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The Role of Catalytic Capital in Digital Credit Markets

Successes, Pitfalls, and Lessons Learned

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C3 is an investment, learning, and market development initiative to promote greater and more effective use of catalytic capital, in recognition of its essential role in realizing the full potential of the impact investing field and achieving the Sustainable Development Goals. Together, the C3 Strategic Partners — The Rockefeller Foundation, Omidyar Network, and the MacArthur Foundation — are supporting field-building work through the C3 Grantmaking Program, housed at and managed by the New Venture Fund.

C3 Grantmaking works to advance learning and market development related to catalytic capital. It helps to answer critical questions about the scope of the need for catalytic capital, when and how catalytic capital can be most effective, and what tools and practices are needed. It does this through activities aimed at strengthening the evidence base, advancing the practice in the field, communicating and facilitating engagement among investors, and fostering solutions and infrastructure.*

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Introduction	1
Background	2
The Rise of Digital Credit	4
Case Study: Lessons from Kenya	5
Emerging Trends in Other Markets	8
Lessons for Investors in Nascent Markets	11
Conclusion	14
Annex 1: Research Methodology and Limitations	15
Annex 2: Data on Catalytic Capital Investments	16
Additional Sources to Learn More	18

^{*} Learn more about the various C3 Grantmaking workstreams at https://newventurefund.org/for-grant-seekers/c3grantmaking.

Introduction

The availability of catalytic capital — investment capital that is patient, risk-tolerant, concessionary, and adaptable – is a crucial enabler for sectors and firms that prioritize social and development impact but have limited access to conventional commercial capital. GIIN's annual impact investor survey shows that impact investment has seen significant progress in the area of impact measurement and management practice. However, lack of appropriate capital across the risk-return spectrum continues to remain a challenge. Catalytic capital has played an increasingly important role in filling this gap. It also serves to crowd in more conventional investors to sectors with high development potential but that are otherwise viewed as excessively risky or producing low returns.

While we do not know the volume of catalytic capital investments in inclusive finance, we know that investments in inclusive finance continue to be a top category of growth. Growing steadily since 2015 at a compound annual growth rate (CAGR) of 30 percent, investment in inclusive finance stands at nearly one-fifth of the total assets under management (AUM). Catalytic capital — which can be structured as debt, equity, guarantee, or other instruments that assume disproportionate risk to return — is often seen as an important signaling device to attract further, timely investment in the target. As such, it can facilitate innovation and help organizations and companies build a track record in underserved markets.

A 2019 report by Tideline highlighted three roles catalytic capital plays at the investee company level: seeding, scaling, and sustaining. Viewing it through this lens, however, does not consider the market-level changes needed for responsible market development that advances the livelihoods of low-income people. However, tracking responsible market development needs systematic tracking of market-level data on the amount of catalytic capital investments, the amount of further

"Catalytic capital can be a force multiplier. With small dollars, catalytic capital can continue to fund innovations which are too high risk commercially, but with great returns if successful, which would then attract commercial funding at larger scale."

— Dino Setiawan, CEO, Awan Tunai

investments made in the market, the types of instruments used, and the nature of investment flowing into a market. In the absence of this information, catalytic capital cannot spur change in market development.

In this report, we focus on the role of catalytic capital as a force multiplier for investments in the digital credit industry while also highlighting the limitations of a framework that does not consider broader market-level consequences of such investments. In multiple markets, catalytic capital has spurred rapid growth in digital credit, resulting in an influx of investment. At the same time, digital credit has created significant concerns over consumer protection, and the supervisory capacity of local regulators has failed to keep pace with the risks that have emerged alongside the rapid growth of digital credit.

The paper draws lessons from how digital credit markets have evolved, driven by initial catalytic capital investments that spurred further investments and highlights guardrails needed at the market level to ensure that growth is responsible, impactful, and leads to inclusive market development.

Inclusive finance refers to the financial inclusion sector comprising financial service providers and their partners who develop and deliver useful and affordable financial products and services that meet the needs of low-income and underserved individuals and businesses.

Background

Catalytic capital is at the intersection between impact investing and philanthropic grantmaking (see Table 1). According to the Catalytic Capital Consortium, the goal is to de-risk and fill the investment gaps for impact-driven businesses and organizations, with the aim of proving the viability and/or scaling the capacity of new business models and crowding in investors who would not otherwise participate in the market. Catalytic capital includes debt, equity, guarantees, and other instruments that accept disproportionate risk and/or concessionary returns (relative to conventional investments) to generate a positive impact and enable third-party investment that otherwise would not be possible. At its core, catalytic capital changes the risk profile of the investment — through tenure, pricing, or position (subordinated vs. senior).

Catalytic capital investors span a wide range of institutions, including development finance institutions (DFIs), foundations and family offices, and other players such as insurance companies, sovereign wealth funds, and diversified financial institutions. Each of these categories of investors views their role in market development slightly differently and uses distinct instruments based on how they perceive the need for catalytic capital. (Annex 2 contains responses received to GIIN's impact investor survey in 2020, illustrating these differences.)

TABLE 1: Role of Catalytic Capital Vis-à-Vis Other Types of Investment	
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	Conventional investing	Sustainable investing	Impact investing	Catalytic capital investment	Philanthropic grantmaking
Expected impact	Goals are at the investee company level and usually restricted to business value	Do no harm to society: manage environmental, social, and governance risks	Use money and capital for positive social results	Fill in capital gaps for impact- oriented enterprises and facilitate additional investment	Create positive impact defined by the grantmaker; usually includes market-level outcomes beyond the grantee
Return expectations	Market-rate, risk-adjusted	Market-rate, risk-adjusted	Concessional or risk- adjusted	Concessional, risk-tolerant, and flexible	Impact or societal returns
Key role	Make a profit for shareholders	Reduce negative harms to society	Positive returns to society	Responsible market development	Impact to address inequities and harms, and catalyze market-level outcomes

Note: Adapted from Catalytic Capital Consortium.

Although catalytic capital has historically excluded grant funding, we have included it in the discussion of catalytic capital when grants are structured with investment-like attributes designed to bring in further capital. This type of funding has played an important role in the development of digital credit markets. To differentiate from conventional grant funding, we have referred to it in this paper as catalytic capital without return expectations. We continue to recognize and appreciate the value of conventional grant funding and have called out specific areas where it is crucial to strengthen the wider ecosystem.

Another critical element of catalytic capital is how its role differs depending on the stage of market development (see Table 2). In underserved or

nascent markets, catalytic capital plays a "seeding" role, helping to address the perception of risk or viability of an investment. In nascent markets, it often enables a company to expand into new consumer segments or geographies.

As markets enter a growth stage and the supply of capital becomes more abundant, catalytic capital shifts to a "scaling" role. At this stage, it helps to either multiply the impact with capital structures designed to scale, replicate, or expand a new business model or to provide access to debt capital. As markets grow, it is also crucial to strengthen support functions, regulations, and rules in the market to ensure that low-income and underserved segments benefit from market expansion.

