Mobile Money and Financial Inclusion in Sub-Saharan Countries

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Purpose of research

- This research aims to extend the existing literature on financial inclusion by using a nationally representative micro data to assess the use of mobile money services in Africa.
- The study goes beyond analysing descriptive statistics to identifying the bottlenecks in financial sector and their effect on the poor.

Financial inclusion and virtual banking platforms

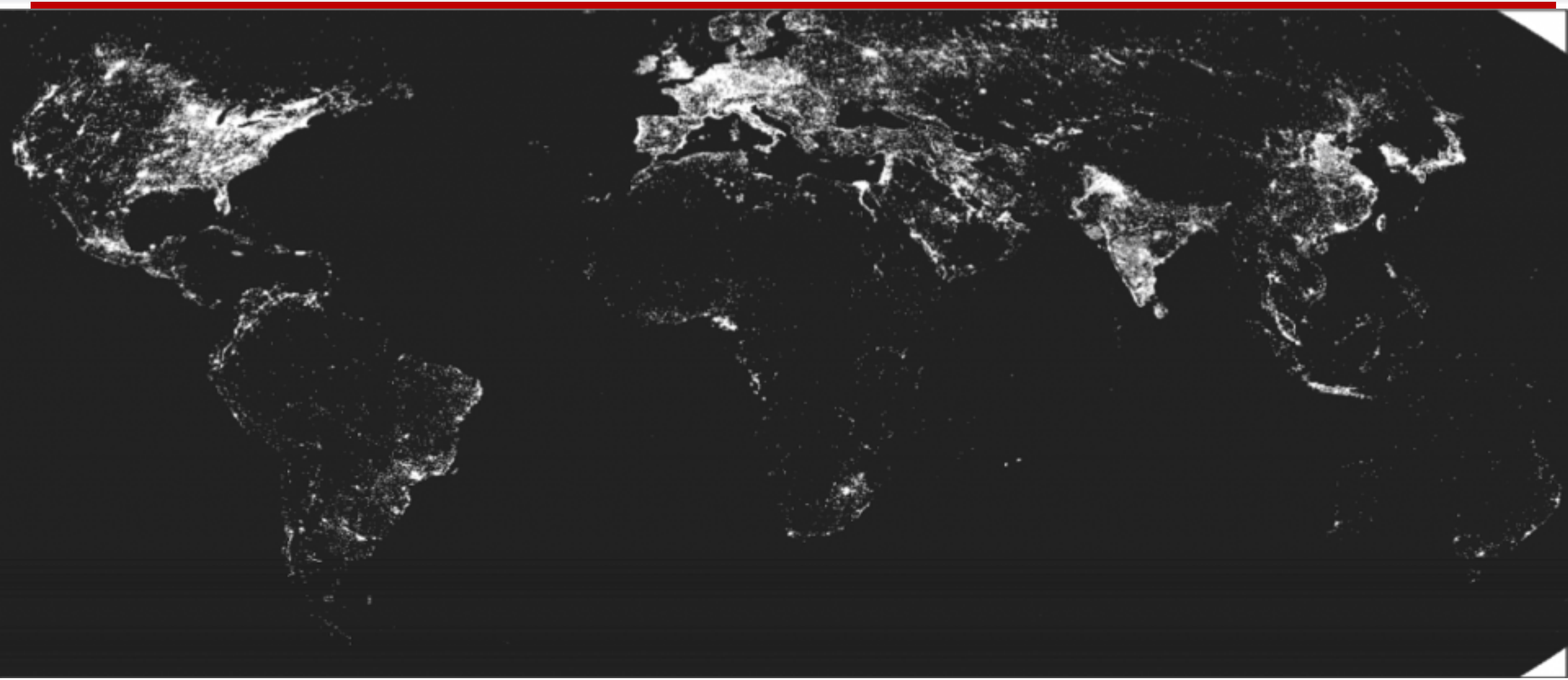
- Financial matters for the well being of people.
- It helps individuals smooth their consumption, insure against risk and broaden investment opportunities.
- Access to finance is particularly important for the poor, more developed financial system can reduce poverty and lessen the gap between the poor and the rich.
- Financial imperfections such as information asymmetry and transactional costs, may be specifically binding on the poor who lack collateral and credit histories.

