



EMURGO AFRICA 2023 Q2 REPORT

**Effect and Effort of
Financial Inclusion**



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01

EXECUTIVE SUMMARY



In this report, I studied financial inclusion through digital and decentralized finance in Africa.

Chapter 2 overviews **what has been proven academically** regarding **the effect of financial inclusion on development measures**.

It is proven that **the biggest positive development impact comes from having a savings account and making digital payment instead of cash**. The effect of access to microcredit is, on the other hand, mixed at best.

Chapter 3 explains the **digital finance (DigiFi) business in Africa** and the outcome of its expansion. **Among DigiFi services, lending shows the highest revenue share and significant opportunities**. The expansion of DigiFi in Africa resulted in the increase in owning, saving in, and borrowing through mobile money accounts in the last 5 years.

Chapter 4 examines the **blockchain finance business**

in Africa and the **difference between DeFi and DigiFi**.

Among 46 identified **on-chain finance businesses in Africa, payment** is the most common on-chain finance business followed by **trading platform, wealth management, and account management**.

Comparing DigiFi with DeFi, in most cases, **DeFi has much lower interest rates than DigiFi**. However, global DeFi platforms require **not a small amount of crypto collaterals, gas fees, transaction fees, and on and off-ramp trading costs** due to limited availability of local currencies. African startup projects are expected to develop more convenient on-chain lending options.

Chapter 5, EMURGO Africa Updates, updates you with our new investments, reports, and recent activities such as **EMURGO Africa and PwC "The State of Web3 in Africa" report launch** event in Nairobi.



02

EFFECT OF FINANCIAL INCLUSION





What academically proven is...

→ The biggest positive development impact comes from 2 factors: savings account and digital payment.

1. Having a savings account.

When a savings account is provided,

In **Kenya**, for **market vendors (mostly women)**,

- Savings ↑
- Private expenditure 38% ↑
- Business investment 60% ↑

In **Malawi**, for **farmers**,

- Savings ↑
- Agricultural output 15% ↑
- Household expenditures 11% ↑

In **Nepal**, for **female household heads**,

- Cooperation with income shock ↑
- Relocate expenditures (spending on education and food ↑; on health and dowries ↓)
- Overall financial situation ↑

2. Making digital payment instead of cash.

When money is transferred by mobile money instead of cash,

For **disbursement of government social benefits**,

- Overall travel and wait time 75% ↓ (in Niger)
- Administrative cost 20% ↓ (in Niger)
- Cost of disbursing 66% ↓ (in South Africa)
- Cost of payment annually \$1.3B ↓ (in Mexico)

Additional benefits include:

- Reduce corruption (in Argentina and India)
- Credit scoring by payment data provides better access to credits (in US and Kenya)
- Give women control over their money (in Kenya)

Reference: [Demirgüç-Kunt, Asli, and Dorothe Singer. "Financial inclusion and inclusive growth: A review of recent empirical evidence." World Bank Policy Research Working Paper 8040 \(2017\).](#)

What academically proven is... (cont'd)





→ The impact of access to microcredit on development measures is mixed at best.

The studies in **Bosnia and Herzegovina**, **Ethiopia**, **India**, **Mexico**, **Mongolia**, and **Morocco** showed,

- Modestly positive
- But not transformative

effects of microcredit as a development tool.

Findings also include:

- **Group-lending for women** showed **business ownership 14%** ; **food and total consumption 11%** ; **no income effect** (in Mongolia); **investment in durable goods**  (in India).
- **Individual-lending** led **no effect** (in Mongolia).
- **Microcredit** helped existing business to expand, but **no effect on entry, exit, or profits** (in India, Mexico, and Morocco).
- **Consumer loans for marginally rejected loan applicants** at **high interest rates (200% APR)** led to **income**  (in South Africa).



Open-air market in Meru; photo taken by author.