TABLE 2: Role of Catalytic Capital in Relation to Market Maturity

	Nascent Market	Growth Market
Features	 Perceived as risky Few investors Underdeveloped capital markets Limited innovation 	 Local financing available at affordable rates Market competition in the sector Innovation, but with checks and balances to protect consumers
Role of catalytic capital investors	 De-risk investments Test business models Commercialize business models Crowd in capital to the investee company Catalyze new firms to enter the market Support development of enabling regulation Demonstrate impact outcomes 	 Ensure intended impact/inclusion outcomes are achieved Improve market efficiency Strengthen support functions, regulations, and market conduct mechanisms Incentivize responsible growth Extend reach to remaining or newly excluded segments

¹ In mature markets, the focus of catalytic capital investments is to preserve the impact. CFI intentionally did not focus on the sustaining role of catalytic capital in mature markets, as consumer protection challenges in these markets are less of an obstacle since they tend to have better consumer protection mechanisms and evolved regulation compared with growth and nascent markets. However, we have included an example in Box 2 on insights from a catalytic capital provider in mature markets.

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The Rise of Digital Credit

Catalytic capital has played a significant role in the development of digital credit markets by either piloting digital credit models or proving their commercial viability. The influx of catalytic capital helped digital credit providers crowd in larger flows of commercial capital compared to other products in the inclusive finance space. By 2018, digital credit was acknowledged as one of the most rapidly growing sectors globally, providing easy access to financing for the first time to many small businesses and low-income people.

However, this growth has been accompanied by expanding risks and rising inequity between and within countries. Hence, the digital credit market provides a good example of both the potential and the shortfalls of catalytic capital to achieve its intended outcomes.

In the next section, we use Kenya as a case study to understand the rise of digital credit. The choice of

Kenya is intentional for a number of reasons. First, it was the birthplace of digital credit, and without the initial support of catalytic capital, it might not have seen such rapid growth. Second, Kenya has the highest distribution of digital credit among all emerging and developing economies. And finally, while its success very quickly spilled over into adjacent markets, spurring digital credit growth in Tanzania and beyond, by 2019, default rates in Kenya were growing. Soon, Tanzania also showed similarly high defaults on digital loans.

We looked closely at Kenya since it offers important lessons for other markets that replicate its rapid growth and associated pitfalls, and it helps highlight how catalytic capital could have been used more responsibly to help authorities develop guardrails that would better protect consumers. The report then examines emerging market trends and draws lessons for catalytic capital investors.

A Decade of Global Growth in Digital Lending



Source: Cambridge Fintech Ecosystem Atlas (https://ccaf.io)

Case Study: Lessons from Kenya

The development of digital credit would not have happened without initial catalytic capital support² and technical assistance from FSD Kenya.ix M-Shwari in Kenya is one of the first examples of the successful uptake of digital credit in what was, at the time, a nascent market. When Safaricom and the Commercial Bank of Africa (CBA) launched M-Shwari in 2012, they knew that success meant they would need to establish a viable business case to ensure that their innovative product met their consumers' needs. The M-Shwari savings and credit account issued by CBA was linked to an M-Pesa mobile money account provided by Safaricom. FSD Kenya provided catalytic capital to develop the business model, expand to new consumer segments, and help build a track record to attract further investments. Between March 2011 and December 2012, FSD Kenya invested USD \$650,000, including staff costs, in M-Shwari, and CBA invested \$14 million. This contribution was in the form of grants but with the intent to prove the business viability. Therefore, we consider this catalytic capital without return expectations. With the help of this funding, CBA received 1 million applications for M-Shwari loans and achieved break-even within 11 months of product launch.

Despite this initial success, FSD Kenya was concerned that M-Shwari's rejection rate, at 60 percent of new applicants, was too high, while CBA worried about the high level of non-performing loans (NPLs). Together, they designed a pilot program to assess whether there was inherent bias over the creditworthiness of lower-income customers. From the rejections, they selected 100,000 consumers to receive loans; M-Shwari improved its underwriting criteria; CBA agreed to take the first 4 percent of losses, which matched the prevailing NPL rate in its main portfolio at that time; and FSD Kenya provided a guarantee against

further losses of up to \$342,000. The guarantee fund, combined with FSD Kenya's expertise in using consumer research to develop markets for the poor, helped increase M-Shwari's acceptance rates from 40 percent to 47 percent, and the total proportion of M-Shwari customers with an assigned credit limit rose from 42 percent to 57 percent. While the expected losses from loan defaults were approximately 5 to 6 percent, only \$5,700 of the guarantee was called upon in a six-month period between December 2013 to May 2014. The program's success enabled M-Shwari to scale rapidly; it had 2.8 million clients by 2014, only three years after launch.*

Kenya remained at the forefront of early financial product experimentation. CBA continued to partner with development organizations, which provided philanthropic grants to fund research into how consumers used digital credit to support their livelihoods, the risks of over-indebtedness and default, and for the development of new products, such as digital lockbox savings accounts and digital health insurance for low-income customers. CBA also developed a customer segmentation strategy and a behaviorally informed communications strategy to incentivize savings and responsible borrowing. These early adjustments to the M-Shwari product proposition helped cement the value of digital credit in the local consumer base and address potential downside risks.

FSD Kenya's use of catalytic capital to support M-Shwari significantly impacted the growth of the broader market. The innovation of building M-Shwari on the M-Pesa mobile money platform reduced transaction costs and increased access to formal savings and credit. After M-Shwari proved the business case, digital credit providers proliferated within Kenya. Safaricom initially struck a two-year exclusive deal with CBA, but as soon as

 $^{2\ \} Although this support was in the form of a grant, we argue that it played the role of equity-like financing for an early-stage innovative venture and should be viewed as being catalytic in nature.$



that ended, it partnered with Kenya Commercial Bank (KCB) to launch KCB M-Pesa, a loan product comparable with M-Shwari but with different terms and conditions and other distinctive features. Within three years, other digital lenders, including Tala, M-Coop, and Branch, were active in the market. Digital credit providers also expanded into neighboring countries with similar infrastructure.

However, Kenya's low-entry barriers and the lack of regulation protecting consumers attracted an influx of potentially predatory lenders with no commitment to financial inclusion. After its initial success, the Kenya story became more of a cautionary tale than one to emulate. By 2018, the Kenyan market was in the growth stage with over 50 digital credit providers, up from two providers in 2014.xi Between 2016 and 2018, 86 percent of the loans taken by Kenyans were digital in nature.** While the digital credit products included a mix of small business loans and consumer credit, most loans were under 90 days in their tenure, raising concerns about consumer indebtedness. A survey conducted by FSD Kenya and CGAP in 2017 showed that over 25 percent of Kenyans had taken a digital loan, with over 50 percent of those surveyed late on repayments at least once.xiii FSD Kenya, in partnership with the Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS), and CGAP, conducted a nationally representative

Between 2016 and 2018,

86 %
of the loans taken by Kenyans were digital in nature.
(MicroSave)



phone survey in 2017 to understand the impact of digital credit on the market.** The survey found unregulated lenders that had begun to operate in the absence of an oversight body to monitor this growing market segment.

Kenya illustrates the negative consequences of an unfettered marketplace without safeguards in place, highlighting a key shortfall in using catalytic capital alone in hopes of achieving responsible market development.