- Credit constraint reduce the efficiency of capital allocation and intensify income inequality by impeding the flow of capital to poor individuals.
- Thus any relaxation of these credit constraints will disproportionately benefit the poor.
- From this perspective, financial development helps the poor by improving the efficiency of capital allocation, which accelerate aggregate growth and by relaxing credit constraint that more extensively restrain the poor and thereby reduce income inequalities.

Financial exclusion a reality

- 7 out of 10 individuals in Africa do not have a bank account (2014).

- 6 out 10 individuals in Africa do not have a bank account (2017 RIA After Access Survey)
- One such platforms that provide residents of developing countries with an opportunity to access some banking services is the mobile money platform
- A mobile money transfer which enable users to cash in using a mobile account (referred to as wallet) which is linked to a unique mobile phone number of a subscriber



Methodology

- ❖ Quantitative approach-micro level data
- ❖ Nationally representative survey, 2017 RIA After Access
- ❖ Country focus- **Ghana, Kenya, Mozambique, Nigeria, Rwanda, South Africa and Tanzania**
- ❖ Utility function approach model
- ❖ **Choice model: subscribers choose to either use mobile money or not (0-1 variable)**

  - Model a binary logit model, consumers decision follow a logistic approach curve

-Data was disaggregated by age, gender and location

- ❖ **Restrict the sample to mobile phone users**

  -3009 do not use mobile money and 2938 use mobile money.

Table 1: Financial account ownership in surveyed countries

Country	Bank account	Mobile money	Bank+mobile money account
Ghana	28.72 %	53.66%	58.43%
Kenya	34.00%	83.30%	84.60%
Mozambique	13.04%	12.78%	17.74%
Nigeria	39.71%	2.99%	32.92%
Rwanda	30.20%	25.60%	38.34%
South Africa	60.07%	7.69%	58.43%
Tanzania	13.63%	44.84%	45.82%

Source: Research ICT Africa After Access Survey, 2017

Account ownership

Table 2: Frequency of remittances

Country	Daily	Weekly	Monthly	Rarely
Ghana	4.09 %	24.99%	32.80%	38.12%
Kenya	6.88%	40.83%	28.40%	23.89%
Mozambique	3.60%	25.12%	40.86%	30.42%
Nigeria	1.03%	24.26%	49.39%	25.31%
Rwanda	4.64%	11.53%	42.12%	41.72%
South Africa	1.30%	5.77%	65.57%	27.36%
Tanzania	0.66%	9.45%	39.24%	50.65%

