries, the regulations are either unclear or do not permit interest to be earned.

**Financial inclusion strategy:** There has been a significant increase in the number of countries that have formulated a financial inclusion strategy, from 52 in 2018 to 63 in 2021. 51 countries have a strategy that includes a specific mobile element and also have targets to address the gender gap. However, there remain 29 countries without an NFIS.

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The majority of countries can enhance their regulatory frameworks in the following areas:

**KYC identifications and automated KYC:** 52 countries in the MMRI do not have ubiquitous rollout of national or government-issued IDs, and the regulations do not allow documents beyond these to access mobile money services. Such requirements will continue to exclude underserved populations (who are less likely to have official ID documents) from using financial services. In addition, only 26 countries provide automated KYC verification for MMPs.

**Deposit insurance:** Only 15 countries provide deposit insurance protection for each mobile money account. This provides for customer funds to be covered if there are insufficient assets to repay customers in the event of service provider insolvency.

**Settlement access:** In 48 countries where non-banks are allowed to issue e-money, they do not have access to the retail payment settlement infrastructure. This is an important area of importance as the need grows for mobile money systems to be integrated with other financial systems.

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With the rapid growth and evolution of mobile money, regulators have had to adapt and evolve with new technologies. Many have done so successfully, enabling the expansion of mobile and digital financial services, while some have not kept pace to the same extent. The GSMA will continue to monitor the regulatory environment across countries to assist MMPs, regulators and policymakers in the development of enabling regulation. This will require the MMRI framework to be re-assessed and updated so that it reflects new considerations that may not have been important before and places less weight on elements that were historically important but are less relevant now. This is an area that the GSMA will continue to work on.

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