Reference: [Demirgüç-Kunt, Asli, and Dorothe Singer. "Financial inclusion and inclusive growth: A review of recent empirical evidence." World Bank Policy Research Working Paper 8040 \(2017\).](#)



As more blockchain financial services are available, we can examine the following questions:

1. Benefits of Financial Inclusion Using Blockchain Technology

- Q. Is there any **innovative automated saving schemes** that have not been possible with digital solutions?
- Q. Do blockchain solutions provide **faster, cheaper, and safer transactions** compared to digital financial services?



2. More Fundamental Question

- Q. Could **decentralized finance protocols** create an **innovative scheme** so that **money of risk-taking crypto investors** be accessible by **vulnerable people in rural areas**?





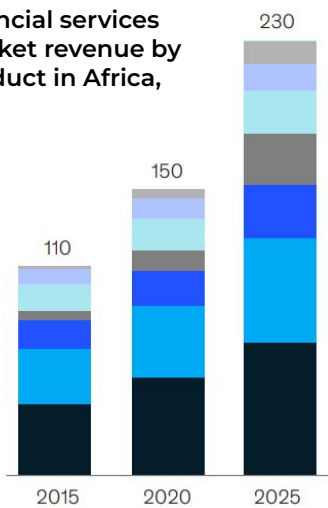
03

DIGITAL FINANCE IN AFRICA



In Africa, financial services revenues are expected to grow by 10% p.a. until 2025, with **retail/SME lending being the largest share of revenue among financial services, followed by insurance. Although blockchain finance is growing fastest, the revenue share is still small compared to other DigiFi businesses.**

Growth rate of financial services market revenue by product in Africa, \$B



CAGR 2020-25 by service type, %

Blockchain/Crypto	50
Wallets	20
Wealth Management	8
Remittances	6
Payments	20
Account Management	10
Insurance	8
Retail/SME lending	6

Lending & Financing

Highest revenue share in DigiFi business and significant opportunities for the access to credit.

Payment & Remittance

In spite of large share of revenue and growth rate, this market is saturated with strong market players.

Insurance

Insurance remains a “nice to have” product in Africa reaching a minority of the population.

Blockchain / Crypto

In spite of small revenue share, opportunity for foreign exchange and remittance could be strong.

Figure cited from [“Fintech in Africa: The end of the beginning.” McKinsey & Company \(2022\).](#)

Reference: “RealFi Lending Protocol - Summary of Findings.” Input Output (2022).

DIGIFI LENDING IN AFRICA I

Digital Financing Lenders in Africa.

Ghana (2)

FIDO 

Nigeria (16)

Egypt (2)

Zambia (2)

South Africa (4)

Kenya (11)

Uganda (1)

 NUMIDA

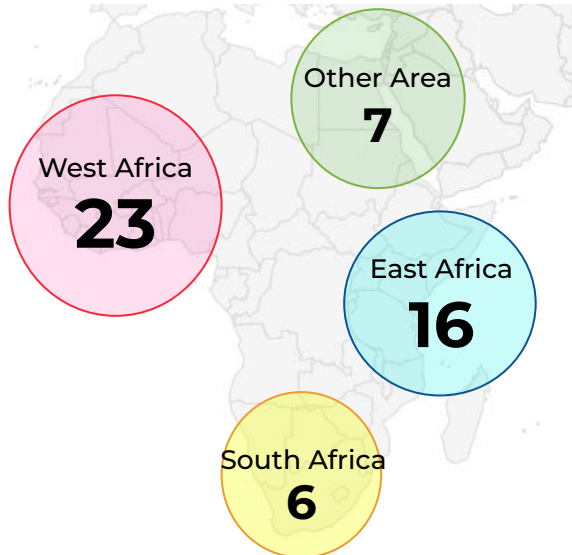
Tanzania (1)

 OYA
MICRO-CREDIT COMPANY

Among 39 digital financing lenders:

1. Operation Areas

23 lenders are **operating** in **west African countries**; **16** are in **east African countries**; **14** are in **south African countries**; and **7** are operating **outside Africa**.



Note: The results are by author's own research.

