



## Empirical Analysis of the Relationship between Fintech Services and SMEs' Access to Finance in Jordan

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### Abstract

*Small and medium-sized businesses (SMEs) are essential contributors to Jordan's economic development and job creation. For many SMEs in the nation, access to financing has been a recurring problem. Digital lending platforms and other fintech services have made alternate funding choices for SMEs available. This empirical study attempts to look into the connection between Jordanian SMEs' access to financing and fintech services. A total of 150 questionnaires were individually delivered to SMEs in Jordan using a purposeful sample method for this cross-sectional study, which was conducted. Using PLS-SEM (PLS 4.0) statistical software, data were examined to determine the effect of fintech services on their access to financing. The study's findings showed a strong correlation between using fintech services and SMEs' ability to acquire financing in Jordan. According to the report, SMEs who utilize fintech services are more likely to be able to receive financing than those that do not. The results of this study will help to clarify how fintech services might increase SMEs' access to financing in Jordan and will educate policymakers and stakeholders about the possible advantages and drawbacks of using fintech services.*

**Keywords:** Fintech Services, SME, Access to Finance, P2P lending platforms.

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### Introduction

Small and medium-sized businesses (SMEs) are well-known for being important forces behind economic growth and for expanding a nation's economy. In both rich and developing nations, the SME sector is a key driver of economic growth and acts as a tool for economic recovery (Herath & Mahmood, 2013, 2014). SMEs play a significant role in economic growth in most nations since they create the majority of jobs and make up the majority of business companies. Therefore, it is impossible to overestimate the contribution that SMEs make to the expansion and advancement of any nation's economy. A sound SME sector is critical for promoting long-term economic growth through wealth creation, job creation, and poverty reduction. More business alternatives that can contribute to long-term economic growth and produce income are offered by

the SME sector. Improved access to infrastructure, more economic activity, and a higher standard of life may all be achieved through expanding output and the development of entrepreneurial skills (Gbandi & Amissah, 2014; Shamsudeen, Keat & Hassan, 2016). Business experts, practitioners, governments, and international organizations are increasingly concerned about the performance of SMEs. SMEs are responsible for the majority of business-related activity in many nations, and they are seen as important contributors to exports and the creation of jobs (Shamsudeen, Imam, & Bello, 2017).

Admittance to financing, then again, has demonstrated to be a significant hindrance for some SMEs in the country, with conventional banks forcing thorough impediments and long credit application systems (Rusadi, and Benuf, 2020). Jordan's small and medium-sized business owners face two significant barriers to expansion: inadequate funding for operations and inadequate initial capital (Zighan, 2021). According to Harvey, Santoro, and Ramachandran (2021) and Philippon (2015), Traditional financial institutions, also known as depository institutions, have not been able to effectively offer financial services to customers of varying sizes, demographics, and locations. These issues may impede Jordan's economic progress by stifling the expansion of small and medium-sized enterprises (SMEs). Fintech services like digital lending platforms have emerged as an alternative means of financing Jordanian small and medium-sized businesses. According to Bollaert, Lopez-de-Silanes, & Schwienbacher (2021), these platforms use technology and data-driven methods to streamline loan applications and evaluate creditworthiness, potentially closing the funding gap for SMEs. Vigne, Karim, Naz, and Naem, 2022).

However, there is a lack of empirical research on the impact of fintech services on the availability of loans to SMEs in Jordan. Thus, the objective of this paper is to overcome that issue by investigating the connection between fintech administrations and SMEs' admittance to back in Jordan, assessing the effect of fintech administrations on SMEs' capacity to gain financing, and tending to expected open doors and difficulties.

## **Literature Review**

The literature on fintech services and SMEs' access to finance indicates that these services can increase SMEs' funding accessibility. Peer-to-peer lending platforms, for example, have been shown in previous research to increase SMEs' access to financing. Fintech services, for instance, have been shown to address some of the difficulties that SMEs face when seeking financing from traditional banks (Bavoso, 2020; Ba Knewtson, and Rosenbaum, 2020; Kong, and Loubere, 2021). Further studies (Fenwick, McCahery, & Vermeulen, 2018; 2019, Chen, Liu, and Li; Vuini, 2020), fintech services can help SMEs manage their finances more effectively by offering competitive interest rates, flexible loan terms, and increased transparency in the loan process. Concerns about regulatory oversight, data privacy, and the possibility of bias in credit scoring models (Langenbucher & Corcoran, 2021; Remolina, 2022), fintech services may provide risks

and challenges. Furthermore, several studies indicate that fintech services may enhance SMEs' access to financing through a variety of techniques. First, alternative funding sources outside of traditional banks are made available by fintech services. Peer-to-peer (P2P) lending platforms, crowdfunding platforms, and digital payment systems are some examples. These alternate finance options can expand the financing options available to SMEs, especially for those who have trouble obtaining financing from conventional banks (Al-Ajlouni, Al-Hakim, & Suliaman, 2018; Najaf, Subramaniam, & Atayah, 2022). Second, fintech services can speed up the loan application procedure, enabling SMEs to apply for loans faster and more easily and to get loan offers from several investors at once (Berg, Fuster, & Puri, 2022). Third, in order to solve the issue of SMEs' limited credit histories, fintech services can make use of alternative data sources and credit scoring models in addition to standard credit scoring techniques to evaluate SMEs' creditworthiness. Fourth, fintech services may provide flexible loan periods and low interest rates, making financing more accessible and adapted to the needs of SMEs (Yeyouomo, Asongu, & Agyemang-Mintah, 2023; Kurniasari, Gunardi, Putri, & Firmansyah, 2021).

