

Can Stablecoins Actually Improve Financial Inclusion: Exploring the IT Affordances of Token-Based Digital Currencies

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Welcome to **blockchain.lab**, where we are researching ways to deliver the responsible use of blockchain technologies and web3 to enterprises and consumers. We are especially interested in blockchain applications for **ReSDA (Responsible and Secure Digital Assets)**.

blockchain.lab is directed by [Prof. Henry Kim](#) at the Schulich School of Business at York University. It was founded by Prof. Kim and [Dr. Marek Laskowski](#).

The aim of **blockchain.lab** is to approach blockchain from a more circumspect, responsible, academic perspective.

Why Stablecoins for Financial Inclusion Narrative is Unremarkable: An Informal IT Affordance Perspective

- Value-Based Affordances of Bitcoin (Lichti & Tumasjan, 2023 [JAIS])
 - Decentralized self-reliance
 - Verification
 - Value creation
 - Identity protection
- Affordances of Cash that CBDCs Should Provide (Nerula et al., 2023 [MIT])
 - Custody: personally possess money
 - Finality: settle transactions instantly
 - Wide access to merchants and services
 - Transcend distances in transactions
 - Privacy: leave little or no data trail
- Financial needs of the financially excluded persons (Makuvaza et. al, 2018 [Gates Foundation]) as Affordances
 - Transfer value
 - Maintain liquidity
 - Stay resilient to financial shocks
 - Meet other family or lifestyle goals



Financial Inclusion and Accounts-Based Digital Currencies



- Findings**
- Mobile money impacted labor outcomes by allowing workers to shift into more productive occupations and firms to invest in fixed assets
 - In Northern Uganda, self-employment increased from 3% to 6% for individuals that lived far away from a bank branch (Weiser et al., 2019).
 - Mobile money had direct impacts on consumption, the ability to cope with shocks, and extreme poverty.
 - Mobile money users were more likely to send and receive remittances and to have additional household members migrate.
 - Mobile money does not tend to impact the level of savings; however, there is suggestive evidence that mobile money accounts can be used as a substitute for informal savings.

A Scenario for Stablecoins for Financial Inclusion (WEF)

- These affordances are need-based, not value-based as in JAIS and MIT papers
- To realize Jose and Maria's affordances with stablecoins, their intermediary ecosystem is complex and requires many human intermediaries to participate

Scenario	Environment that constrains affordances	Actor(s)	IT Artifact	IT affordances	Financial Goals
Cross-border remittance to Honduras	Intermediary Ecosystem	José and Maria	Stable coins	<ul style="list-style-type: none">Transfer valueMaintain liquidityStay resilient to financial shocksMeet other family or lifestyle goals	<ul style="list-style-type: none">Send remittances from José to Maria at lower costDevelop a credit history that can be used across many loan providers in Honduras, made possible because there are affordably priced loan optionsObtain affordable and suitable health and automotive insurance

Why Stablecoins for Financial Inclusion Narrative is Unremarkable: Towards a Theory-Driven IT Affordance Perspective

- MIT Digital Currency Initiative, WEF studies are extensive, evidential, and high-profile. For IS research, we can...
 - Reframe in theoretical lens of IT Affordance
 - Theorize about intermediary ecosystem
 - Theorize about needs of the financial excluded as IT affordances

Use case actor	Technically sophisticated user	Well-functioning technical architecture	Widespread intermediary participation	Large or benevolent intermediary to mitigate these challenges
José and Maria (WEF)	✗	✗	✗	✗

For a Compelling Use Case...
Global South Solution to a
Global South Challenge

Take away message

- Stablecoins and cryptocurrencies can eventually aid in financial inclusion
- For now, though, required technological, financial, and even energy infrastructures are lacking, especially in the Global South, to make this anything more than a narrative

Token-Based Digital Currencies for Financial Inclusion: Extensive & Evidential Studies

Digital Currency Initiative

MAIDEN

INTERNATIONAL MONETARY FUND

CBDIC: Expanding Financial Inclusion or Deepening the Divide?

Brandon, Joel Tan
WP22389

WORLD ECONOMIC FORUM

4/8 Digital Currency Governance Consortium White Paper Series

What is the Value Proposition of Stablecoins for Financial Inclusion?

WHITE PAPER
NOVEMBER 2021

Stablecoins for Financial Inclusion: Misfit in the Environment that Constrains IT Affordance

Use case actor	Intermediary Ecosystem for viable use case requires...			
	Technically sophisticated user	Well-functioning technical architecture	Widespread intermediary participation	Large or benevolent intermediary to mitigate these challenges
José and Maria (WEF)	✗	✗	✗	✗
Libertarian bitcoin user (JAIS)	✓	✓	✗	✗
Financially excluded cash user (MIT)	N/A	N/A	✓	N/A
Financially excluded CBDC user (MIT)	?	?	?	✓



We gratefully acknowledge the funding and support of the York University Catalyzing Interdisciplinary Research Cluster and the Digital Currencies Project.