

# Fintech Solutions for West African SMEs: Post-Crisis Challenges

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## Abstract

"Catalysts of economic growth worldwide, small and medium enterprises (SMEs) play a pivotal role in fostering job creation, social advancement, and innovation. In Africa, they account for 95% of job providers (World Trade Organization, 2022). Yet, SMEs often face significant hurdles, with limited access to finance being chief among them, especially in the aftermath of financial crises. Traditional banks, hampered by regulatory changes, have scaled back lending to SMEs, paving the way for Financial Technology (Fintech) firms to offer innovative financing solutions.

Utilizing cutting-edge technology and varied business models, Fintech platforms provide SMEs with alternative financing options, including debt and equity financing. This disruption in the financial landscape holds promise for SMEs, liberating them from reliance on traditional banking channels and providing crucial capital for growth and expansion. SMEs can significantly contribute to achieving Sustainable Development Goals (SDGs), such as creating employment, reducing income inequality, and alleviating poverty (OECD, 2017).

The post-crisis era has not only hindered traditional financing avenues but also birthed new alternatives. These non-bank financing options empower SMEs by presenting fresh funding opportunities. While Fintech companies are thriving in developed nations, many developing countries are lagging. Despite the numerous benefits Fintech financing offers to SMEs, certain countries are slow to adopt them, hindering progress.

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**Keywords:** SME, Fintech, Covid 19, Bank, West Africa, Mauritania

## 1. Introduction

Small and medium enterprises (SMEs) represent a pivotal component of any economy given their substantial role in job creation and social advancement, both of which are fundamental drivers of economic growth. Despite their significance, SMEs encounter formidable challenges, particularly in developing nations. Foremost among these challenges is the restricted access to finance, stemming from the stringent lending environment prevalent in traditional banking channels. Regulatory shifts in the banking sector have led to a reduced appetite for exposure to SMEs, exacerbating the hurdles faced by this sector. Nonetheless, this reluctance has spurred the emergence of alternative financing sources, leveraging technological innovations to provide new avenues for entities with limited access to traditional financial products and services.

These alternative financing models, epitomized by Fintech platforms, are expanding financing opportunities for SMEs, affording them flexibility in choosing between debt financing, equity investment, or crowdfunding to fuel their operations. However, a notable constraint lies in the unavailability of alternative financing sources in certain developing countries, where despite their manifold advantages, Fintech solutions remain underdeveloped and underutilized. Consequently, SMEs in these economies remain heavily reliant on the traditional banking sector to secure the necessary funding, underscoring the imperative for broader adoption and integration of Fintech innovations to bolster financial inclusivity and stimulate SME growth worldwide.

## 2. Importance of SMEs for Less Developing Countries in West Africa

Small and medium enterprises (SMEs) play a paramount role in driving economic growth due to their multifaceted contributions. Primarily, SMEs serve as vital engines for job creation and catalysts for social development (Angela, 2011). Duarte (2004) underscores that SMEs not only foster job creation and social

progress but also yield benefits in terms of tax revenue, innovation, and, most significantly, economic advancement.

Illustrating the profound significance of SMEs, they represent up to 90 percent of businesses globally and generate between 50 to 60 percent of total employment opportunities (Robu and Savlovschi, 2011). Indeed, SMEs comprise approximately 99 percent of all enterprises, with over 60 percent of new job opportunities emanating from this sector (Robu and Savlovschi, 2011). Furthermore, SMEs contribute substantially to GDP growth by augmenting the overall output of the economy (Dalberg Global Development Advisors, 2011).

Additionally, SMEs play a pivotal role in fostering income equality and poverty alleviation by creating employment opportunities and enhancing living standards (Raynard and Forstater, 2002; Al Berry, 2001). Policy initiatives aimed at bolstering the SME sector directly align with poverty reduction objectives by fostering job creation and enhancing income distribution (Raynard and Forstater, 2002; Al Berry, 2001).

Despite their pivotal role, SMEs encounter numerous obstacles, particularly in developing economies, hindering their creation and growth potential (Thorsten et al., 2008). Recognizing the profound social and economic benefits associated with SMEs, policymakers are actively addressing barriers impeding their establishment and expansion. Chief among these barriers is the constrained access to finance, which poses a significant impediment to SME creation and expansion.

