Digital Credit Products and Regulations

Evans School Policy Analysis & Research Group (EPAR)

April 14th, 2017
Presentation Plan

• Defining Digital Credit
• Research Methods
• Characteristics of Digital Credit Products in Selected Countries
• Digital Credit Regulatory Environment
• Takeaways
Defining Digital Credit

- **Instant** - Products take no more than 72 hours to approve and disperse loans

- **Automated** - Products use automated processes to determine creditworthiness, though live professionals may make the final loan decision

- **Remote** - Product services can be accessed remotely (potentially with initial in-person registration)

- Products released in the **past 10 years**

- Products focused on **individual** customers or business owners, not groups
Focus Countries

- **India (pop. 1,311,050,530)**
  - 10.2% aware of mobile money
  - 5.2% adopted mobile money

- **Kenya (pop. 46,050,300)**
  - 97% aware of mobile money
  - 80.3% adopted mobile money

- **Nigeria (pop. 182,201,960)**
  - 11.4% aware of mobile money
  - 7.3% adopted mobile money

- **Tanzania (pop. 53,470,420)**
  - 91.9% aware of mobile money
  - 67.1% adopted mobile money

- **Uganda (pop. 39,032,380)**
  - 90.4% aware of mobile money
  - 52.3% adopted mobile money


Research Methods
• **Products Search**
  - Focus country web searches
  - Cross-checked with GSMA* and other databases
  - Review of product websites

• **Regulations Search**
  - Review of literature on digital credit regulatory issues
  - Broad web searches for country regulatory documents and discussion of regulations
    - Focus on low- and middle-income countries
  - Included regulatory documents that:
    - reference online, mobile, digital, or internet financial products and lending, loan, or credit services
    - are mentioned by grey literature as possibly applying to digital credit regulatory concerns

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*Groupe Spéciale Mobile Association*
Review of Digital Credit Products in India, Kenya, Nigeria, Tanzania, and Uganda

Key Findings
Year Identified Digital Credit Products Were Introduced

Number of products by country:
- India: 37
- Kenya: 18
- Nigeria: 6
- Tanzania: 4
- Uganda: 1
- Multiple (East Africa): 2

*Based on information on product websites
**13 products were missing date information
Partnerships and Bundled Products

• **Banks:** 14 products

• **Mobile Network Operators (MNOs):** 25 products

• **Retailers:** 10 products

• **Other Partners:** 16 products
  • Private lenders (11 P2P products), investment groups (3 products), non-bank financial institutions (4 products)

• **Bundling with other services:** 31 products
  • DFS Products (savings accounts, bill pay, money transfers): 27 products
  • Other financial services (insurance plans, traditional home or business loans): 4 products

Note: Products may have multiple partners
Product Models

- **India**: 12 Standard, 16 P2P, 9 Retail, 1 Other
- **Kenya**: 11 Standard, 4 P2P, 3 Retail, 1 Other
- **Nigeria**: 5 Standard, 1 Retail, 1 Other
- **Tanzania**: 3 Retail, 1 Other
- **Uganda**: 1 Other
- **Multiple Countries**: 2

Digital Credit Products
Source: Authors’ calculations
Note: 14 products use multiple technology platforms. 11 use an app combined with an internet platform, and 3 use an app combined with a feature phone platform.
Target Populations

- Low-income populations
- Urban Borrowers
- Small Business Owners
- Students
- Women

Note: 10 products in India (6 in SSA) target multiple groups
Alternative Data

The bar chart compares the number of products using different types of data in SSA and India. The data sources include:

- Mobile Money Data
- Mobile Phone Data
- Traditional Financial History Data
- Online Activity and Social Media
- Previous Digital Credit Loans
- Other Personal Information

For each type of data, the chart shows the number of products in SSA (dark bars) and India (light bars). The chart highlights that Traditional Financial History Data is the most commonly used in both regions, followed by Other Personal Information.
Awareness and Adoption of Digital Financial Services

• Use of alternative data can help certain populations overcome barriers to accessing financial services
• Lack of awareness that the services exist
• Consistent gender gap in indicators related to the use of DFS (awareness, mobile phone ownership and access, mobile money account registration, bank account registration)

Financial Inclusion Insights (FII) Data Analysis*:

• Women less likely than men to be aware of mobile money in Pakistan, Bangladesh, India, and Nigeria

