Comparative Financial Inclusion in Sub-Saharan Africa and Frontiers of Financial Inclusion Research

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Objectives
1. Discuss the comparative context for financial inclusion and its constraints.
2. Introduce recent research on financial inclusion.
3. Outline some key research questions.
4. Open the discussion to the floor.

Outline
1. Conceptual Framework
2. Rates of Inclusion
3. Barriers to Inclusion
   A. Poverty
   B. Geography
   C. Gender
   D. Informality
   E. Financial Literacy
4. Consumer Needs
5. Key Research Questions
Primary References


Introduction:
The last 10 years

1. Increasing knowledge about financial inclusion in Sub-Saharan Africa (SSA)
   - FinScope/FinAccess
   - Global Findex
   - Supply side surveys
   - Experiments with an element of randomisation

2. Mobile banking has taken off but many countries lag behind.

3. The vast majority in SSA remain outside of formal banking.
1. Conceptual Framework

- Focus on plain vanilla payment and saving service – transactional/custodial.
- Population ordered by size/volume of transaction engaged in.
- State variables = market size, macro fundamentals, technology, per capita income, infrastructure, institutions.
- Improving supply: Regulatory reform, Innovation, competition, better cost management.
- Improving demand: Financial literacy and culture but also higher incomes.

Opportunities for Financial Inclusion
A = bankable population
D → C = Improved supply
D → B = Improved demand

Beck and del la Torre (2006)
Role of Innovation

- Iso-profit curves = the combinations of size/volume that yield the same profit for two alternative banking business models.
- Right-ward movement broadens access but there are serious limitations to broadening access.

Beck and del la Torre (2006)
Individual Level

King (2012)
2. Formal Financial Inclusion

Access to Formal Financial Services

Honohan and King (2012)
Percentage of Adults with a Formal Account
Global Findex Database, 2011

Demirguc-Kunt and Klapper (2012)
Explaining the Differences

- Progress is being made in Kenya, leading SSA outside of ZAF, NAB and BWA.
- Significant differences in estimates
  - Two year difference
  - More open ended question in Global Findex

Global Findex Question on Financial Inclusion

Do you, either by yourself or together with someone else, currently have an account at any of the following places? An account can be used to save money, to make or receive payments, or to receive wages and remittances. Do you currently have an account at (read A and then B, where applicable)?

<p>| A | A bank or credit union (or another financial institution, where applicable – for example, cooperatives in Latin America) |</p>
<table>
<thead>
<tr>
<th>B</th>
<th>The Post Office (for example, [insert local example])</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>(DK)</td>
</tr>
<tr>
<td>4</td>
<td>(Refused)</td>
</tr>
</tbody>
</table>

Demirguc-Kunt and Klapper (2012)
Wider Financial Landscape in Kenya

Johnson, Brown and Fouillet (2012)
3. Barriers to Formal Financial Inclusion

Categorisation of self-reported barriers to inclusion (King, 2012b)
A. Role of Poverty

- Clearly evident from summary statistics.

### Financial Inclusion Rates by Income Level

- **FinScope Surveys**

<table>
<thead>
<tr>
<th>Country</th>
<th>Income Level</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOZ</td>
<td>Under $1 a day</td>
<td>2009</td>
</tr>
<tr>
<td>MWI</td>
<td>Under $1 a day</td>
<td>2008</td>
</tr>
<tr>
<td>TZA</td>
<td>Under $1 a day</td>
<td>2006</td>
</tr>
<tr>
<td>ZMB</td>
<td>Under $1 a day</td>
<td>2006</td>
</tr>
<tr>
<td>RWA</td>
<td>Under $1 a day</td>
<td>2008</td>
</tr>
<tr>
<td>NGA</td>
<td>Over $1 a day</td>
<td>2008</td>
</tr>
<tr>
<td>NAM</td>
<td>Over $1 a day</td>
<td>2004</td>
</tr>
<tr>
<td>BWA</td>
<td>Over $1 a day</td>
<td>2004</td>
</tr>
<tr>
<td>ZAF</td>
<td>Over $1 a day</td>
<td>2006</td>
</tr>
</tbody>
</table>

*Graph showing financial inclusion rates by income level for different countries.*
Honohan and King (2012)
- Looking at the distributions for 10 SSA Countries some overlap but statistically different.
- 1% increase in monthly personal income increases the chances of being banked by 3%.

