EVALUATING THE EFFECTIVENESS OF FINTECH TECHNOLOGIES AND DIGITAL LENDING PLATFORMS IN FINANCING SMALL AND MEDIUM ENTERPRISES

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ARTICLE INFORMATION

ARTICLE HISTORY:
Received: 09.02.2026
Revised: 10.02.2026
Accepted: 11.02.2026

KEYWORDS:
small and medium-sized enterprises, fintech, digital lending, alternative finance, online platforms, financial inclusion, credit scoring, SME financing, financial technologies, investment efficiency

ANNOTATION

This article examines the role of fintech technologies and digital lending platforms in improving access to finance for small and medium-sized enterprises. The study analyzes the main features of technology-based lending models, their advantages over traditional bank financing, and their impact on reducing transaction costs and simplifying credit procedures. Particular attention is given to the use of alternative data, automated credit scoring, and online platforms that enable faster and more flexible financing for small businesses. The paper also evaluates the economic effectiveness of digital lending in terms of financial inclusion, investment activity, and business sustainability. In addition, existing challenges related to credit risk, data protection, and regulatory issues are discussed. Based on the analysis, practical recommendations are proposed to enhance the development and effective use of fintech solutions in SME financing.

Introduction. Small and medium-sized enterprises (SMEs) are widely recognized as one of the main drivers of economic growth, employment, and innovation. In most economies, they constitute the largest share of business entities and make a substantial contribution to gross domestic product and job creation. At the same time, limited access to finance remains one of the most serious obstacles to their stable development. Many small firms struggle to obtain bank loans due to strict collateral requirements, high interest rates, and lengthy approval procedures. As a result, promising business initiatives are often delayed or never implemented.

Recent developments in digital technologies have begun to change this situation. The rapid expansion of financial technologies (fintech) has introduced new forms of lending that are faster, more flexible, and more accessible for small businesses. Digital lending platforms

use online applications, automated decision-making systems, and alternative data sources to assess borrowers' creditworthiness. This approach reduces transaction costs and allows financing to be provided within a much shorter time compared to traditional banking services.

The experience of platforms such as LendingClub, Funding Circle, and Kabbage shows that technology-based lending models can significantly expand access to capital for SMEs. By connecting borrowers directly with investors or by applying automated credit scoring systems, these platforms simplify procedures and make financing available even for businesses with limited credit history.

Nevertheless, the growing role of fintech in SME financing also raises several concerns. Questions related to credit risk, data protection, regulatory compliance, and the long-term sustainability of digital lenders remain open. Therefore, it is important not only to highlight the advantages of fintech solutions but also to assess their actual effectiveness and limitations in practice.

Against this background, this article examines the effectiveness of fintech technologies and digital lending platforms in financing small and medium enterprises. The study focuses on their economic benefits, operational features, and their role in improving access to finance, while also identifying existing challenges and possible directions for further development.

Literature Review. The issue of access to finance for small and medium-sized enterprises (SMEs) has long attracted the attention of economists and financial researchers. Early studies mainly focused on the limitations of traditional bank lending and the presence of information asymmetry between lenders and small firms. In this context, Joseph Stiglitz and Andrew Weiss explained that credit rationing occurs when banks are unable to accurately assess borrower risk, which leads to stricter lending conditions and the exclusion of many small businesses from formal financial markets. Their theoretical framework laid the foundation for later research on alternative financing mechanisms [1].

With the development of digital technologies, the focus of research gradually shifted toward fintech and online lending models. Ajay Agrawal, Christian Catalini, and Avi Goldfarb argue that digital platforms reduce transaction costs and mitigate information asymmetry by using data-driven tools and online interactions. According to their findings, technology-based finance expands market participation and improves capital allocation efficiency, particularly for small and young firms [2].

Empirical evidence on digital and peer-to-peer lending has been widely discussed by Douglas Cumming and Lars Hornuf, who analyzed the behavior of investors and borrowers on fintech platforms. Their research shows that online lending systems increase funding opportunities for SMEs that are often underserved by banks, while also introducing new forms of risk related to platform reliability and borrower default. The authors emphasize the

importance of proper regulation and transparency to ensure sustainable market development [3].