• Women had lower likelihood of adopting mobile money than men

• Gender not found to have a statistical impact on the likelihood of using mobile money, among those that adopted it

*Controlling for education, employment, country, income, and other differences

1 Financial Inclusion Insights Survey
# Digital Credit Loan Terms

<table>
<thead>
<tr>
<th></th>
<th>Average Minimum Length (days)</th>
<th>Average Maximum Length (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median</strong></td>
<td>30</td>
<td>180</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>64</td>
<td>427</td>
</tr>
<tr>
<td><strong>Number of Products with information</strong></td>
<td>46</td>
<td>51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Average Minimum APR</th>
<th>Average Maximum APR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median</strong></td>
<td>13%</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>12%</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td>38%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>Number of products with information</strong></td>
<td>37</td>
<td>41</td>
</tr>
<tr>
<td>Country (No. of Products with data)</td>
<td>Min (USD)</td>
<td>Avg Min (USD)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td>Uganda (1)</td>
<td>$0.84</td>
<td>$0.84</td>
</tr>
<tr>
<td>Tanzania (2)**</td>
<td>$0.46</td>
<td>$0.46</td>
</tr>
<tr>
<td>Kenya (15)</td>
<td>$0.49</td>
<td>$8.70</td>
</tr>
<tr>
<td>Nigeria (4)</td>
<td>$1.60</td>
<td>$12.27</td>
</tr>
<tr>
<td>India (32)</td>
<td>$0.02</td>
<td>$475.09</td>
</tr>
</tbody>
</table>

*Local currency figures were converted to USD using current exchange rates

**Only 1 product in Tanzania provides data for minimum loan size
Digital Credit Fees

- **Percentage of Principal Loan Amount (one-time or incremental)**
  - SSA: 13
  - India: 9

- **Fee charged, but fee structure unclear**
  - SSA: 7
  - India: 6

- **Processing Fee (per transaction)**
  - SSA: 7
  - India: 5

- **Registration Fee**
  - SSA: 2
  - India: 4

- **Fixed Fee***
  - SSA: 2
  - India: 5

- **Listing Fee (when borrower requests a loan)**
  - SSA: 2
  - India: 4

*Fixed fees refer to a flat amount that is charged for taking out a loan (may relate to the loan size)*

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<table>
<thead>
<tr>
<th>Type of Reward</th>
<th>Number of Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase loan amount/credit limit</td>
<td>25</td>
</tr>
<tr>
<td>Reduce interest rates</td>
<td>8</td>
</tr>
<tr>
<td>Accumulate loyalty points</td>
<td>4</td>
</tr>
<tr>
<td>Increase repayment length</td>
<td>3</td>
</tr>
<tr>
<td>Lower fees</td>
<td>3</td>
</tr>
<tr>
<td>Earn commission for referring new clients</td>
<td>3</td>
</tr>
<tr>
<td>Offered discounts through partner organizations</td>
<td>2</td>
</tr>
<tr>
<td>Increase flexibility of terms</td>
<td>2</td>
</tr>
<tr>
<td>Receive gift cards</td>
<td>1</td>
</tr>
<tr>
<td>Zero fees when purchasing through partner organizations</td>
<td>1</td>
</tr>
<tr>
<td>Increase chance of approval for future loans</td>
<td>1</td>
</tr>
</tbody>
</table>
• Data on uptake of digital credit is limited

• Four products self-reported user numbers:
  • KCB M-Pesa reported more than seven million clients
  • Branch reported 10,000 clients
  • M-Shwari listed 4.5 million users
  • InstaPaisa in India reports that over 6,000 borrowers use their peer-to-peer product
• Diversity in digital credit models

• Digital credit products may broaden the loan-eligible population through the use of alternative data sources to make credit decisions and ability to access loans remotely
  • Extent to which the products promote financial inclusion is unclear

• Alternative data raises questions about how to integrate formal credit scores with digital credit product scores

• Rewards may offer incentives for individuals to borrow repeatedly

• Unclear if digital credit is creating new debt or replacing existing debt
Review of Digital Credit Regulations in Low- and Middle-Income Countries

Key Findings
Overlapping regulatory frameworks can cover digital credit:
- Finance
- Telecommunications
- Competition

Existing regulatory documents in these sectors may apply to digital credit products, but also may not address issues related to specific characteristics of digital credit - we did not review these more general regulatory documents

