Mobile Money and Regulatory Architecture

22nd Monetary Policy Workshop
Digitalisation of Money and Finance

Chengdu, 23-24 November 2023

Prof. Dr. Martina Metzger

Institute for International Political Economy (IPE)
Berlin School of Economics and Law (BSEL)

Paper(s)

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

Metzger, M., Were, M., Wu, J. P. (2022) Financial Inclusion, Mobile Money, and Regulatory Architecture", Institute for Political Economy Berlin, Working Paper 202/2022 (December).

- The role of mobile money accounts for financial inclusion
- Actual risks to consumers and the financial system arising from the use of mobile money accounts and requirement of regulation

Empirical paper to come:

- Role of regulation to deepen financial inclusion via mobile money use

2019 household survey data collected in 2018 by the Central Bank Kenya (CBK), the Kenya National Bureau of Statistics (KNBS), and Financial Sector Deepening (FSD) Kenya.

Collected since 2006. Not a consistent set of households, the surveys measure and track developments in financial inclusion in Kenya.

Outline

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

1. Stylised Facts on Financial Inclusion and Mobile Money

2. Regulatory Approaches for Mobile Money

3. Preliminary Conclusions

Why financial inclusion?

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

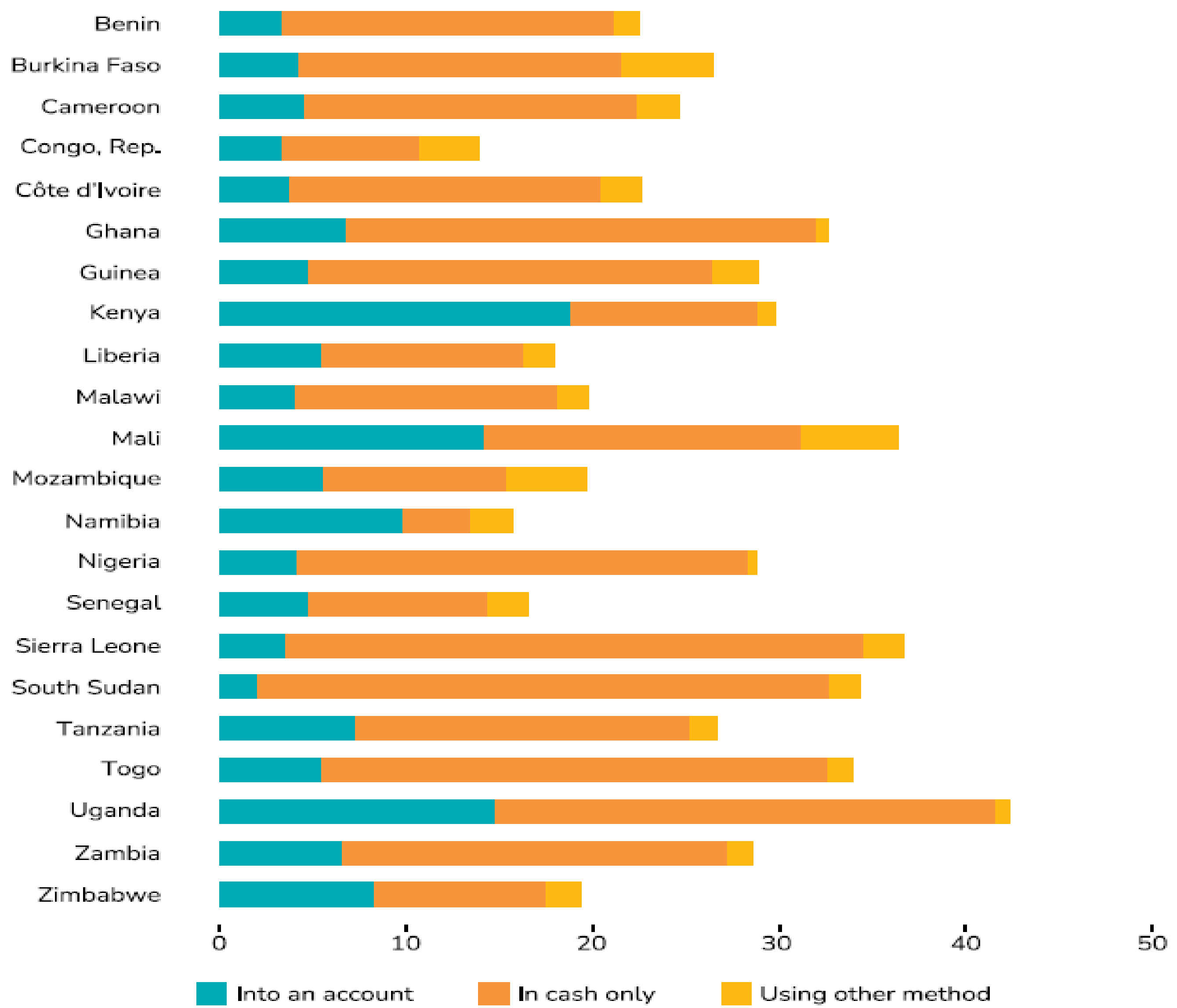
- Financial inclusion
  - **Narrow definition**: An account in a formal commercial bank, savings bank or credit cooperative
  - Broader definition: access to and use of a variety of financial services; e.g. payments, savings, credit or insurance
  - Globally 1.7 bio. adults lack an account