Johnson, Brown and Fouillet (2012)
- “What I make is very little and there is nothing to be taken to the bank”.
- “I lack a permanent job, low income or that there is nothing remaining after expenses to take to the bank.”
National income explains much of the variation in account penetration across all economies—but far less among lower-income ones

Adults with an account at a formal financial institution (%)

Note: GDP per capita data are for 2010.
Source: Demirgüç-Kunt and Klapper 2012; World Bank, World Development Indicators database.
Recent Research

Financial Inclusion  Welfare Outcomes

- Honohan and King (2012)
  - Access to formal banking services increases an individual’s monthly income by 1.67%. Evaluated at the mean represents $1.41.

- Abraham, Kast and Pomeranz (2012)
  - Randomised Experiment in Chile: Participants with access to a no fee (or minimum balance) savings account have less informal debt, fewer outstanding payments, and less often need to reduce consumption due to economic difficulties.

- Ashraf, Karlan and Yin (2006)
  - After twelve months of a commitment savings scheme in the Philippines, average savings balances increased by 81 percentage points for those clients assigned to the treatment group.
B. Role of Geography

- **Sub-Saharan Africa**
  - An especially high proportion of rural dwellers (63% in 2010 down from 85% in 1960).
  - Absolute number of people risen to 534m from 196m in 1960.
- One of the most significant urban-rural financial inclusion divides is in SSA.
- Recent growth in bank branches largely an urban phenomena (e.g. Kenya).
- Kenya: Increases in inclusion in rural areas but gap with urban areas is widening.
- Geography affects both access and frequency of usage.
Account penetration in urban and rural areas

Adults with an account at a formal financial institution (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>Rural (%)</th>
<th>Urban (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDDLE EAST &amp; NORTH AFRICA</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>SOUTH ASIA</td>
<td>31</td>
<td>37</td>
</tr>
<tr>
<td>SUB-SAHARAN AFRICA</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td>LATIN AMERICA &amp; CARIBBEAN</td>
<td>35</td>
<td>43</td>
</tr>
<tr>
<td>EUROPE &amp; CENTRAL ASIA</td>
<td>39</td>
<td>53</td>
</tr>
<tr>
<td>EAST ASIA &amp; PACIFIC</td>
<td>50</td>
<td>69</td>
</tr>
<tr>
<td>HIGH-INCOME ECONOMIES</td>
<td>88</td>
<td>89</td>
</tr>
</tbody>
</table>

Source: Demirguc-Kunt and Klapper 2012.
Bank Branches in Kenya: 46% increase in three years from a total of (581 end 2006 to 849 end 2008).

Branch expansion occurred in Nairobi and hinterland and more densely populated rural areas in the south of the country stretching from Lake Victoria to the port city of Mombasa.
Recent Research

- King (2012a) finds in Kenya that:
  - A 1% increase in the distance from a bank branch is associated with a decrease in the chance of being banked by 3% in 2009.
  - Or a one unit discrete increase in the categorical variable time to bank branch reduced the probability of being formally banked by 1-2%.

- Distance is not important in having an account with a SACCO (Johnson, Brown and Fuillett, 2012).

- Karlan (2007) uses quasi-random variation in the group-formation process at a Peruvian microfinance institution
  - Groups with greater levels of geographic proximity have lower default and higher savings rates.
C. Role of Gender

Johnson, Brown and Fouillet (2012)

- Men control the major sources of income in married households, while women usually have smaller sources.
- Income streams are in the main controlled and managed separately.
- Financial services are also managed separately.

“Men are difficult. There are only few who show their payslip. You might see their payslip and for example they are earning 20,000 and then they bring shopping worth 5,000 you will keep asking yourself as a woman where does the other 15,000 go? So it is better not knowing.”

- Women more actively save with bank accounts.
Figure 17

Account penetration by gender

Adults with an account at a formal financial institution (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle East &amp; North Africa</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>41</td>
<td>22</td>
</tr>
<tr>
<td>South Asia</td>
<td>44</td>
<td>27</td>
</tr>
<tr>
<td>Latin America &amp; Caribbean</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>Europe &amp; Central Asia</td>
<td>58</td>
<td>52</td>
</tr>
<tr>
<td>East Asia &amp; Pacific</td>
<td>92</td>
<td>87</td>
</tr>
<tr>
<td>High-Income Economies</td>
<td>55</td>
<td>47</td>
</tr>
</tbody>
</table>

Source: Demirgüç-Kunt and Klapper 2012.
Gender Divide: Access to Formal Financial Services

Percentage of Adults Surveyed, %

Female
Male

Recent Research on Gender

- Schaner (2011) found that the bargaining power within household determined impact of a reduced-fee ATM intervention in western Kenya.