2. User Type

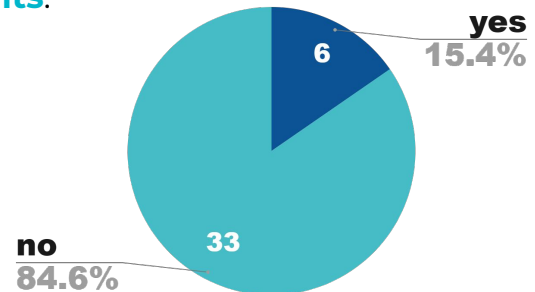
16 are for **both business and individual**;
22 are for **only business**;
1 are for **only individual**.

3. Investors

4 use capital from **individual investors**;
14 (among 21 known) have capital from **international institutional investors**.

4. Offline Agents

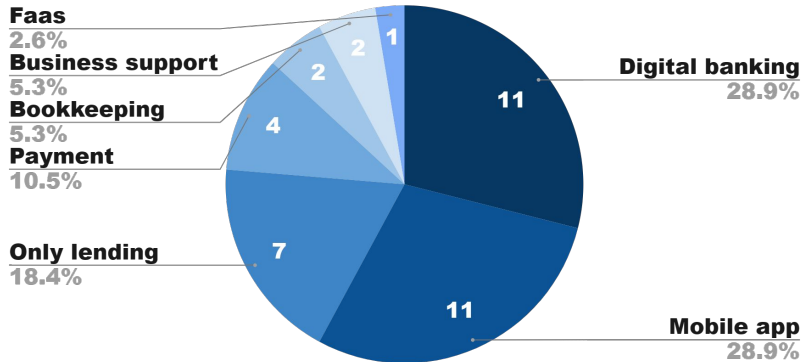
6 lenders **have offline agents** while **33 do not have offline agents**.



Among 39 digital financing lenders:

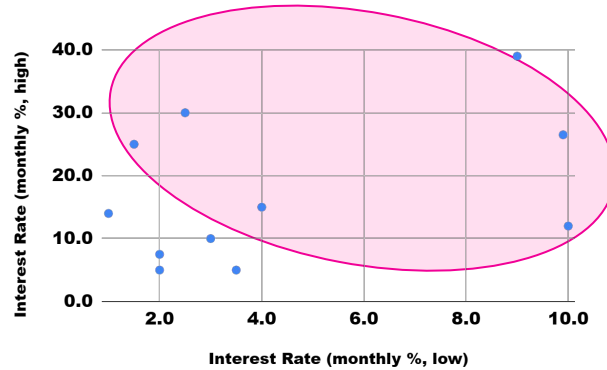
5. Business Model

11 lenders' main business is **digital banking**;
11 lenders' main business is **mobile app**;
7 lenders' main business is **lending only**;
4 lenders' main business is **payment**;
2 is **bookkeeping**;
2 is **business support**;
 and **1** is **Faas**.

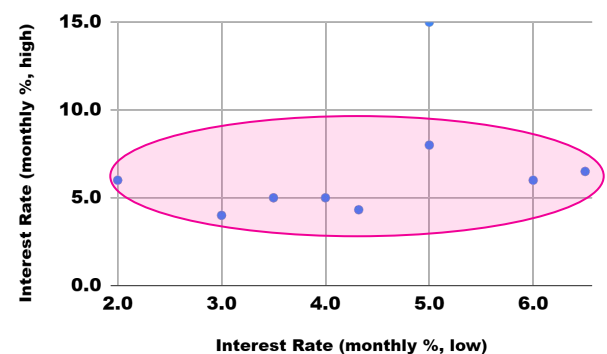


Note: The results are by author's own research.

Lenders with maximum loan size below \$5k.



Lenders with maximum loan size above \$5k.