- To receive payments – by family members; by employers; by the government
- To make payments – to family members; for school fees; for medical treatment; bills, e.g. electricity, mobile phone
- To receive interest payments in a environment of inflation
- Cash is unsecure

FIGURE 2.1.8

In Sub-Saharan African economies, payments for agricultural products were usually in cash, with notable exceptions

Adults receiving payments for agricultural products in the past year (%), 2021



Source: Global Findex Database 2021.

Source: Demirgüc-Kunt et al. (2022), p.62

Summary – Financial inclusion and mobile money

- There are widespread supply and demand factors responsible for financial exclusion from banking institutes
- These factors (in particularly living in remote areas, low or irregular incomes, lack of documentation) will not change in the middle term
- Mobile money accounts can be a viable alternative, crowding-in formerly unbanked households
- Receiving payments via a mobile money account in particularly from the government can be a trigger to increase narrow financial inclusion (aka account ownership) and facilitate broader financial inclusion
- Digitalisation of payments (and other financial services) via mobile money create data and show a financial / income / credit history
- **However: while formal banks and credit institutes are comprehensively regulated, this is not the case with mobile money providers, yet. International level playing field lacking.**

Outline

1. Stylised Facts on Financial Inclusion and Mobile Money

2. Regulatory Approaches for Mobile Money

3. Preliminary Conclusions

Why regulation?