The main risks that have emerged fall into three categories:

High interest rates, indebtedness, and default risks: While regulators admit that digital credit for consumption generates short-term, high-priced loans, most are wary of imposing an interest rate cap for fear of curtailing innovation. As a result, interest rates remain incredibly high for consumers, especially those in low-income segments. A study by the Evans School Policy Analysis and Research Group (EPAR) found that annual percentage rates (APRs) of digital credit products can be as high as 520 percent APR (Pesa na Pesa in Kenya).** A survey by FSD Kenya and CGAP showed that over 800,000 Kenyans were juggling multiple loans, and about half of those surveyed had reported being late at least once with their digital loans.xvi Credit reporting mechanisms can reveal such risks at an early stage. Regulatory approaches such as interest rate caps rarely achieve the desired objectives, but excessively high pricing may indicate other market challenges. To address this, catalytic

capital investors can proactively support investee companies in adopting tools, such as risk-based pricing models, to measure the indebtedness level of existing and prospective borrowers. They also can deepen domestic markets, which can help improve access to capital and bring down the cost of funds. For example, the fintech Lendable formed a fund along with funders, enabling it to obtain a credit rating and access debt capital (see Box 2).

- Aggressive sales practices, exploitative terms and conditions (T&Cs), and deceptive fees: Without adequate entry barriers or regulation on responsible market practices for digital lending, a few business models in Kenya used controversial tactics. For example, the digital credit lender Mjiajiri employed a pyramid-like scheme whereby users paid an initial registration fee of KSh 200 (USD \$1.63) and then earned a commission of KSh 40 (USD \$0.33) for recruiting users to register for loan access.xvii In Kenya, terms and conditions, accessible only through weblinks, were usually not read by consumers using USSD mobile phones without internet access.xviii In some cases, products were bundled, and associated fees were unclear. Even where smartphone applications were in place, terms and conditions were often unclear and not read by consumers who, like people worldwide, chose to consent without a complete understanding of what it meant to sign up.xix Catalytic capital providers can work with regulators and industry associations to influence market practice with respect to transparency.
- 3. Data privacy issues: Borrowers often consented without understanding how lenders would use, store, and share their data with others. In Kenya, Kopa Leo, a lender that operated through the Android store and was not regulated by any financial sector authority, warned consumers that if they defaulted, their names would be published on the Kopa Leo platform and their social media channels.**

 Other lenders collect information, including call and SMS logs, phone information, photos, and Facebook contacts, which can be used to threaten consumers with aggressive collection practices when they default.**



The immense success of digital credit in Kenya very quickly spurred the expansion of similar products into other nascent markets. CBA successfully launched M-Shwari-type products in Tanzania, xxii Uganda, xxiii Rwanda, xxiv and the Ivory Coastxx by establishing partnerships with different telecommunication operators and implementing some of the early lessons learned in the Kenyan market. Fintechs such as Tala and Branch International in Kenya attracted significant investments from commercial investors and DFIs to expand their operations to new geographies, particularly India.xxvi Catalytic capital was deployed in various markets, such as Indonesia, where the Swiss Capacity Building Fund (SCBF) worked with Awan Tunai to design and launch innovative credit products for farmers (see Box 1 for detail).xxvii In Cambodia, USAID provided a first-loss default guarantee under its PACT program to help Boost Capital provide digital loans to underserved microenterprises. As in the case of FSD Kenya and M-Shwari, this was not a 100 percent guarantee. In the absence of a 100 percent guarantee, Boost Capital has skin in the game to ensure its focus on due diligence does not waver.

However, some negative impacts that affected Kenyan consumers quickly emerged in other markets. Research by CGAP in Tanzania showed that by 2018, nearly a third (31 percent) of digital borrowers had defaulted, and more than half (56 percent) had repaid their loans late.xxviii In India, a report released by the Reserve Bank of India showed that between January and February 2021, over 1,100 lending apps were available to Indian consumers, 600 of which were considered fraudulent.xxix Research by the University of Zurich showed that the rise of fraudulent digital credit apps was a global trend during the COVID-19 pandemic. Data from 71 countries showed that digital credit apps were among the most downloaded during the outbreak, and many showed signs of being either predatory or entirely fraudulent.***

BOX 1

Catalytic capital in Indonesia

Indonesia has a large rural population with about 19 million farmers, many of whom lack access to bank accounts. The fintech Awan Tunai has used catalytic capital to support its development, in partnership with its sister company Sayurbox, which facilitates farm-to-table delivery by eliminating intermediaries. The Swiss Capacity Building Fund (SCBF) provided catalytic capital in the form of grants structured as early-stage equity financing. This enabled Awan Tunai to create innovative credit products for low-income farmers with its partner banks. Catalytic capital also served to help a small company demonstrate its credibility, allowing Awan Tunai to raise further funds from commercial investors.

The pandemic-driven push towards digital financial services also accelerated the development of new business models and the integration of digital credit into the platform economy.xxxi This push enabled the evolution of digital credit into new and more complex product propositions, such as embedded finance and buy-now-pay-later (see Box 2). For example, in Latin America, the e-commerce giant MercadoLibre expanded its credit and payment offerings to merchants and consumers, extending working capital credit lines to more than 270,000 businesses in Argentina, Brazil, and Mexico by 2020. Southeast Asia saw the development of several "superapps" such as Grab and Gojek, which provide a variety of financial services, including digital credit, as part of their broader product proposition.xxxii In India, buy-now-pay-later has become increasingly popular since 2020, causing increased penetration among retail consumers and concerns about the potential lack of transparency and indebtedness levels in the market.***iii

Although these business models can potentially disrupt markets and accelerate innovation and financial inclusion for consumers and small businesses, their actual long-term development impact at the market and consumer levels is yet to be fully understood. On the one hand, many of these business models fall outside the regulatory perimeter, hence, they may not be subject to market conduct and consumer protection regulation and supervision. On the other hand, many offerings rely on partnerships between regulated and unregulated providers, and it is becoming increasingly difficult for consumers to determine who is responsible for the quality, safety, and fairness of the services they are using. As these models continue to evolve, monitoring the emerging risks at both the consumer and market levels is important, ensuring that regulators and catalytic capital investors play a more proactive role in addressing the downside risks.

BOX 2

Other Roles for Catalytic Capital, Beyond Kenya

Catalytic capital can play a critical role at different stages of market development. The Kenya case study reveals the role of catalytic capital in testing new business models, establishing partnerships, and derisking early investments. The development of digital credit markets in other countries has shown other important roles that catalytic capital can play.

TABLE 1: Role of Catalytic Capital Vis-à-Vis Other Types of Investments

Role of Catalytic Capital	Examples
Expansion to new geographies	Catalytic capital can play an instrumental role in growth markets by supporting businesses to expand to new geographies.
	Example: Lenddo,* a digital lender headquartered in Singapore, attracted capital from various investors, including the Omidyar Network in 2012 and 2015, to expand operations into the Philippines, India, Korea, and other countries.***
Enable access to debt capital	Many fintechs and digital credit providers focusing on underserved markets are considered too risky and struggle to access debt capital to fund their operations.
	Example: Lendable obtained catalytic capital from investors, such as FSD Africa, to address this problem. Lendable established a fund where, along with the funders (in this case FSD Africa), they participated in the first-loss default guarantee, commercial investors took the next 30 percent, and senior debt investors provided the remaining 60 percent of a transaction. This structure helps companies obtain credit ratings to build credibility among local debt capital providers, which can address the challenge of the cost of funds for end borrowers as the supply of on-lending capital becomes less constrained.

^{*}After the merger with EFL, Lenddo is known as LenddoEFL.

Develop new, more complex business models

Catalytic capital has also promoted the evolution of mobile-based digital credit models, which were primarily linked to mobile money operators, into more sophisticated "embedded finance" business models, which instead relied on technology platforms in various sectors such as e-commerce, e-mobility, and agtech.