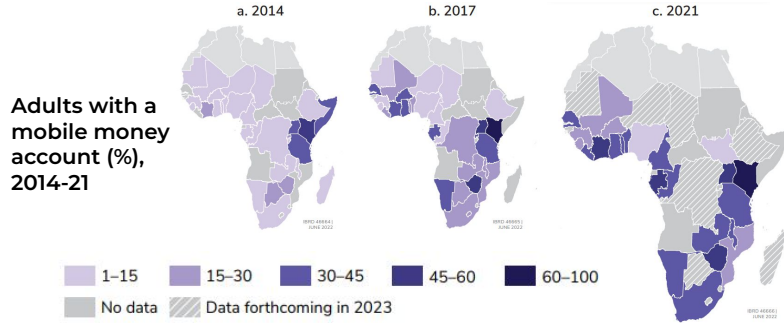


6. Interest Rate

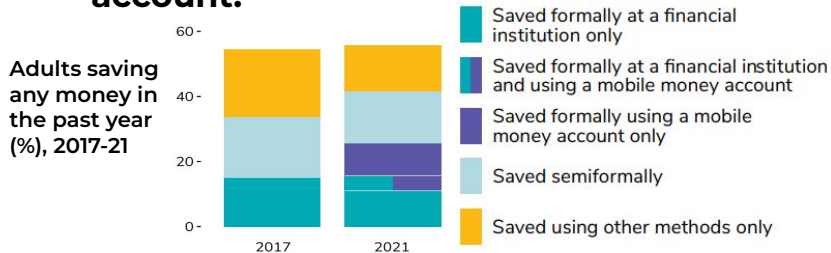
For **lenders with maximum loan size below \$5k**, interest rate starts from **2-4% per month**. However, **it goes larger than 10% and even 40% in some cases**.

For **lenders with maximum loan size above \$5k**, the minimum interest rate varies **between 2-6% per month**, and **it goes up to below 10% in most cases**.

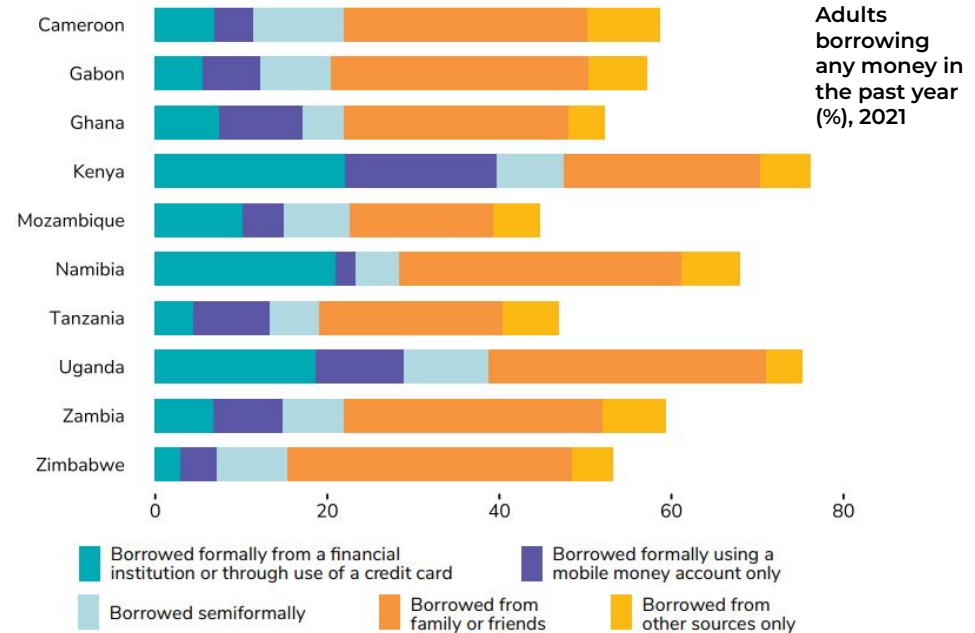
1. Mobile money accounts both grew and spread across SSA from 2014-2021.