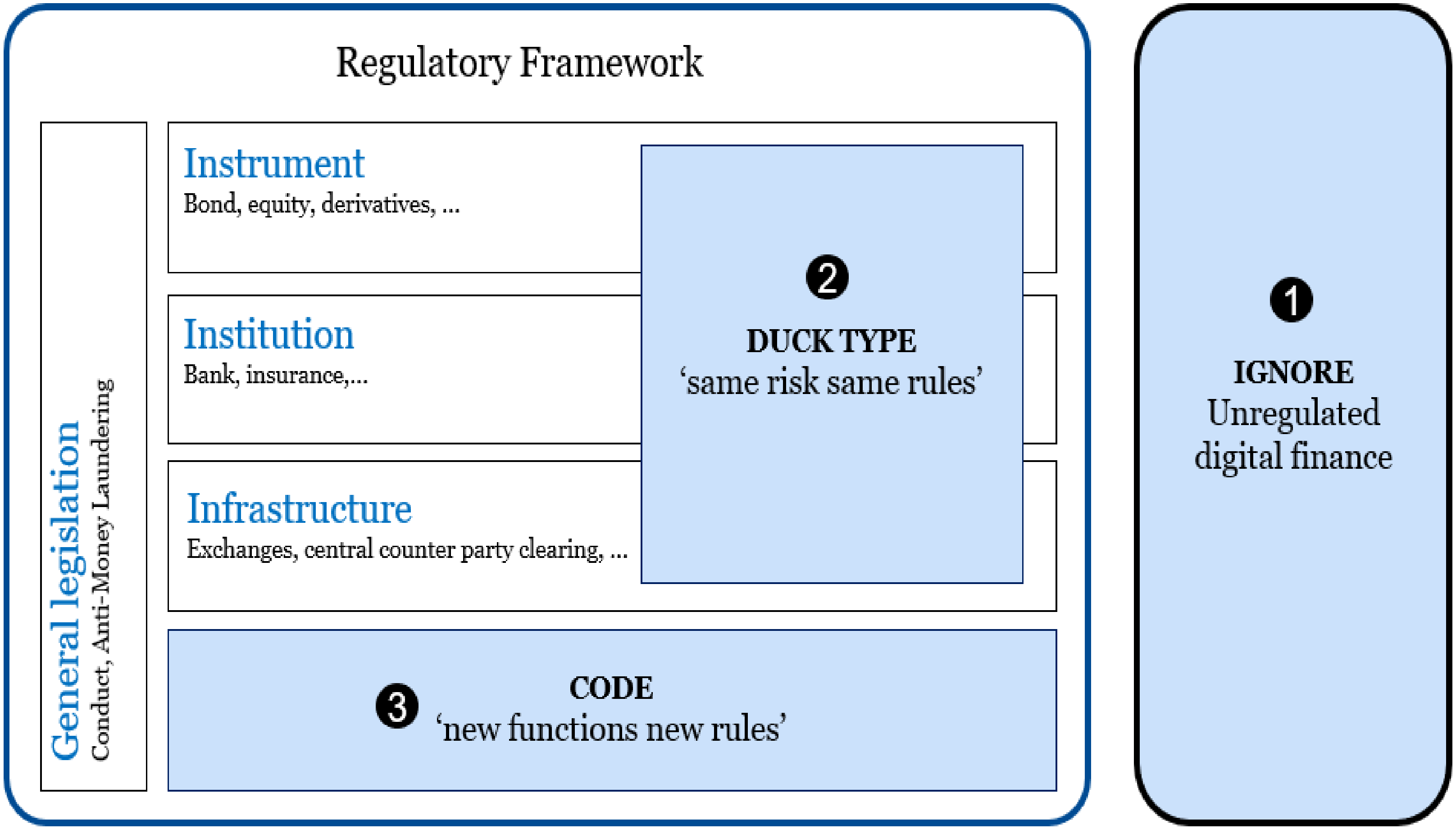
Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

- In literature role of regulation for financial inclusion via mobile money or digital financial services in developing countries: blind spot
  - Lack of conceptual and theoretical papers
  - Lack of impact studies or cross-country studies

- Fintech market actors comprise:
  - Non-banking sector entities, which offer financial services
  - Regulatory arbitrage

- Possible regulatory issues
  - Authorisation: who is being allowed to provide mobile money services
  - Consumer-protection issues, e.g. deposit insurance, interest payments
  - Financial-integrity issues: KYC and money laundering, fraud
  - Financial-stability issues: counter-party risk, creation of loans, currency mismatches
  - Agent networks and infrastructure (mobile money taxation, ID verification infrastructure, interoperability)

Regulatory framework for digital financial services



Source: Amstad, M (2019),: Regulating Fintech: Objectives, Principles, and Practices, ADBI WP Series no, 1016 (October), p. 7.

Duck-type regulation

- Similar instruments – similar risks:
  - Risks to financial stability (e.g. maturity and currency mismatches; counterparty risks; credit risks; illiquidity and insolvency of mobile money providers; spillover)
  - Risks to financial integrity (e.g. fraud; money laundering; other criminal behaviour of mobile money providers or agents)
  - **Risks to consumer protection** (e.g. mismanagement, bankruptcy; lack of transparency of fees, lack of transparency of contract termination; lack of transparency on terms of loan contracts; predatory lending; interrupted access to accounts; violation of privacy of data)

- Similar institutions – similar risks:
  - Deposit and loan facilities (e.g. loss of customer details; deposit insurance)

- Similar infrastructure - similar risks:
  - Counterparty risks

Lack of consumer protection

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

- Right to contact customer care and the right to file a complaint:
  - However, Kaffenberger et al. (2018, p. 25) find for Kenya and Tanzania: "In both countries, about 10 percent of digital borrowers reported needing to access customer care and being unable to figure out how"

- Having to roll-over credits weekly or even daily:
  - "Many borrowers, therefore, remain stuck with low-value, short-term, expensive credit, and they could potentially benefit from loans with terms better designed for productive uses" (Kaffenberger et al. 2018, p. 37).