- Gine and Mansuri (2011) and Berge, Bjorvatn and Tungodden (2012) investigate the impact of entrepreneurship training and find that for women, while knowledge increases, business outcomes do not. This is in part due to inhibiting expectations and weak bargaining power.
D. Role of Informality

- Informality related to income poverty, education, employment situation etc
- But remains a distinct form of poverty for a number of reasons:
  - Migration
  - Weak institutions
  - Choice to avoid burdensome and untrustworthy state institutions
Number of documents to open checking account (out of 5)
Beck, Demirguc-Kunt, Martinez-Peria (2008)
Evidence from Nigeria

Proportion of Respondents in Possession of Identity Documents
Up to 16 Documents

- Banked
- Informally Banked Only
- Financially Excluded

King (2012b)
Recent Research

- Using an Instrumental Variable approach, King (2012b) finds that in Nigeria:
  - When an individual possesses four and five documents, an additional document increases their probability of being banked by 17 percent and 15 percent respectively.
E. Financial Literacy

• Financial Literacy now seen as a two way process.
  – Gine et al (2012) monitored information provided when trained undercover “shoppers” visited multiple financial institutions. Results suggest that staff provide little information voluntarily and when probed, most appear to be misinformed about key characteristics of the products offered.
“Knowledge of how and under what circumstances to borrow from banks is patchy” (Johnson et al, 2012)

Increasing financial sector knowledge by one unit is associated with an increase in the likelihood of being formally banked by 3% (Honohan and King, 2012).

Evidence on impact of financial literacy training is mixed.

- Cole, Sampson, and Zia (2011) find limited returns to training.
4. Consumer Needs

• Worthwhile exercise in defining the financial needs of the poor:
  – To model the ideal set of financial instruments for a number of representative low income HHs.
  – Perhaps building on the Portfolios of the Poor work.
Weakness in Formal Banking Products

- Although costs have fallen, fees in formal banking are out of reach of many poor households.

- Bank accounts are often opened for processing payments (contracts, employment payments). This is a strong reason for dormancy (Johnson, Brown and Fuillett, 2012).

- Absence of flexibility for dynamic cash flow management
  - Groups and inter-personal transactions offer the greatest flexibility for cash flow management – borrowing in time of need. (Johnson, Brown and Fuillett, 2012).
Mobile Banking

- Is ‘Mobile Banking’ really banking?
- Question marks over the integration of more sophisticated savings and credit services.
- Can M-Pesa’s success occur elsewhere?
  - Other countries have favoured a bank led approach.

Demirguc-Kunt and Klapper (2012)
Consumer Needs

1. Low cost
2. Convenient access
3. Facilitate inter-personal transactions
4. Elements of out-of-reach/commitment savings
5. Flexible lending to aid cash flow
6. Insurance options
7. Easy to understand and learn about financial management
Consumer Needs

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5. Research Questions

1. Impact on Welfare
2. Product Innovation
3. Short-run Constraints
4. Financial Stability
Impact on Welfare

Does financial access substantially improve the well-being of customers?

- State-run Banks: Burgess and Pande (2005) find rural branch expansion significantly reduces poverty at household level.

Key Research Questions

- How much does access to formal lending and savings products lead to welfare improvements?
- How much does consumption smoothing contribute to welfare?
- Impact of formal access on traditional ‘give-receive’ relationships?
Product Innovation

- Given the gulf between the financial products supplied and those demanded, what can innovative and sustainable products achieve?
  - More sophisticated mobile savings products with an out-of-reach/commitment component.
  - Bank accounts with flexible credit and savings elements to help cash flow management.

Key Research Questions

- Are borrowing and saving complements or substitutes?
- How do different products affect intra-household behaviour?
- Measuring impact of new products: Randomised evaluations of new products (e.g. USAID funded Trade Credit Project in Kibera).
Constraints: Short-run

- Short-run constraints to formal access: Financial literacy, informality or price?
  - Weak evidence that financial literacy leads to more meaningful financial inclusion
  - Modest evidence that greater formality can lead to greater inclusion
  - Evidence that price is a constraint (Cole, Simpson and Zia, 2011).

- Key Research Questions
  - What gains are possible through financial literacy programmes?
  - What gains can be made by reducing documentary criteria for opening a bank account?
  - To what degree are consumers price sensitive?
  - What are the interactions between these constraints?
Can increasing access enhance or jeopardize the stability of financial systems?

- Expanding access and stability may not necessarily be related.
- Regulators need to understand the changes in risk structure when millions enter the system.
- Fast growth, poor practices and absence of consumer protection can lead to over-charging and over-indebtedness.

Key Research Questions

- What are the risk profiles of new lending products? (Are regulators adequately equipped to oversee rapidly expanding financial institutions?)
- Do bank staff provide good advice (Gine et al, 2012)?
- Are low-income consumers sufficiently protected?
Thank you


Secondary References