2. In SSA, equal shares of adults saved at a financial institution and a mobile money account.



3. Borrowing using mobile money account is becoming more common in some countries in SSA.



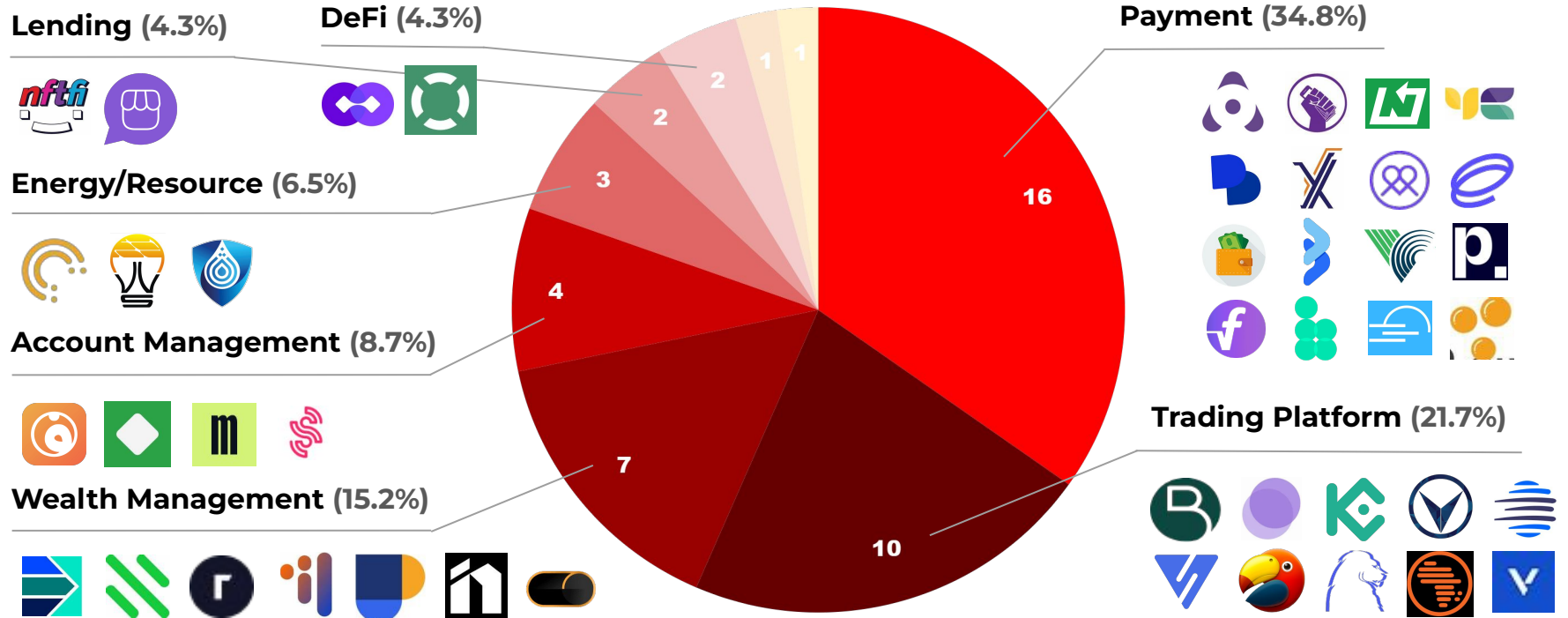


04

BLOCKCHAIN FINANCE IN AFRICA



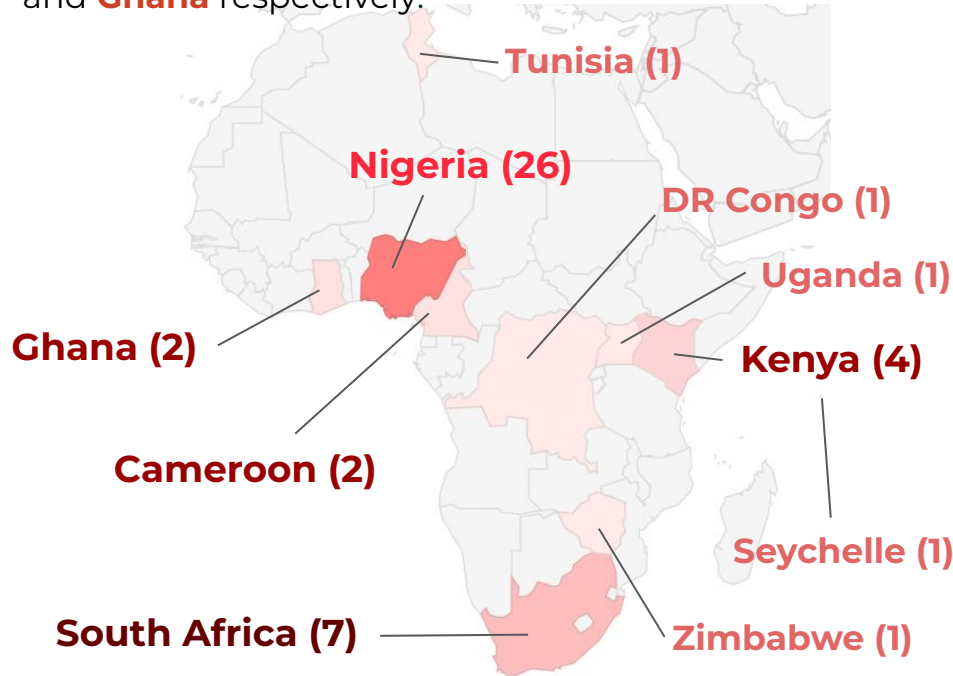
Among 46 identified on-chain finance businesses in Africa, 16 provide **payment services**, 10 are **trading platforms**, 7 serve **wealth managements**, 4 **account managements**, 3 **energy or resource tradings**.