### 3. SME Financing Need in the region

Despite their significant contribution toward the economy, SME sector financing needs in Mauritania reflect the broader challenges faced by small and medium enterprises across the globe, compounded by the unique economic and developmental context of the country. Here are some key points regarding SME financing needs in Mauritania:

**Limited Access to Finance:** SMEs in Mauritania often struggle to access financing from traditional banking institutions. Banks may be hesitant to lend to SMEs due to perceived risks, lack of collateral, and stringent lending criteria. This limited access to finance hampers the growth and development of SMEs in the country.

**High Interest Rates:** Even when SMEs manage to secure financing, they often face high interest rates, which can significantly increase the cost of borrowing and impact profitability. The high cost of credit further exacerbates the challenges faced by SMEs in Mauritania.

**Inadequate Financial Infrastructure:** Mauritania's financial infrastructure may be inadequate to support the needs of SMEs. Limited access to banking services, including digital banking solutions, and underdeveloped capital markets restrict SMEs' ability to raise funds and manage their finances effectively.

**Government Support:** While the Mauritanian government recognizes the importance of SMEs for economic development, there may be a lack of comprehensive policies and initiatives aimed at addressing the specific financing needs of SMEs. Without adequate government support, SMEs may struggle to access the resources and assistance needed to grow and thrive.

**Potential for Alternative Financing Solutions:** Despite the challenges, there is potential for alternative financing solutions to address the SME financing gap in Mauritania. Fintech innovations, microfinance institutions, and peer-to-peer lending platforms present opportunities to expand access to finance for SMEs, particularly those in underserved areas or sectors.

As highlighted by (Yao Wang, 2016; Sharma and Gounder, 2012), limited access to finance stands out as a significant barrier to SME development and growth. Insufficient funds hamper SMEs' ability to undertake a full range of activities, thereby constraining their growth potential (Angela, 2011). Historically, small businesses have relied on funding from friends, family, and personal savings to kick-start operations. However, while these sources may suffice for initial phases, they often fall short in financing sustained growth. Consequently, SMEs frequently turn to the banking sector for financing both operational and investment activities.

In the aftermath of the 2007-2008 financial crisis, banks have become increasingly hesitant to extend loans to certain sectors and client groups, particularly SMEs. Heightened regulation and increased capital costs have compounded difficulties in accessing traditional lending channels (World Economic Forum, 2005). Banks, wary of heightened risk profiles, now impose higher fees and interest rates on loans to mitigate potential risks associated with SME financing.

### **3.1. Characteristics of SME Sector for Potential Financing**

According to (Abdi, 2019), Banks in Mauritania like their counterparts in the region exhibit a preference for larger companies over SMEs, particularly start-up firms, due to the distinct characteristics of small and medium enterprises that deter banks from providing financing. As elucidated by Vasilescu (2014), these characteristics include:

- a. Weaker financial structure or lower capitalization
- b. Low level of diversification
- c. Low or non-existing credit ratings
- d. Heavy reliance on credit to finance activities
- e. Limited financing options and restricted access to financial markets
- f. Inadequate collateral or absence thereof
- g. Higher transaction costs

These features of SMEs contribute to banks' reluctance to finance this sector. The high costs associated with servicing small businesses, particularly considering the relatively smaller loan amounts required by SMEs, often render such endeavors economically unviable for banks. Additionally, the perceived high riskiness of SMEs, stemming from factors like lack of collateral and financing options, further dissuades banks from extending funding to this sector.

Moreover, informational asymmetries between SMEs and banks exacerbate the issue, with small business owners sometimes withholding pertinent information during borrowing processes. Thorsten et al. (2008) highlight that banks exhibit lower exposure to SMEs due to higher levels of non-performing loans and often charge higher interest rates and fees for loans provided to SMEs, reflecting the perceived riskiness of this sector.

Despite these challenges, SMEs possess characteristics that make them attractive for funding, including operating in highly profitable environments and exhibiting significant growth potential. However, banks' aversion to financing SMEs has only intensified post-2007/08 financial crisis due to regulatory changes, such as increased capital requirements under Basel III, which augment the cost of capital for banks when providing riskier financing.