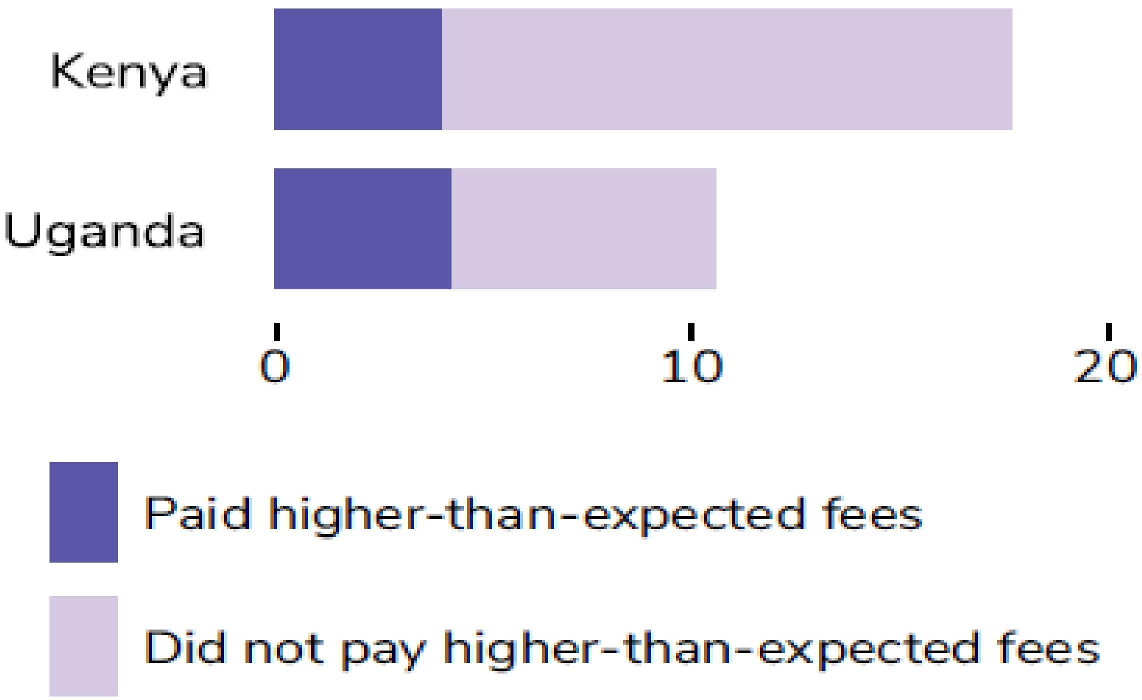
Lack of transparency

- Payments:
- Unexpected fees for additional, undesired services:
  - Mobile money providers, including Safaricom from Kenya, design their user interface in a way that makes users prone to subscribe to additional services: "It is very easy to sign up to these services by mistake, but extremely complicated to cancel the expensive subscriptions again" (Fritz and Hilbig 2019, p. 50)
- Unexpected fees for desired services

FIGURE 3.3.3

In certain economies, the share of wage recipients paying unexpected fees to receive their money into an account was as high as 40 percent

Adults receiving a wage payment into a mobile money account (%), 2021



Source: Global Findex Database 2021.

Source:
Demirgüc-Kunt et al. (2022), p. 155

Lack of transparency – cont'd

- Credit supply:
- Actual interest and how it is computed
- Unexpected withdrawal of lenders
- Unclear disclosure of costs, e.g. as high overdraft fees, penalty fees
- Results: underestimation of costs, late payments, high default rates
  - Kenya and Tanzania: late repayments of digital loans by 50% of debtors; two-digit default rates