The operational aspects of crowdfunding and online financing platforms have also been examined by Ethan Mollick, whose studies demonstrate that digital finance not only provides funding but also serves as a market validation tool. Although his work mainly addresses crowdfunding, the findings are relevant for digital lending, as both models rely on online networks, trust, and information disclosure [4].

In addition, research on alternative credit scoring has shown that fintech lenders use non-traditional data sources—such as transaction histories, online behavior, and real-time cash flows—to assess creditworthiness. Scholars note that these methods can improve risk assessment accuracy and allow financing for businesses without formal credit records. At the same time, concerns remain regarding data privacy, algorithmic bias, and regulatory oversight.

Main Part. The rapid development of financial technologies has significantly transformed the way small and medium-sized enterprises obtain external financing. Unlike traditional banks, which rely on lengthy procedures and standardized risk assessment models, fintech companies apply digital tools that simplify and accelerate the lending process. As a result, access to capital has become easier, especially for small firms that previously faced difficulties in meeting strict collateral and documentation requirements.

One of the key features of digital lending is the automation of the entire credit cycle. Loan applications are submitted online, borrower information is processed automatically, and decisions are often made within hours or days rather than weeks. Platforms such as LendingClub, Funding Circle, and Kabbage demonstrate how technology can replace many traditional banking operations. By using algorithms and digital scoring systems, these platforms evaluate credit risk more quickly and at lower operational costs.

From an economic perspective, fintech lending reduces several barriers that typically restrict SME financing. First, transaction costs decline because most processes are conducted electronically, which eliminates the need for physical branches and extensive paperwork. Second, alternative data sources—such as online sales records, payment histories, and real-time cash flows—allow lenders to assess firms that lack formal credit histories. Third, competition between digital platforms leads to more flexible loan terms and often lower interest rates for borrowers.

Digital lending also improves financial inclusion. Many micro and small enterprises operating in remote or underserved regions have limited access to bank branches. Online platforms overcome geographical constraints by providing services through the internet and mobile applications. Consequently, entrepreneurs can apply for funding regardless of their location, which contributes to broader participation in economic activity.

In addition, fintech technologies create advantages not only for borrowers but also for investors and lenders. Automated systems enhance risk diversification by distributing funds among multiple borrowers, while data analytics improve portfolio management. This increases transparency and allows more efficient allocation of financial resources within the economy. In this sense, digital lending platforms contribute to the modernization of the entire financial system.

However, despite these benefits, several challenges remain. The simplified procedures of online lending may increase default risks if credit assessments are not sufficiently accurate. Dependence on algorithms raises concerns about data security and potential biases in decision-making. Moreover, insufficient regulation can expose both borrowers and investors to fraud or platform failures. Therefore, the effectiveness of fintech financing depends not only on technology itself but also on appropriate legal frameworks and supervision.

Conclusion. The analysis conducted in this study shows that fintech technologies and digital lending platforms have become an increasingly important source of financing for small and medium-sized enterprises. By simplifying application procedures, reducing transaction costs, and accelerating credit decisions, digital finance has helped address some of the long-standing barriers that SMEs face in accessing traditional bank loans. As a result, many small businesses that were previously excluded from formal financial markets are now able to obtain external funding to support their operations and growth.

The findings also indicate that digital lending platforms contribute to greater financial inclusion by expanding access to capital across different regions and business sizes. The use of alternative data and automated credit assessment allows lenders to evaluate firms with limited credit histories more effectively, while increased competition among fintech providers leads to more flexible loan conditions. These factors enhance the overall efficiency of capital allocation and support entrepreneurial activity.

At the same time, the study highlights that the effectiveness of fintech-based financing is closely linked to the management of associated risks. Issues related to credit quality, data protection, algorithmic transparency, and regulatory oversight remain critical challenges. Without adequate supervision and robust risk management frameworks, the rapid expansion of digital lending may increase financial instability and undermine trust in fintech solutions.

In conclusion, fintech technologies and digital lending platforms have strong potential to support sustainable SME development by improving access to finance and modernizing the financial system. To fully realize this potential, policymakers and financial institutions should focus on developing appropriate regulatory frameworks, strengthening consumer and investor protection, and promoting digital and financial literacy among entrepreneurs. Under these conditions, digital finance can play a key role in enhancing the competitiveness and resilience of small and medium-sized enterprises.

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