Example: The IFC has invested in various digital platforms in Africa and Asia, such as Kobo360**** (e-logistics) and TradeDepot***** (B2B e-commerce) in Nigeria, Twiga Foods**** (agtech) in Kenya, Moglix**** (B2B e-commerce) in India, and several others. These investments enabled the various tech companies to provide digital credit to users within their platforms through partnerships with local banks or other structured capital markets instruments.

Shaping responsible markets

The focus of catalytic capital investments in mature markets is to preserve the impact of their investment by shaping responsible markets.

Example: Community Investment Management (CIM) is an institutional impact investment manager largely operating in mature markets and has just started expanding to emerging markets. CIM provides debt capital and partners with innovative digital lenders that work with low-income and underserved communities. For instance, in the United States, CIM works with digital lenders serving small business owners or underserved households. Most of these businesses tend to be owned by women and people of color. One of its partners is Camino Financial, which works with the U.S. Latinx community.

CIM offers growth capital in the form of structured debt financing facilities that allows digital lenders to scale and accelerate their growth. CIM also focuses on capacity building with their investee companies to make lending transparent and more affordable to the end consumers.

CIM's impact in creating responsible markets has been through shaping policy and lending practices; CIM's advocacy has centered on developing a set of responsible practices for fintech lenders, including co-founding the Small Business Borrowers' Bill of Rights 2021.²¹



Lessons for Investors in Nascent Markets

The Kenya digital credit story and the emerging trends in other growth markets point to several key lessons for actors concerned with responsible market development, including catalytic capital investors.

While there is definite value and an important role for catalytic capital to play in nascent and growth markets, the rapid change that results from the influx of capital can have unintended consequences. The fast development of fintech and digital credit markets has exacerbated consumer protection risks and created new ones. Certainly, digital credit products can bring new opportunities to low-income and vulnerable consumers, but there also is heightened risk in providing people with too much credit or products they may not fully understand.

Six key lessons have emerged from this research and can be applied to nascent markets:

A Recognize indicators of market growth and define a clear exit strategy. Although no exact point indicates the transition from the nascent to the growth stage in a market, many indicators can serve as a proxy. For example, Kenya in 2014 was a nascent market with two digital credit providers. Four years later, it had entered the growth stage with 50 providers. and 86 percent of lending digital in nature, and the market was showing signs of stress. The FSD Kenya/CGAP study revealed that over 50 percent of Kenyan borrowers surveyed in 2017 reported being late on repayments at least once.xiii

Looking to the investment landscape for indicators of changing market dynamics and a need for catalytic capital investors to change tactics, the issue of competition with commercial investors stands out. Using the same instruments and tactics in growth

markets as nascent markets risks crowding out commercial capital. This has been a recurring story in the inclusive finance field, initially with microcredit and now with digital credit.******IThere are insights to be drawn from the microfinance sector to understand how catalytic capital investors can add value through active governance and responsible exits in the markets in which they invest.***

Catalytic capital investors face four strategic decisions:

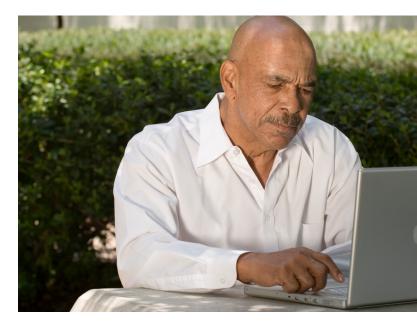
- When to exit an investment
- Who would replace them
- How the investee company will continue responsible behavior and social intent post-exit
- How to balance the financial and social returns at the time of exit

On top of this, catalytic capital investors, especially DFIs, would benefit from integrating a market development dimension. Although their main role is to catalyze private financial market development, they can also base their decisions on the broader needs of the market and support the infrastructure that contributes to responsible market development — such as financing and technical support for credit bureaus, encouraging transparent data sharing, and funding surveys that track the volume of investments at a market level.

Recognize the limitations of investment instruments to create market-level responsible outcomes. Consumer protection is like a three-legged stool: it needs consumers who understand their rights and responsibilities; providers who implement client protection principles; and the market environment, which needs effective

regulation and market supervision.xivi We need all of these to work together for consumer protection to achieve positive consumer outcomes from using financial services. While investors can conduct firm-level due diligence to ensure client protection principles are respected, two of the three legs of the consumer protection stool – regulation/supervision and building consumer awareness — require traditional grant funding. Market actors need access to timely information and market research that informs them about potential market risks and which consumer segments might be particularly vulnerable. Market conduct supervision that can contribute to a better environment for consumer protection needs investment that allows them to test and invest in new tools that can capture consumer risks as they evolve.

In Kenya, FSD Kenya, in partnership with the Central Bank of Kenya (CBK), Kenya National Bureau of Statistics (KNBS), and CGAP, conducted a nationally representative phone survey in 2017 to understand the impact of digital credit on the market.xivii The survey found the existence of several players, including unregulated lenders, that had begun to operate in the absence of an oversight body to monitor this growing market segment.xiviii In Tanzania, CGAP, with inputs from FSD Tanzania, conducted surveys in 2017 to identify consumer experiences with digital credit and emerging risks and to assess the size of the digital credit market.xiix The survey provided insights into the structure of the digital lending market in Tanzania and showed that the market was concentrated among three lenders. It also provided insights into the types of digital credit borrowers and the consumer protection challenges they faced. The study found a high correlation between the lack of transparency in terms and conditions and the default rates of digital loans. The Bank of Tanzania has since worked to improve transparency and disclosure of terms and conditions by digital lenders. The Bank of Tanzania mandates that terms and conditions be available through multiple platforms basic phones and interactive voice response (IVR) services. Further, financial service



providers offering credit products must provide consumers with information on fees and other costs for the credit facility, total interest payments, charges and fees, terms and conditions of bundled financial products sold with the loan, and information about late payment and prepayment in simple, easy-to-understand language.

Source and use market-level data. Today, systematic data on the volume of investments made specifically in digital credit is not available. Because of how information is gathered and organized by investors, it is not possible to sort by an investor, type of funder, instrument, geography, or business model. Without this information, it is difficult to identify funding gaps or to set priorities based on concentrations and opportunities in the sector.

The power of such information is seen in the CGAP funder survey, which showed that funding increased to micro, small, and medium enterprises during the pandemic and provided guidance on what funders could do to prevent microfinance insolvency in the wake of COVID-19. Additionally, CFI's work with the Council on Smallholder Agricultural Finance (CSAF) has shown that data access can help identify trends

in funding and areas of concentration and can be used by investors to redirect funding to underserved areas." More focus needs to be placed on ensuring that useful metrics are tracked and made publicly available. Initiatives like the "private sector engagement evidence gap map" supported by USAID need to extend to evidence on digital credit."