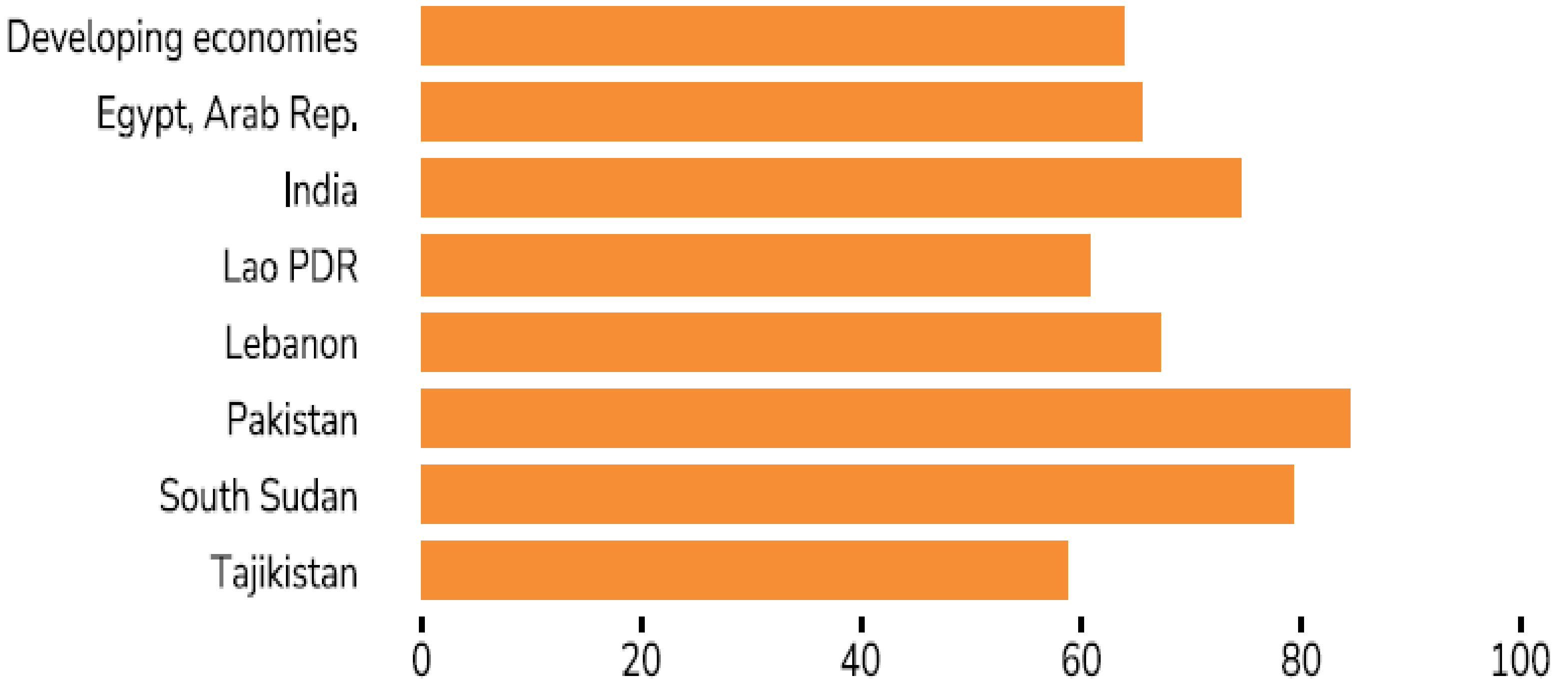
Consumer protection

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

FIGURE 1.2.10

Unbanked adults lack the confidence to manage an account by themselves

Adults with no account who said they could not use a financial institution account without help (%), 2021



Source: Global Findex Database 2021.

Source:
Demirgüc-Kunt et al. (2022), p. 44

Code-type regulation

- Regulatory issues related to technology:

  - Hysteresis effects due to BigData

  - Displacement effects and BigTech

  - Financial exclusion by mandatory digitalisation

Outline

1. Stylised Facts on Financial Inclusion and Mobile Money

2. Regulatory Approaches for Mobile Money

3. Preliminary Conclusions

Preliminary Conclusions from a Regulator's Perspective

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

- Several regulators involved:
  - Telecommunication, financial sector, maybe also competition; depending on purpose of mobile money transfers: regulators responsible for capital controls and forex; health sector; …
  - Regulatory approach: combination of duck-type and code-type

- Do not allow something you do not understand
- Observe comprehensively the experience of other countries
- Do undertake risk mapping, develop emergency and contingency plans
- Monitor downside risks, e.g. **digital exclusion**, data protection issues, competitive pressure on traditional banking sector
- Develop regulatory framework with involvement of non-financial regulators
- Use regulatory sandboxes

Preliminary Conclusions from a Regulator’s Perspective – C‘td

Hochschule für Wirtschaft und Recht Berlin
Berlin School of Economics and Law

- Digital solutions: no panacea!
- They do not substitute provision of basic needs and public infrastructure, including health, education, clean water, housing
- Literature is ambiguous whether digital financial services create new income (except for Fintechs companies themselves)
- Evaluation still has to show under which conditions we can expect a permanent improvement of living conditions as well as their contribution to achievements of SDGs