Given the critical role of SMEs in the economy and the limited access to finance from traditional banking channels, the emergence of alternative financing sources becomes imperative. Non-bank financing firms have seized this opportunity, offering funding solutions for the SME sector to address the constraints imposed by traditional banking practices and regulatory changes.

## **4. Fintech Financing Opportunities for SMEs in west africa**

West Africans SMEs face significant challenges in accessing financing, especially in the aftermath of financial crises. The limited availability of finance hampers the growth and development of small and medium enterprises (SMEs) in the country (Mohamed & Mohamed, 2019). However, there are opportunities for improvement, particularly through the adoption of Fintech solutions.

Several studies and reports have explored various aspects of SME financing and Fintech innovation in Mauritania. (Bilal, 2020). These works analyze the challenges faced by SMEs in accessing finance and propose potential solutions to address these obstacles. Additionally, they investigate the role of Fintech in enhancing SME access to finance and promoting financial inclusion in the country.

Key areas of focus include the impact of Fintech on SMEs, the role of microfinance institutions, comparative analyses of financing options, and case studies examining Mauritania's financial landscape. These studies aim to provide insights into the opportunities and challenges associated with Fintech adoption

and its implications for SME growth and development in Mauritania and the broader West African region (Didi, 2019).

The financial crisis had a dual impact on SME financing opportunities, manifesting both negative and positive effects. While it led to increased regulation and financing costs for the banking sector, it also catalyzed the emergence of new and innovative financing models. Despite its adverse effects on traditional SME financing channels, the crisis fostered an environment conducive to the development of innovative funding channels. (Cheikh & Salem, 2018).

The obstacles encountered by SMEs in securing financing spurred the creation of new business models for offering financial products (World Economic Forum, 2005). These innovative financing alternatives have largely emerged within the Fintech sector, where companies leverage changes in risk assessment techniques and funding sources to enhance SME financing accessibility.

According to the World Economic Forum (2015), the potential of new Fintech financing alternatives for SMEs is vast, given their efficient business models tailored to the low-scale financing needs that banks often eschew. These new financing models effectively bridge the financing gap for SMEs, utilizing technological innovations across various financing platforms.

Table 1: Overview of online alternative financing models

Alternative financing models	Definition
Marketplace/P2P lending Consumer	Individuals or institutional funders provide a loan to a consumer borrower
Balance Sheet Lending Consumer	The platform entity provides a loan directly to a consumer borrower
Market place P2P Business Lending	Individuals or institutional funders provide a loan to a business borrower
Balance Sheet Business Lending	The platform entity provides a loan directly to a business borrower
Market place P2P Real Estate Lending	Individuals or institutional funders provide a loan secured against property to a consumer or business borrower
Real Estate Crowdfunding	Individuals or institutional funders provide equity or subordinated-debt financing for real estate
Invoice Trading	Individuals or institutional funders purchase invoices or receivable notes from a business (at a discount)
Equity Based Crowd Funding	Individuals or institutional funders purchase equity issued by a company.
Reward Based Crowdfunding	Backers provide finance to individuals, projects or companies in exchange for non-monetary rewards or products.
Donation based Crowdfunding	Donors provide funding to individuals, projects or companies based on philanthropic or civic motivations with no expectation of monetary or material return.

Crowdfunding and peer-to-peer lending (P2P) platforms represent basic forms of alternative financing models with additional variations depending on specific financing and funding models (Wardrop et al., 2016). The advent of these diverse financing platforms signifies a paradigm shift in SME financing, offering unprecedented opportunities for small businesses to access the capital they need to thrive and grow.

Some of the most common alternative financing models as defined by Wardrop et al. (2016) is presented in table 1. These alternative financing models differ in terms of the financing sources and/or the funds disbursement model, as well as the market they serve.