- **T** Employ digital public infrastructure (DPI) to drive inclusion, enable rapid service delivery in times of need, and help develop new tools through data trails. Market systems level investments in the form of grant funding (considered as catalytic capital without return expectations) between 2008 and 2019 represent 2 percent of the total volume of investments in fintech-related projects. Increasing this number to create access to identity, digital payment systems, credit information systems, and instruments that can address forex and hedging risks and develop domestic capital markets can help address issues with the cost of funds for providers and pricing of loans for consumers while also tracking consumer debt levels.
 - India's investment in digital public infrastructure in Aadhaar for identity and Unified Payments Interface (UPI) for payments has accelerated inclusion and innovation and helped to generate data trails that digital lenders can use. iv MOSIP, an open-source platform on which national foundational IDs are built, is available to all governments for deployment as part of their DPI. Countries like Morocco, the Philippines, Sri Lanka, Guinea, Ethiopia, and others are implementing their systems based on MOSIP. It is crucial to ensure that DPIIv is designed to be inclusive and protect the privacy and security of users and is governed by regulations that ensure accountability and transparency. Developing the right mix of institutional, policy, and technological protections needs long-term grant capital and must be a focus for catalytic capital investors like DFIs.
- Understand that regulations and supervisory capacity are critical enablers of sound market development. The complexity and speed of digital innovation result in a proliferation of risks that add to existing risks from incumbent business models. Wi There is a need to build regulatory and supervisory capacity to match the innovation seen with digital financial services so that financial sector supervisors are not accused of inhibiting innovation or sacrificing consumer protection. As new technologies evolve, there is a need for grant funding that can support the testing of tools and collective advocacy efforts such as the Latimpacto model, wii which brings together philanthropists, social investors, and regulators to learn from "sister" networks in Asia and Africa. These initiatives can augment the capabilities of market conduct supervisors but require careful thought on how catalytic capital is deployed.
- Turn to support organizations (industry associations and networks) to complement regulatory capacity. The role of industry associations — such as the Fintech Association for Consumer Empowerment (FACE) in India and the Digital Lenders Association of Kenya (DLAK)³ – in conducting independent demand- and supply-side surveys, identifying emerging consumer risks, and informing regulators is a crucial pillar to ensure success. DLAK and FACE have been working with the Central Bank of Kenya and the Reserve Bank of India, respectively, to set professional standards for digital lending. Catalytic capital investments should take an ecosystem approach and begin with an assessment of the regulatory landscape, building the capacity of institutions that can monitor unintended consequences on an ongoing basis and inform regulators. Providing technical assistance and grants through these intermediaries and investing in the ecosystem will contribute to a market systems approach to inclusive finance.

³ Note that as this paper was being edited, the Digital Lenders Association of Kenya rebranded to call itself Digital Financial Services Association (DFSA) in March 2023.

Conclusion

Catalytic capital can play a crucial role in enabling responsible market development. However, as the case of digital credit demonstrates, responsible market development does not automatically follow. Responsible market development needs investments at the firm level and in enabling market information, consumer awareness and capability, regulatory and supervisory capacity, and various other measures that can serve as checks and balances on firm behavior. Traditional grant funding will be needed to support responsible market development since catalytic capital cannot be expected to grow firms and solve wider market deficiencies. DFIs, whose mandate includes measuring additionality, must play a greater role as first movers in providing catalytic capital and ensuring subsequent responsible market development.

While in nascent markets there is a need to establish a business case to crowd in capital for innovative solutions, the role of catalytic capital investors should quickly transition as indicators of market growth become visible. The case of Kenya and the replication of similar fault lines in Tanzania shortly after have shown that crowding in capital, in the absence of an oversight body to monitor the market segment and other market monitoring mechanisms, can easily lead to the entry of unregulated lenders. It can also lead to the emergence of consumer risks, like overindebtedness or aggressive collection practices, which erode consumer trust and damage the reputation of the sector.

Not all catalytic capital investors use grant instruments, but their role in ensuring responsible market development is nonetheless crucial. Catalytic capital providers such as DFIs must think carefully about parallel investments in digital public infrastructure and broader market development. As markets move to the growth stage, catalytic capital providers should consider

providing crucial support for technical assistance to build the capacity of regulators, supervisors, and other investors and to support the development of industry standards. To ensure consumer trust and prevent harm to consumers, responsible market development should remain a priority. This means carefully planning and sequencing investments, rather than simply trying to attract more capital. As we've seen in Kenya and other places, prioritizing investments over responsible market development can lead to negative consequences for consumers. Catalytic capital investors can also collaborate with, invest in, and influence other market actors, including industry associations and consumer associations that can shape responsible market development. As markets move to the growth stage, technical assistance is crucial to build the capacity of regulators, supervisors, and other investors or to support the development of industry standards.

Catalytic capital investors can also collaborate with, invest in, and influence other market actors.



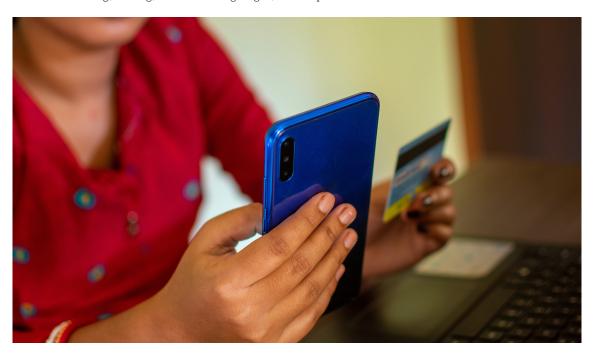


Annex 1: Research Methodology and Limitations

To better understand the landscape of investments in digital lending and the role of catalytic capital providers, we conducted both primary and secondary research to develop our insights. Market information on catalytic capital investments in digital credit specifically does not exist in a public database and is often clubbed with broader investments in inclusive finance. This indicates both a gap and an opportunity. In identifying markets for a deeper dive, we examined multiple data sources, such as the Cambridge Centre for Alternate Finance (CCAF), to identify concentrated and underserved markets for digital credit and the change in volume of lending globally and regionally between 2011 and 2020. We also used EIU Microscope data, which assesses and ranks the enabling environment for financial inclusion across five categories and 55 countries.

To examine the role catalytic capital investors can play in underserved and concentrated markets and at the seeding, scaling, and sustaining stages, we looked at Kenya as a market that has been at the frontier of digital credit innovations. We also examined markets like India, Indonesia, Cambodia, Mexico, and parts of West Africa like Ghana and Nigeria, where digital lending has seen significant investor interest.

We sent a primary survey to 63 private and public investors, identified through purposive sampling. The response rate was low, either because investors did not want to share proprietary data or because the data was not available in the format needed for this study. Therefore, we supplemented survey responses with data provided by the GIIN Global Impact Investor Survey (2020), publicly available data in the PAIF survey (2020), the CGAP funder survey (2020), and interviews with investors. We also conducted multiple in-depth qualitative interviews with key stakeholders across markets and investor groups to understand emerging consumer risks due to digital credit and the role of catalytic capital.





This information is drawn from responses to GIIN's Global Impact Investor Survey (2020) and was provided by GIIN's research team. In some cases, data segments were combined to preserve respondent anonymity and may not match the original Annual Survey tables.

1. Total Volume of Catalytic Capital Investments					
	n	Total	Median	Average	
Amount of capital deployed (in USD millions)	104	3487	5	34	
Number of transactions	99	2707	6	27	

2. Breakdown by Region					
Amount of capital deployed (in USD millions)					
Region	n	Total	Median	Average	
U.S. & Canada	59	1887	5	32	
WNS Europe	23	1193	10	52	
Middle East & Africa	8	276	4	34	
Asia	6	93	3	16	
Other	8	37	2	5	

Note: "Other" includes investors in LAC, Oceania, and those with multiple headquarters.