We did not identify any regulatory documents that specifically mention “digital credit” in Africa, Asia, or Latin America

Expanding our search, we identified 20 regulatory documents from low- and middle-income countries available online in English that specifically mention some form of mobile/online/digital credit/lending services
Sources of Regulatory Documents

Identified 20 regulatory documents across 14 countries:

- Bangladesh
- China
  - Hong Kong
- Ghana
- India
- Indonesia
- Kenya
- Lesotho
- Malaysia
- Pakistan
- Singapore
- Sri Lanka
- Tanzania
- Thailand
- Zambia
## Regulatory Issues

<table>
<thead>
<tr>
<th>Regulatory Issue</th>
<th>Number of Regulatory Documents Identified</th>
<th>Brief Description of Regulatory Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Management and Privacy</td>
<td>10</td>
<td>Data privacy, Data management requirements, Confidentiality</td>
</tr>
<tr>
<td>Product Disclosure</td>
<td>6</td>
<td>Transparency of fees, terms, etc.</td>
</tr>
<tr>
<td>Customer Redress</td>
<td>4</td>
<td>Redress procedure, Internet/telephone complaint center</td>
</tr>
<tr>
<td>Consumer Over-indebtedness</td>
<td>2</td>
<td>Lending amount limits</td>
</tr>
<tr>
<td>Rates and Pricing</td>
<td>1</td>
<td>Rate caps, Length of loan terms, Competitive pricing</td>
</tr>
<tr>
<td>Licensing and Reporting Requirements</td>
<td>7</td>
<td>License requirements, Business continuity plan, Reporting requirement</td>
</tr>
<tr>
<td>Lending Prohibition</td>
<td>6</td>
<td>Prohibits lending from certain types of institutions</td>
</tr>
<tr>
<td>Regulatory Sandboxes</td>
<td>5</td>
<td>Allow organizations to experiment with new financial technology models with minimum supervision within defined time and space limits</td>
</tr>
<tr>
<td>Capital Requirements</td>
<td>5</td>
<td>Equity in relation to debt, Ratio of capital to risk-weighted assets</td>
</tr>
<tr>
<td>Governance Requirements</td>
<td>2</td>
<td>Managing financial risk, Managing maturities of loans and investments, Organizational governance standards</td>
</tr>
</tbody>
</table>
Market Conduct Regulatory Issues

• **Data Management and Privacy**: data privacy and management of confidentiality (10 regulatory documents)

• **Product Disclosure**: products clearly disclose terms and fees covered (6 regulatory documents)

• **Consumer Redress**: consumers can use transparent channels for redress or complaint (4 regulatory documents)

• **Consumer Over-Indebtedness**: limits on consumer lending amounts (2 regulatory documents)

• **Rates and Pricing**: rate caps, pricing controls, length of loan term limits (1 regulatory document)
• **Licensing and Reporting**: licensing and reporting procedures (7 regulatory documents)

• **Lending Prohibition**: prohibit lending from certain types of institutions (6 regulatory documents)

• **Regulatory Sandboxes**: allow companies to experiment with new technology within defined limits (5 regulatory documents)

• **Capital Requirements**: equity in relation to debt, ratio of capital to risk-weighted assets (5 regulatory documents)

• **Governance Requirements**: organizational governance standards to manage financial risk (2 regulatory documents)
Digital Credit products exist in an overlapping regulatory framework - governments may need to rely on higher level guidelines to cover gaps
  - Must clarify if and how general financial and other regulations apply to digital credit providers

We did not identify any regulatory documents specifically mentioning “digital credit,” but regulators may develop new regulations or amend existing regulations to address regulatory gaps

Data management and privacy is a particularly concerning issue in regard to digital credit products, due to the use of alternative data

Digital credit products may represent new loans in the financial system, or may act as a substitute for existing loan offerings. If the majority of loans are new, this represents increased risk in the financial system that may require oversight.

The speed of growth in the digital credit industry is a challenge for regulators
Evans School Policy Analysis & Research Group (EPAR)

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Professor Travis Reynolds, co-Principal Investigator
Professor Marieka Klawitter, Faculty Advisor

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Please direct comments or questions about this research to Principal Investigators C. Leigh Anderson and Travis Reynolds at eparinfo@uw.edu