Raji (2021) asserts that some of the key Fintech credit innovations in Africa include:

- a. Scoretechs: these are credit scoring platforms which allow for easier credit risk assessment of African SMEs.
- b. Invoicetechs: these involve digital invoice trading platforms for African SME working capital needs
- c. Lending aggregators: these are Fintech platforms which enable customers to compare loans across banks
- d. Telco-based lenders: these are Fintech platforms which depend on data from mobile money transactions to make loans to African SMEs.
- e. Pay as you go (PAYG): these are Fintech platforms which leverage on the assets being financed as collateral.
- f. Peer-to-peer platforms: these Fintech platforms match African SMEs with lenders.

### 5. Alternative Financing Models

Individuals or institutional funders provide a loan to a consumer borrower. The platform entity provides a loan directly to a consumer borrower individuals or institutional funders provide a loan to a business borrower. The platform entity provides a loan directly to a business borrower.

Marketplace/P2P real estate lending	Individuals or institutional funders provide a loan secured against property to a consumer or business borrower
Real estate crowdfunding	Individuals or institutional funders provide equity or subordinated-debt financing for real estate
Invoice trading	Individuals or institutional funders purchase invoices or receivable notes from a business (at a discount)

Equity-based Crowdfunding Individuals or institutional funders purchase equity issued by a company.

Reward-based Crowdfunding	Backers provide finance to individuals, projects or companies in exchange for non-monetary rewards or products.
Donation-based Crowdfunding	Donors provide funding to individuals, projects or companies based on philanthropic or civic motivations with no expectation of monetary or material return.

Source: Wardrop et al. (2016) “Breaking New Grounds – the Americas alternative finance benchmark report”, Cambridge Centre for Alternative Financing, pp.30.

Exploring various alternative models, SMEs have the flexibility to finance their activities in their preferred manner through Fintech platforms. These platforms offer options for debt financing, equity financing, and even crowdfunding, providing SMEs access to funds from individual or institutional funders. It's important to note that while Fintech platforms represent some of the basic non-banking financing models leveraging technological innovations, other models also exist. For instance, Baeck et al. (2014) highlight community shares and pension-led funding as additional financing alternatives. The Fintech industry, characterized by its high level of innovation, continually generates new alternative sources of financing, expanding the repertoire of options available to SMEs.

According to Temelkov and Samonikov (2018), it has been noted that there has been an increase in regulation and cost of financing for the banking industry. At the same time, this has created an enabling environment for new and innovative financing models to develop. So while the financial crisis adverse has effect on the conventional financing channels of SME in developing countries, it also provide grounds for the development of funding channels that are innovative. The obstacles SMEs in developing countries faced with regards to financing have opened up opportunities for the development of new business models concerning the offer of financial products (World Economic Forum, 2005, pp3.). These novel and innovative financing alternatives have all been explored within the Fintech aspect. Fintech firms are expanding the SME financing alternatives availability due to changes in the risk assessment strategies and funding sources.

## **6. Benefits From E-Wallet Financing Alternatives for West African Economies**

Initially neglected by banks, online financing alternatives have emerged as major disruptors in the financial sector, particularly in banking, attracting attention and gaining popularity among customers and potential investors. For example, Wardrop et al. (2016) report that the peer-to-peer consumer lending model accrued over \$25 billion in 2015 in the Americas, outpacing the balance sheet consumer lending segment, which accrued just over \$3 billion.

The need for new financing alternatives is evident, especially in emerging countries where SMEs face limited access to finance. The creation of non-bank financing alternatives in developing markets presents new opportunities for both borrowers and investors. When considering the benefits of alternative financing sources, it's crucial to consider both sides: borrowers (SMEs) and investors (entities looking to save or invest funds).

One major benefit for SMEs from the Fintech sector is improved access to finance, which removes a significant obstacle to SME growth. Additionally, Fintech platforms decrease transaction and service costs for smaller loans, providing justification for lending to SMEs - a factor not always seen with banks' service costs. Moreover, these platforms reduce search costs for borrowers by bringing all investors to one place, making it easier for SMEs to find willing investors for their start-up or growth plans.

One reason why banks often hesitate to lend funds to SMEs is due to the lack of adequate information, which makes the assessment process costly and often unjustified for the smaller loans demanded by SMEs. Fintech financing alternatives address this issue by employing credit scoring methods that lower assessment costs, enabling lenders to provide smaller loans to SMEs. It is also noteworthy that SMEs benefit from a simplified and less costly application process through online applications.