3. Breakdown	by Type of I	nvestor		
Amount of capital dep	loyed (in USE) millions)		
Type of investor	n	Total	Median	Average
Asset manager: not-for-profit (including fund managers and investment managers)	24	989	4	41
Asset manager: for-profit (including fund managers and investment managers)	23	371	3	16
Foundation	23	475	5	21
Family office	8	32	2	4
Development finance institution (government-backed institution investing in the private sector)	8	1328	175	166
Other	18	292	5	16

Note: "Other" includes insurance companies, sovereign wealth funds, and diversified financial institutions.

	4. Reason for	Providing Catalyti	c Capital by Inves	tor Type	
Type of capital	Asset manager: not-for-profit (including fund managers and investment managers)	Asset manager: for-profit (including fund managers and investment managers)	Foundation and family office	Development finance institution (government- backed institution investing in the private sector)	Other
Innovation: Catalytic capital is needed due to the novelty of the business model, financing model, or target market.	20	25	31	8	15
Early-stage (including sub-scale): Catalytic capital is needed to build a meaningful track record and/or adequate scale at the investee level.	20	25	31	7	16
Population: Catalytic capital is needed to reach underserved stakeholders.	21	22	28	8	12
Place: Catalytic capital is needed to access hard-to-reach places (e.g., where political, economic, and/or infrastructure factors create significant added costs or risks).	17	19	22	10	9
Business model: Catalytic capital is needed to address small transaction sizes, and/or high transaction costs, and/or other economic issues related to the type of product or service offered (e.g., capital intensity).	23	20	25	7	14

Note: "Other" includes insurance companies, sovereign wealth funds, and diversified financial institutions.



Additional Sources to Learn More

- Matranga, Heather Strachan, Bidisha Bhattacharyya, and Ross Baird.
 "Breaking the Pattern: Getting Digital Financial Services Entrepreneurs to Scale in India and East Africa." VillageCapital, Jun. 2017. http://archive.vilcap.com/wp-content/uploads/2017/06/VC_Breaking_the_Pattern_Exec.pdf.
- Kashangaki, James. "Digital Credit –
 The most pressing problem in Kenyan
 credit markets Really?" FSD Kenya,
 Sep. 2019. https://www.fsdkenya.
 org/blogs-publications/blog/digitalcredit-the-most-pressing-problem-inkenyan-credit-markets-really/
- 3. Gwer, Francis, Jack Odero, and Edoardo Totolo. "Digital Credit Audit Report." FSD Kenya, Sep. 2019. https://www.fsdkenya.org/research-and-publications/digital-credit-audit-report-evaluating-the-conduct-and-practice-of-digital-lending-in-kenya
- 4. Tameo Impact Fund Solutions, "Private Asset Impact Fund Report 2021," 2021.
- 5. Mazer, Rafe and Greg Chen. "Instant, Automated, Remote: The Key Attributes of Digital Credit." CGAP, Feb. 2016. https://www.cgap.org/blog/instant-automated-remote-key-attributes-digital-credit
- Burlando, Alfredo, Michael A. Kuhn, and Silvia Prina. "Too Fast, Too Furious? Digital Credit Delivery Speed and Repayment Rates." University of California CEGA Working Paper Series No. WPS-151, Mar. 2021. https://doi. org/10.26085/C32P49
- 7. Johnen, Constantin, Martin Parlasca,

- and Oliver Mußhoff. "Promises and pitfalls of digital credit: Empirical evidence from Kenya." PLoS ONE, Jul. 2021. https://doi.org/10.1371/journal.pone.0255215
- 8. Alliance for Financial Inclusion,
 "Credit Guarantee Schemes:
 Facilitating MSME Financing in Africa
 During the COVID-19 Pandemic,"
 Mar. 2022. https://www.afi-global.org/publications/credit-guarantee-schemes-facilitating-msme-financing-in-africa-during-the-covid-19-pandemic/
- 9. Cornelli, Giulio, Jon Frost, Leonardo Gambacorta, Raghavendra Rau, Robert Wardrop, and Tania Ziegler. "Fintech and big tech credit: a new database." BIS Working Paper No. 887, Sep. 2020. https://www.bis.org/publ/work887.htm
- Baur-Yazbeck, Silvia. "Development Funders and Inclusive Fintechs: Analyzing One Decade of Funding Flows." CGAP, May 2021. https://www.cgap.org/research/reading-deck/development-funders-and-inclusive-fintechs-analyzing-one-decade-funding-flows
- 11. Kenny, Charles and Todd Moss.

 "What to Do When You Can't Prove
 DFI Additionality." Center for Global
 Development, Mar. 2020. https://www.cgdev.org/publication/what-do-when-you-cant-prove-dfi-additionality
- 12. Behrends, Jeff, Joshua Simons, Kevin Troy, and Harshita Gupta. "Digital Public Goods: An Overview of Guidance for Development, Governance, and Stewardship." Harvard University: The Justice, Health, and Democracy

- Impact Initiative, Jul. 2021. https://ethics.harvard.edu/files/center-for-ethics/files/dpg_guidance_v2.pdf?m=1630420782
- 13. O'Neil, Kevin and Nicole Rasul. "CoDevelop: Digital Public Infrastructure
 for an Equitable Recovery." The
 Rockefeller Foundation, Aug. 2021.
 https://www.rockefellerfoundation.org/wp-content/uploads/2021/08/Co-Develop-Digital-Public-Infrastructure-for-an-Equitable-Recovery-Full-Report.pdf
- 14. Tolzmann, Molly. "CGAP Funder Survey 2020: Trends in International Funding for Financial Inclusion." CGAP Focus Note, Jan. 2022. https://www.cgap.org/sites/default/files/publications/2022_01-focus_Note_2020_Funder_Survey.pdf
- 15. USAID, "FinTech Partnerships Playbook," Apr. 2019. https://www.usaid.gov/sites/default/files/2022-05/FinTech_Partnerships_Playbook.pdf
- 16. Tideline, "Catalytic Capital," Mar.
 2019. https://tideline.com/wp-content/
 uploads/2020/11/Tideline_CatalyticCapital_Unlocking-More-Investmentand-Impact_March-2019.pdf
- 17. Hand, Dean, Hannah Dithrich, Sophia Sunderji, and Noshin Nova. "Annual Impact Investor Survey 2020." GIIN, Jun. 2020. https://thegiin.org/assets/GIIN%20Annual%20Impact%20Investor%20Survey%202020.pdf
- The Economist Intelligence Unit, "Global Microscope 2020: The role of financial inclusion in the Covid-19 response," Center for Financial Inclusion, Nov. 2020. https://www.centerforfinancialinclusion.org/global-microscope-2020
- 19. University of Cambridge, "Cambridge Alternative Finance Benchmarks," accessed Mar. 2023. https://ccaf.io/cafb/digital_lending/total_global_ranking
- 20. Blue Like an Orange Sustainable Capital, "Impact Portfolio,"

- accessed Mar. 2023. https://bluelikeanorangecapital.com/impact-portfolio
- 21. Cerise+SPTF, "Universal Standards for Social and Environmental Performance Management," Feb. 2022. https://sptf.info/universal-standards-for-spm/ universal-standards
- 22. Principles for Responsible Investment, "Investment tools," accessed Mar. 2023. https://www.unpri.org/investment-tools
- 23. Harmonized Indicators for Private Sector Operations (HIPSO), "Financial Intermediation," accessed Mar. 2023. https://indicators.ifipartnership.org/financial-intermediation/
- 24. Operating Principles for Impact Management, "The 9 Principles," accessed Mar. 2023. https://www.impactprinciples.org/9-principles
- 25. Koh, Harvey and Catalina Martínez.