Source: Research ICT Africa After Access Survey, 2017

Descriptive statistics

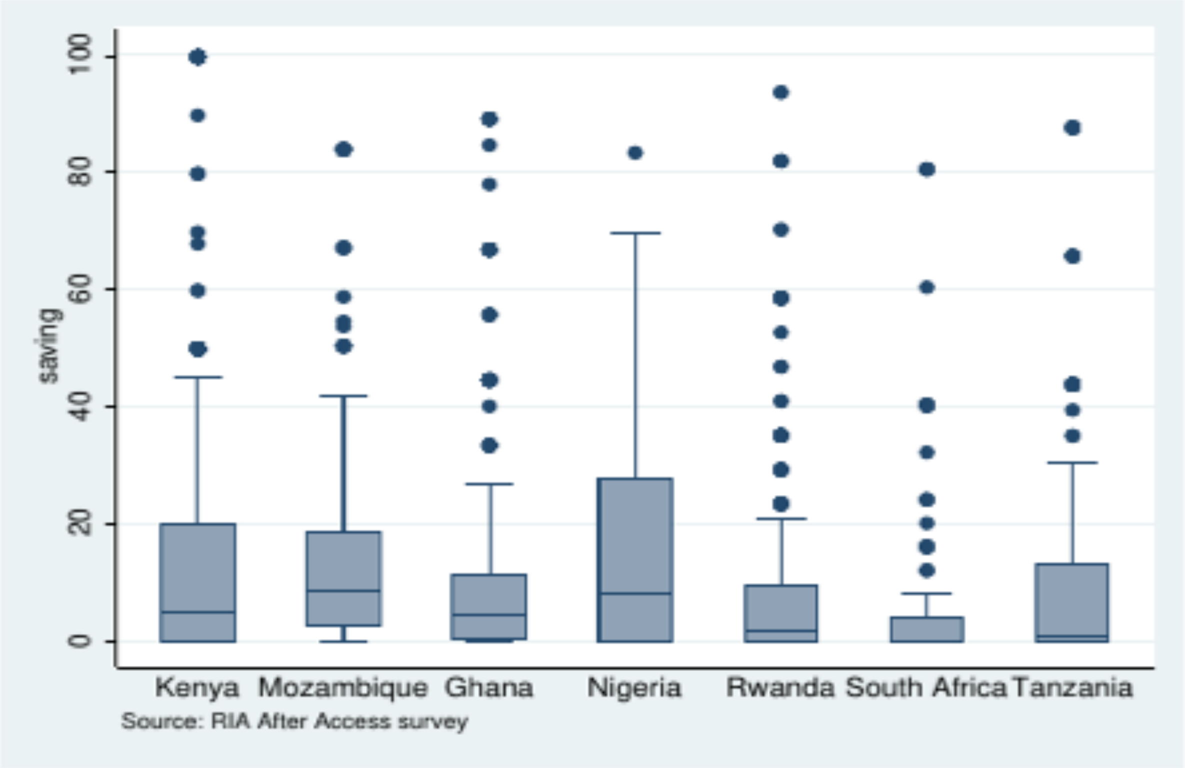
Mobile money use

Table 3: Mobile money transactions

Country	Airtime topup	Salary	Pay bills	Insurance	payments	Pension
Ghana	43.84%	5.54%	7.34%	1.58%	82.19%	14.69%
Kenya	82.27 %	9.76%	33.89%	7.98%	37.52%	7.70%
Mozambique	91.60%	3.44%	29.96%	0.15%	68.61%	2.18%
Nigeria	86.17%	9.57%	58.09%	0.78%	81.03%	2.35
Rwanda	69.39%	16.78%	40.21%	4.69%	53.14%	4.21%
South Africa	48.49%	12.14%	22.58%	7.67%	40.00%	3.89%
Tanzania	67.14%	1.57%	29.80%	0.92%	40.50%	0.11%

Source: Research ICT Africa After Access Survey, 2017

Figure 2: Box plot of mobile money savings



Findings

- ❖ Regulatory environment play important role in the success of mobile money
- ➢ In Kenya 8 out of 10 people use mobile money
- ➢ In Nigeria few use mobile money
- ❖ Mobile money is more likely to be used by households with at least one member that have migrated
- ❖ Relatively wealthy individual more likely to use mobile money
- ❖ Mobile money and bank account are substitute
- ➢ Mobile money banking the un-bankable
- ❖ Individual who use mobile money are less likely to have access to credit facility/loan
- ❖ Location and gender gap less insignificant

Mobile money only provide users with the transactional services- send/receive and payments but does not enhance societies ability to smooth their consumption

Recommendations

- The use of mobile money has a potential to increase financial inclusion in developing countries. However, low levels of mobile phone adoption especially by the poor, remain a challenge. Policy makers should look beyond universal service access policies and device polices that ensures access to devices (mobile phones).
- Policy makers should adopt regulatory policies which enhance the use of mobile money rather than those that stifles its use. For instance, in Nigeria and Mozambique the central bank requires mobile operators to partner with banks in provision of mobile money. However, this approach tend to have the similar effect as the traditional formal banking system.
- Policy makers should set policies aiming that allow virtual financial services to offer loans. Allowing mobile money platforms to offer loan to those at the bottom of the pyramid is crucial to development and narrowing inequalities.

Thank You

Research made possible

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