On the other hand, investors also reap benefits from these alternative lending sources. With decreasing interest rates, certain instruments offer very low returns, prompting investors to seek more profitable investments. The emergence of Fintech platforms facilitates this search by offering lower operating costs and higher-risk borrowers, enabling investors to earn higher returns without hindering SMEs' growth potential. Additionally, Fintech platforms allow for risk dispersion among investors through portfolio diversification. By financing the activities of different SMEs with fractions of their funds, investors mitigate the impact of borrower defaults, ensuring that the loss is spread among multiple investors rather than borne entirely by one.

## **7. Risks and Challenges of Fintech in West African Economies**

Despite the numerous benefits of Fintech financing sources, there are also associated risks. According to the West African Economic and Monetary Union (2023); and Bowmans (2017), there are several risks associated with Fintech financing platforms that should be noted:

- a. Limited protection of investors: Investors may have inadequate safeguards in place to protect their investments.
- b. Providing funding for unreliable borrowers: Fintech platforms may inadvertently provide funding to borrowers with unreliable credit histories or questionable financial backgrounds.

- c. The possibility of systematic risk: Insufficient regulation of the Fintech sector could lead to systemic risks within the financial system.

Moreover, Fintech platforms pose certain risks for SMEs as well. Due to lower regulation, there is a heightened risk of intellectual property theft, where product or service ideas could be easily stolen. Additionally, depending on the type of financing sources utilized by Fintech platforms, SMEs may attract non-professional investors, particularly in equity financing platforms, which could lead to suboptimal outcomes.

Despite these risks, one of the primary benefits of alternative financing sources for SMEs, particularly in developing countries, is increased access to finance. As highlighted by Buckley and Webster (2016), these new financing sources offer the unbanked sector the opportunity to access much-needed funds for working capital, investment capital, and other essential needs.

However, it's important to note that despite the benefits of non-bank alternative financing for SME activities, some developing economies still lag behind in adopting new technological trends. In certain economies, the potential benefits of Fintech platforms have not yet been fully recognized or embraced. Therefore, while Fintech presents opportunities for SMEs, careful consideration of associated risks and regulatory frameworks is necessary to ensure their effective and sustainable implementation.

## 8. Conclusion

The integration of Fintech alternatives for SME financing in Mauritania and in all the region of West Africa, holds immense potential to catalyze economic growth and foster sustainable development in the country. By leveraging innovative financial technologies, such as peer-to-peer lending platforms, crowdfunding, and digital banking solutions, Mauritania can address the pressing challenges faced by SMEs in accessing traditional financing channels. These Fintech solutions offer opportunities to democratize access to finance, empower entrepreneurs, and stimulate entrepreneurial activity across various sectors of the economy. Moreover, by promoting financial inclusion and supporting the growth of SMEs, Mauritania can unlock new pathways for job creation, enhance productivity, and drive overall economic prosperity data unequivocally underscores the vital role of SMEs in driving economic growth. SMEs contribute significantly to job creation, social development, income distribution, higher tax revenues, and innovation. Given these substantial benefits, it becomes imperative to address any barriers hindering the establishment and expansion of small and medium enterprises.

One such formidable obstacle is the limited access to finance, a challenge exacerbated by the aftermath of the recent financial crisis. Regulatory changes following the crisis have prompted banks to curtail their exposure to the SME sector, thereby creating an opening for new financing channels to enter the market. These emerging players, characterized by innovative business models infused with the latest technology, are known as Fintech firms. They offer SMEs alternative financing sources such as debt financing, equity financing, and more, catering to diverse types of investors including both individual and institutional.

Given the pivotal role SMEs play in economic development, it is imperative for developing economies to prioritize Fintech platforms. Providing SMEs with alternative financing channels diminishes their reliance on the banking sector, which has become increasingly conservative in its lending practices. Regrettably, many developing nations have yet to implement policies and procedures aimed at fostering the creation and promotion of Fintech platforms, potentially hindering SME growth and economic advancement.

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