Note: The list is made based on the data availability and presence in the market with reference of [Crunchbase](#) and [StartupList Africa](#).

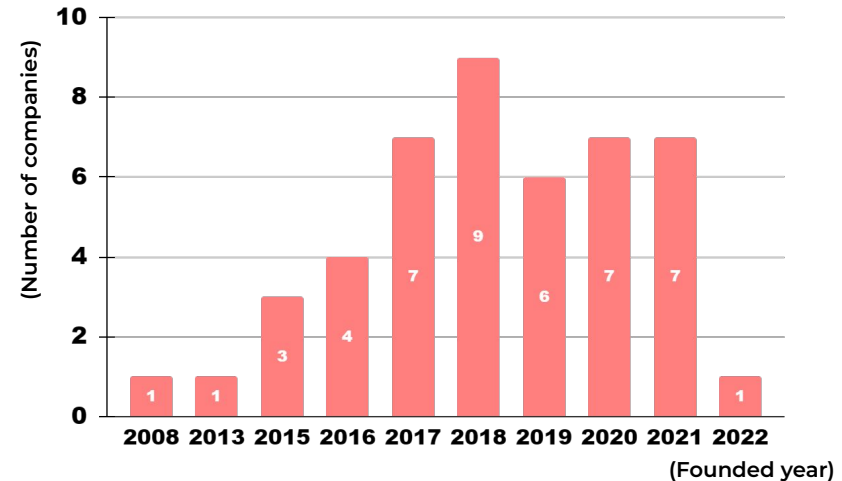


Among 46 identified on-chain finance businesses in Africa, 26 are Nigerian startups, 7 are South African, 4 are Kenyan, 2 are companies in Cameroon and Ghana respectively.



Note: The results are by author's own research.

9 on-chain finance businesses are founded in 2018, followed by 2017, 2020, and 2021, in each year 7 companies were founded.



Only 4 businesses provide lending services, among which 2 are decentralized finance (DeFi) protocols; 1 is NFT collateralized lending; the other is lending for small businesses.

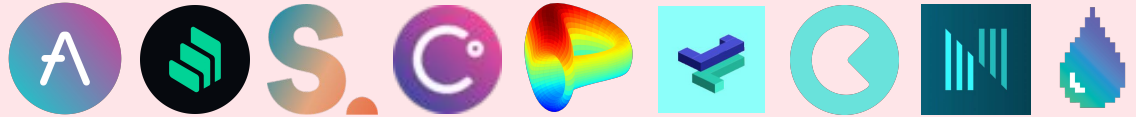


On-chain Lending (Users' Borrowing) Available in Africa

Global DeFi platforms, global CEX platforms, and African startup projects are available in Africa. In most cases, **interest rates are lower than DigiFi services** (see page 18). However, global platforms have **limited availability with local currencies**. Also, **crypto collaterals and gas fees are required**. African projects are expected to develop more convenient options.