 "Advancing Practice in Catalytic Capital:
 Guidance Note 1 The Seeding Role."
 FSG, May 2022. https://www.fsg.org/resource/advancing-practice-in-catalytic-capital/#resource-downloads
- Cuvellier, Max. "Africa: The Big Deal."
 Substack newsletter, accessed Mar.
 2023. https://thebigdeal.substack.com/
- 27. FSD Africa, "The Growth of M-Shwari in Kenya A Market Development Story," Nov. 2016. https://www.fsdkenya.org/blogs-publications/publications/
 the-growth-of-m-shwari-in-kenya-a-market-development-story/
- 28. ReelAnalytics Ltd., "State of Digital Lending in Kenya- 2021,"
 PowerPoint Presentation, Aug. 2021. https://www.dlak.co.ke/uploads/1/9/8/3/19835783/2021-reelanalytics-digital-lending-research-report.pdf

References

- i Catalytic Capital Consortium, "Overview," MacArthur Foundation, Mar. 2019. https://www.macfound.org/media/files/c3_overview_v4_030919.pdf
- ii Hand, Dean, Hannah Dithrich, Sophia Sunderji, and Noshin Nova. "Annual Impact Investor Survey 2020." GIIN, Jun. 2020. https://thegiin.org/assets/GIIN%20 Annual%20Impact%20Investor%20 Survey%202020.pdf
- iii Ibid.
- iv Tideline, "Catalytic Capital," Mar. 2019. https://tideline.com/wp-content/ uploads/2020/11/Tideline_Catalytic-Capital_ Unlocking-More-Investment-and-Impact_ March-2019.pdf
- v Catalytic Capital Consortium, "Frequently Asked Questions About Catalytic Capital," New Venture Fund, Apr. 2022. https://newventurefund.org/wp-content/uploads/2022/05/Frequently-Asked-Questions-about-Catalytic-Capital-FINAL.pdf
- vi Claessens, Stijn, Jon Frost, Grant Turner, and Feng Zhu. "Fintech credit markets around the world: size, drivers and policy issues." BIS Quarterly Review, Sep. 2018. https://www.bis.org/publ/qtrpdf/r_qt1809.pdf
- vii Johnen, Constantin, Martin Parlasca, and Oliver Mußhoff. "Promises and pitfalls of digital credit: Empirical evidence from Kenya." PLoS ONE, Jul. 2021. https://doi.org/10.1371/journal.pone.0255215
- viii Gwer, Francis, Jack Odero, and Edoardo Totolo. "Digital credit and audit report." FSD Kenya, Sep. 2019. http://www.fsdkenya.org/wp-content/uploads/2019/11/19-09-10-Regulation-Digital-credit-audit.pdf

- ix Catalytic Capital Consortium, "Frequently Asked Questions."
- x FSD Kenya, "The Growth of M-Shwari in Kenya – A Market Development Story," Nov. 2016. https://www.fsdkenya.org/wp-content/uploads/2021/aws/Archive%20data%20 FSD/M-Shwari_Briefing-final_digital.pdf-9. pdf?_t=1611135649
- xi MicroSave Consulting, "Making Digital Credit Truly Responsible," PowerPoint Presentation, Sep. 2019. https://www.microsave.net/wp-content/uploads/2019/09/Digital-Credit-Kenya-Final-report.pdf
- xii Ibid.
- xiii Totolo, Edoardo. "Kenya's Digital Credit Revolution Five Years On." CGAP, Mar. 2018. https://www.cgap.org/blog/kenyas-digital-credit-revolution-five-years
- **xiv** Ibid.
- xv Biscaye, Pierre, Kirby Callaway, Melissa
 Greenaway, Daniel Lunchick-Seymour, and
 Max McDonald. "Review of Digital Credit
 Products in India, Kenya, Nigeria, Tanzania,
 and Uganda." University of Washington EPAR
 Technical Report #35la, Apr. 2017. https://
 epar.evans.uw.edu/sites/default/files/
 EPAR_UW_35la_Review%20of%20Digital%20
 Credit%20Products_4.12.17_0.pdf
- xvi Totolo, "Kenya's Digital Credit Revolution."
- xvii Kaffenberger, Michelle. "Digital Credit in Kenya: Time for Celebration or Concern?" CGAP, Oct. 2016. https://www.cgap.org/blog/digital-credit-kenya-time-celebration-or-concern
- xviii Mazer, Rafe and Kate McKee. "Consumer Protection in Digital Credit." CGAP Focus Note No. 108, Aug. 2017. https://www.cgap.

- org/sites/default/files/researches/documents/ Focus-Note-Consumer-Protection-in-digital-Credit-Aug-2017.pdf
- xix Cakebread, Caroline. "You're not alone, no one reads terms of service agreements."
 Business Insider, Nov. 2017. https://www.businessinsider.com/deloitte-study-91-percent-agree-terms-of-service-without-reading-2017-11?r=US&IR=T
- xx Ombija, Sarah and Patrick Chege. "Time to Take Data Privacy Concerns Seriously in Digital Lending." CGAP, Oct. 2016. https://www.cgap.org/blog/time-take-data-privacy-concerns-seriously-digital-lending
- xxi Ibid.
- xxii Zhou, Adelyn. "M-Pawa 1 Year on: Mobile Banking Perceptions, Use in Tanzania." CGAP, Nov. 2015. https://www.cgap.org/blog/m-pawa-1-year-mobile-banking-perceptions-use-tanzania
- xxiii UNCDF, "Three months down the road:
 The story of MoKash in Uganda," Nov.
 2017. https://www.uncdf.org/article/1675/
 three-months-down-the-road-the-story-of-mokash-in-uganda-migration
- xxiv Business Daily Africa, "CBA targets Rwanda M-Shwari entry," Oct. 2016. https://www.businessdailyafrica.com/bd/corporate/companies/cba-targets-rwanda-m-shwari-entry-2127752
- xxv Business Daily Africa, "CBA to launch
 M-Shwari loan service in Ivory Coast
 next year," Nov. 2016. https://www.businessdailyafrica.com/bd/corporate/companies/cba-to-launch-m-shwari-loan-service-in-ivory-coast-next-year-2132604
- xxvi Globe Newswire, "Branch International raises \$70M Series B to Bring World-Class Financial Services to Emerging Markets,"
 Mar. 2018. https://www.globenewswire.com/news-release/2018/03/28/1454819/0/en/Branch-International-Raises-70M-Series-B-to-Bring-World-Class-Financial-Services-to-Emerging-Markets.html
- **xxvii** Swiss Capacity Building Facility (SCBF), "New SCBF Supported Project: AwanTunai

- Collaborates with SayurBox Bringing Access to Affordable Finance for Micro-SME Farmers throughout Indonesia," accessed Mar. 2023. https://scbf.ch/new-scbf-supported-project-awantunai-collaborates-with-sayurbox-bringing-access-to-affordable-finance-for-micro-sme-farmers-throughout-indonesia/
- xxviii CGAP, "Digital Credit in Tanzania: Customer Experiences and Emerging Risks," Jan. 2018. https://www.cgap.org/research/reading-deck/digital-credit-tanzania-customer-experiences-and-emerging-risks
- xxix Reserve Bank of India, "Report of the Working Group on Digital Lending including Lending through Online Platforms and Mobile Apps," Nov. 2021. https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=1189
- the Rise in Fraudulent Fintech Apps."