1. Global DeFi Platforms

provide **crypto loans** including stablecoins such as USDT, USDC, DAI etc. **Monthly interest rate ranges from 0.1% to 1%**. Although the interest rate is low, in many cases, it requires **certain amount of crypto collaterals, transaction and gas fees, and on-ramp and off-ramp trading costs due to limited availability of local currencies**.



2. Global CEX Platforms

provide **crypto loans** or **buy crypto pay later**. Most crypto loans require **more collateral than the amount of loans**.






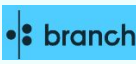






3. African Startup Projects

include **loans using NFTs as collaterals, DeFi protocols, and cross-border lending service**.



DIGIFI AND DEFI COMPARISON I




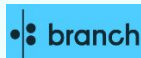










While **digital finance** requires personal ID and certain credit history and score to access to loans, **DeFi does not require anything but having a wallet**. On the other hand, in most cases, **DeFi asks certain amount of crypto collaterals** to borrow money, but **digital finance does not require any collaterals**.

	OFF-CHAIN: Digital Finance					ON-CHAIN: DeFi				CEX
										
Operation area	Kenya, Uganda, Ghana	Kenya, Mexico, Philippine, India	Kenya, Uganda	Kenya, Nigeria	Nigeria, India	Global	Global	Global	Global	Global
User	SME	Anyone	SME	Anyone	Anyone	Anyone	Anyone	Anyone	Anyone	Anyone
Access	Registered Business	National ID	Mobile (ID)	Mobile (ID)	National ID	Wallet	Wallet	Email	Wallet	National ID
Collateral	No	No	No	No	No	Crypto	Crypto	Crypto	Crypto	Crypto
Requirement	6 mo< operation	Credit score	6 mo< operation	Credit score	₦1000< income	No	No	No	No	No

Note: The information above is collected from their websites by author.

DIGIFI AND DEFI COMPARISON II

While **digital finance offers local currency loans**, **DeFi, in many cases, requires on and off-ramp trading costs in addition to transaction or gas fees**. However, **DeFi offers way much lower interest rates** than DigiFi.

	OFF-CHAIN: Digital Finance					ON-CHAIN: DeFi				CEX
Interest rate (per month)	 pezesha	 TALA	 4G CAPITAL	 branch	 FairMoney	 AAVE	 Compound	 Celsius	 Liquid	 BINANCE
Local currency	5-8%	4-15%	<8%	1.7-18%	2.5-30%	-	-	-	-	-
 USDT	-	-	-	-	-	0.3%	0.3%	0.1-1%	-	0.3-0.6%
 USDC	-	-	-	-	-	0.2%	0.2%	0.1-1%	-	0.3-0.5%
 DAI	-	-	-	-	-	0.1%	0.2%	0.1-1%	-	0.3-0.4%
 iUSD	-	-	-	-	-	-	-	-	0.4%	-
Other cost	-	-	-	-	-	Transaction & gas fee	Gas fee	-	Transaction fee	-

Note: The information above is collected from their websites by author.



05

EMURGO AFRICA UPDATES





EMURGO Africa invests and partners with Africa-focused enterprises, startups, and accelerators to foster the development of socially impactful solutions on Cardano's third-generation and environmentally-sustainable blockchain. The missions of EMURGO Africa include the **support of the creation of blockchain solutions to promote businesses that solve social issues**; the **promotion of Real-Fi, fusion of traditional finance and DeFi** (decentralized finance); the **raise of awareness of Cardano as a technological platform to build socially impactful solutions** and EMURGO's role in the Cardano ecosystem. Cardano blockchain has the founding entities, [EMURGO](#), [Input Output \(IO\)](#), and [Cardano Foundation](#). EMURGO Africa is a regional entity of EMURGO, focusing on Africa and Middle East.



Afriblocks



Afriex



Afropolitan



Agriguild



Amini



Awujo



BellBank



Bitgrit



Bitmama



BitSport



Boundlesspay



BuuPass



Calend



Canza Finance



Cassava



Chekkkit



Credable



Diagon



Ejara



FanBants





Fonbank

fɔnbnk

Goodwall

 GOODWALL

Hisa

 Hisa

Houseafrica

 houseafrica

Hustlesasa

 hustlesasa

Kabuk



Mazzuma

 MAZZUMA

Melanin Kapital

 Melanin Kapital

Midchains

MidChains

Momint

 Momint

Nestcoin

nestcoin

Pravica

 Pravica

Scalex

 Scalex

Seso Global

 SESO
GLOBAL

Simulon

 Simulon

Skrimiish

Skrimiish

Stakefair

stakefair 

Talksay

 TalkSay

Versus

 versus

OUR NEW INVESTMENT

Bit2Me



Changeblock



Kotani Pay



Nuzo



Revix



Snowstorm



TBTM

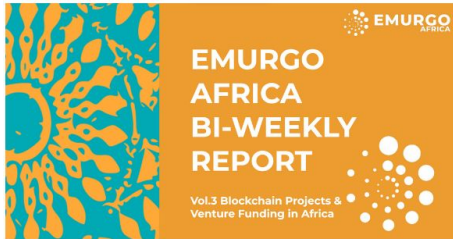




[\[EMURGO Africa Bi-Weekly Report Vol.2\] Crypto Adoption in Africa](#)



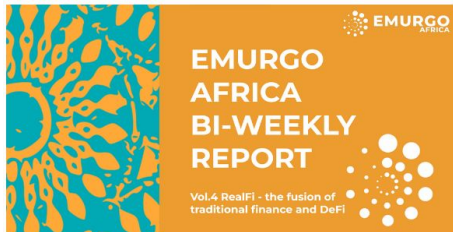
[\[EMURGO Africa 2023 Q1 Report\] Full Report: Coin Market and Tokenized Projects](#)



[\[EMURGO Africa Bi-Weekly Report Vol.3\] Blockchain Projects & Venture Funding in Africa](#)



[\[EMURGO Africa 2023 Q1 Report\] Ch.2 Token Projects on Coin Market](#)



[\[EMURGO Africa Bi-Weekly Report Vol.4\] RealFi - The Fusion of Traditional Finance and DeFi](#)



[\[EMURGO Africa 2023 Q1 Report\] Ch.3 Tokenized Projects in Africa](#)



You can read linked blog articles for the details.

[New Launch]

April 5, [**NODO Launched Pan-African Web3 Product Discovery Platform, NODO Discover**](#)

April 11, [**Opened NODO GRANTS for African Web3 Business Ideas and Products**](#)

May 26, [**NODO News V2 Launched: Expanded Editorial Coverage & Exclusive PR Service**](#)

June 13, [**NODO Product Community: Marketing & Publicity Channels for Web3 Builders Opened**](#)

[Partnership]

April 26, [**Partnered with GreenHouse Capital to Build Web3 Investment & Advisory Platform**](#)

[Event]

April 25, [**Web3 CONNECT Africa in Lagos**](#)

April 28, [**Web3 CONNECT Africa in Nairobi**](#)

June 3, [**Web3 CONNECT Africa in Kano**](#)

June 14, [**Web3 CONNECT Africa in Lagos**](#)

June 21, [**Web3 CONNECT Africa in Nairobi**](#)

June 23, [**EMURGO Africa and PwC "The State of Web3 in Africa" Report Launch Event in Nairobi**](#)



EMURGO Africa and PwC "The State of Web3 in Africa" Report Launch Event on June 23 in Nairobi.



In collaboration with PwC, **EMURGO Africa** released a comprehensive report showcasing the exponential growth of the global blockchain industry entitled "The State of Web3.0 Report."

EMURGO Middle East & Africa co-CEOs, Yosuke Yoshida and Shogo Ishida, shared their insights at the event.



Download and read the full report at:

<https://www.emurgo.africa/emurgo-africa-report-2023>



Website: <https://www.emurgo.africa>
Blog: <https://www.blog.emurgo.africa>
Twitter: <https://twitter.com/EmurgoAfrica>

Published Date: July 14, 2023
Author: [Mayuko Kondo, Ph.D.](#)

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