 Center for Financial Inclusion, Dec. 2020.

 https://www.centerforfinancialinclusion.

 org/combating-the-rise-in-fraudulentfintech-apps; Ruiz, Lucciana Alvarez and
 Edoardo Totolo. "Global Findex 2021:
 Growth, Stagnation, and (Relative) Decline in Global Financial Inclusion." Center for Financial Inclusion, Jul. 2022. https://www.centerforfinancialinclusion.org/global-findex-2021-growth-stagnation-and-relative-decline-in-global-financial-inclusion
- xxxi Totolo, Edoardo, Hemant Baijal,
 Margaret J. Miller, and Delia Buisi
 Dean. "Embedding Digital Finance
 in e-Commerce Platforms during the
 COVID-19 Pandemic." The World Bank,
 Dec. 2020. https://documents.worldbank.
 org/en/publication/documents-reports/
 documentdetail/819411608643348469/
 embedding-digital-finance-in-e-commerceplatforms-during-the-covid-19-pandemic
- xxxii Mondato, "From Ride-Hail to Superapp, by Way of Fintech," Nov. 2020. https://blog.mondato.com/ride-hail-superapp-by-way-of-fintech/
- xxxiii Srinivas, Madhu and Srikara Prasad. "The costs of using Buy Now, Pay Later (BNPL)

- products." Dvara Research, Jul. 2022; updated Nov. 2022. https://www.dvara.com/research/blog/2022/07/07/report-the-costs-of-using-buy-now-pay-later-bnpl-products/
- xxxiv See more details: "Keynote Speaker: Edoardo Totolo." Center for Financial Inclusion video, October 21, 2022. https://www.youtube.com/watch?v=FFIFIvuVo0U
- xxxv Bankless Times, "Lenddo and EFL join forces," Next Billion, Oct. 2017. https://nextbillion.net/news/lenddo-efl-join-forces/
- xxxvi IFC, "IFC \$6 million Seed Investment in Kobo360 Aims to Transform Supply Chain for African Mass-Market Goods," Dec. 2018. https://pressroom.ifc.org/all/pages/ PressDetail.aspx?ID=24772
- xxxvii IFC, "TradeDepot Ser.B, Summary of Investment Information," accessed Mar. 2023. https://disclosures.ifc.org/project-detail/SII/45601/tradedepot-ser-b
- xxxviii IFC, "Twiga Foods, Summary of Investment Information," accessed Mar. 2023. https://disclosures.ifc.org/project-detail/SII/41195/twiga-foods
- xxxix Paul, Binu. "Accel, IFC And Others Invest in B2B Marketplace Moglix's Series C Round." VCCircle, Dec. 2018. https://www.vccircle.com/accel-ifc-and-others-invest-in-b2b-marketplace-moglix-s-series-c-round
- x1 Responsible Business Lending Coalition, "The Small Business Borrowers' Bill of Rights, 2021," accessed Mar. 2023. http://www.borrowersbillofrights.org/bill-of-rights.html
- **xli** MicroSave Consulting, "Making Digital Credit Truly Responsible."
- xlii Totolo, "Kenya's Digital Credit Revolution."
- xliii von Stauffenberg, Damian and Daniel Rozas.

 "Role Reversal Revisited." Marketlinks/
 MicroRate, 2011. https://www.marketlinks.org/sites/default/files/media/file/2020-09/MicroRate-Role-Reversal-Revisited.pdf
- xliv Rozas, Daniel, Deborah Drake, Estelle
 Lahaye, Katharine McKee, and Danielle
 Piskadlo. "The Art of the Responsible Exit
 in Microfinance Equity Sales." CGAP Access

- to Finance Forum, Reports by CGAP and Its Partners, No. 9, Apr. 2014. https://www.cgap.org/sites/default/files/researches/documents/Forum-Art-of-the-Responsible-Exit-April-2014.pdf
- xlv El-Zoghbi, Mayada and Kate Lauer.

 "Facilitating Market Development to Advance
 Financial Inclusion." CGAP Focus Note No.
 89, Oct. 2013. https://www.cgap.org/sites/default/files/researches/documents/Focus-Note-Facilitating-Market-Development-to-Advance-Financial-Inclusion-Oct-2013_1.pdf
- xlvi Magdas, Adriana. "The Three-Legged Stool of Client Protection." Center for Financial Inclusion, Dec. 2012. https://www.centerforfinancialinclusion.org/the-three-legged-stool-of-client-protection
- xlvii Totolo, "Kenya's Digital Credit Revolution."

xlviii Ibid.

- xlix Kafftenberger, Michelle. "Digital Credit in Tanzania: Customer Experiences & Emerging Risks." CGAP PowerPoint Presentation, Jan. 2018. https://www.cgap.org/sites/default/files/publications/slidedeck/Digital_Credit_in_Tanzania_Customer_Experiences_Emerging_Risks.pdf
- 1 Alliance for Financial Inclusion, "Digital Credit Regulation in Tanzania," 2020.

 https://www.afi-global.org/wp-content/uploads/2020/11/AFI_DFS_Tanzania_CS_AW2_05.10.20_digital.pdf
- li Council on Smallholder Agricultural Finance, "CSAF Open Data Portal – Overview," accessed Mar. 2023. https://data.csaf.org/overview
- lii USAID, "Private Sector Engagement Evidence Gap Map," Github, accessed Mar. 2023. https://crcresearch.github.io/usaid-pse-egm/#/egm
- liii NPCI, "Unified Payments Interface (UPI)
 Product Overview," accessed Mar. 2023.
 https://www.npci.org.in/what-we-do/upi/product-overview
- liv O'Neil, Kevin and Nicole Rasul. "Co-Develop: Digital Public Infrastructure for an Equitable Recovery." The Rockefeller Foundation, Aug.

- 2021. https://www.rockefellerfoundation.org/wp-content/uploads/2021/08/Co-Develop-Digital-Public-Infrastructure-for-an-Equitable-Recovery-Full-Report.pdf
- lv MOSIP, accessed Mar. 2023. https://www.mosip.io/
- Ivi Chalwe-Mulenga, Majorie, Eric Duflos, and Gerhard Coetzee. "The Evolution of the Nature and Scale of DFS Consumer Risks: A Review of Evidence." CGAP Reading Deck, Feb. 2022. https://www.cgap.org/research/reading-deck/evolution-nature-and-scale-dfs-consumer-risks-review-evidence
- lvii Latimpacto, accessed Mar. 2023. https://www.latimpacto.org/?lang=en
- Iviii Dvara Research and CGAP, "Workshop Proceedings: A Convening on 'Emerging Customer Risks in Digital Lending in India," Dvara Research, Aug. 2021. https://www.dvara.com/research/wp-content/uploads/2021/08/A-Convening-on-Emerging-Customer-Risks-in-Digital-Lending-in-India.pdf
- lix Oppong, Kwame and Max Mattern. "African Digital Credit Goes West." CGAP, Jan. 2020.

 https://www.cgap.org/blog/african-digital-credit-goes-west

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