### **Is Fintech facilitating SMEs' access to credit in Jordan?**

Yes, fintech services have made it easier for SMEs in Jordan to acquire financing. Peer-to-peer (P2P) lending platforms and other fintech services have given SMEs in Jordan additional funding choices, solving some of the difficulties they may have when trying to obtain financing from conventional banks.

By diversifying their funding sources, fintech services have significantly facilitated SMEs' access to capital in Jordan. Traditional banks could have tight guidelines for SMEs seeking finance, including requirements for a solid credit history, collateral, and laborious loan application processes. A pool of investors prepared to lend money to SMEs based on their company strategy, financials, and funding needs is available through fintech services, including P2P lending platforms. The likelihood of SMEs acquiring finance to assist their company growth is increased by the diversification of funding sources, especially for those SMEs who could have trouble securing financing from conventional banks (Lukonga, 2021).

Additionally, Jordanian SMEs' loan application procedure has been enhanced by fintech services. The procedure of applying for a loan is quick and simple on digital lending platforms, including P2P lending platforms (Al-Naimi, & Yousef, 2021). SMEs may apply for loans and receive bids from a number of investors quickly, saving time and effort compared to traditional banks, which can need drawn-out loan application processes. Due to the shortened procedure, SMEs may access cash more quickly, allowing them to take advantage of business opportunities and meet their finance needs more quickly.

Fintech solutions have also addressed the problem of Jordanian SMEs' short credit histories. Small businesses with little or no credit history may find it difficult to obtain financing from traditional banks because of this (Al-Naimi, & Yousef, 2021). P2P lending platforms and other

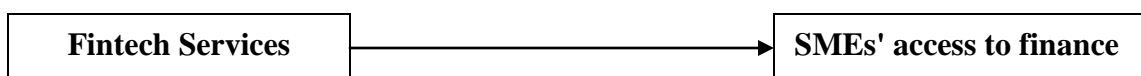
fintech firms use different data sources and credit scoring models in addition to more conventional techniques to evaluate the creditworthiness of SMEs (Lukonga, 2021). This gives SMEs with poor credit histories the chance to obtain funding that may not have been available through conventional banks, increasing their access to capital.

For SMEs in Jordan, fintech services have also provided competitive interest rates (Al-Dmour, et al., 2020). P2P lending platforms and other digital lending platforms sometimes have cheaper operating expenses than traditional banks since they don't have physical branches and rely on automated procedures instead. This enables them to provide loans to SMEs at interest rates that are competitive, making finance more accessible for SMEs. These attractive interest rates are advantageous for SMEs since they may reduce their borrowing costs and enhance their total cash flows. Fintech services have also given SMEs in Jordan flexibility in financing conditions. P2P lending platforms and other digital lending platforms frequently provide flexibility in loan amounts, payback terms, and interest rates, enabling SMEs to select credit conditions that are appropriate for their company's requirements. Due to their ability to control their cash flow cycles and specific requirements, SMEs may better manage their finances thanks to this flexibility (Alsmadi et al., 2022).

Fintech firms have extraordinarily smoothed out the advance application process for Jordanian SMEs. Digital lending platforms and peer-to-peer lending services in general offer comprehensive information regarding loan offers, including interest rates, repayment terms, and fees. Small and medium-sized businesses (SMEs) are able to make informed decisions and are aware of the loan's costs thanks to this transparency.

By providing additional funding sources, streamlining the loan application process, addressing a lack of credit history, offering competitive interest rates, flexibility in loan terms, and increasing transparency, fintech services like P2P lending platforms have generally improved SMEs' access to finance in Jordan. These improvements have helped the accessibility, viability, and moderateness of money for SMEs, permitting them to develop their organizations and invigorate the economy.

At long last, it was found through the previously mentioned writing that fintech, or monetary innovation, has been definitely adjusting the monetary administrations area from one side of the planet to the other, including Jordan. Fintech services have made it easier for Jordanian SMEs (small and medium-sized enterprises) to obtain funding. Historically, SMEs in Jordan have had difficulty finding reasonable and timely financing. Therefore, as shown in Fig. 1 below, this paper constructed a theoretical framework:



**Figure 1:** *Research Framework*

The researcher provided the following proposition based on the conceptual framework:

H1: Fintech services boost SMEs' access to credit in Jordan significantly.

## **Methodology**

This empirical study examined the connection between “fintech services” and “SMEs' access to credit” in Jordan using quantitative research techniques. A structured questionnaire survey was used to obtain data from 150 owner/managers of SMEs in Jordan. The survey asked questions on the SMEs' funding sources, loan application procedures, loan terms, and other pertinent factors. By focusing on SMEs that have utilized fintech services, such as digital lending platforms, as a source of finance, the sample was chosen using a purposive sampling approach. PLS-SEM (PLS 4.0) was used for data analysis to explore the relationships between the theoretical model's components.

## **Empirical Estimation Model**

$$\text{“SMEs AF} = \beta_0 + \beta_1 \text{ Fintech} + \mathcal{E}\text{”}$$

Where:  $\beta_0$  = “Constant (Intercept)”

$\beta_1$  = “Coefficient of Fintech”

$\mathcal{E}$  = “Standard error of estimate”

## **Analysis and Findings**

The constructs' validity and reliability were first tested using Smart PLS 4.0. Chin (1998) used a two-step “method measurement” and “structural measure” while examining the model incorporating “Fintech Services” and “SMEs' Access to credit”.

## **Assessment of Measurement Model**

Prior to determining the measurement's level of quality, the “measurement model's” objective is to sort the data by confirming the constructs' dependability and correctness. The researcher assesses the data by “indicator reliability,” and considers a threshold of 0.4 to be adequate. Furthermore, the “internal consistency” is evaluated using “composite reliability,” and a score of 0.7 is considered suitable. The “convergent validity” is assessed using the “average variance extracted,” which, according to Chin (1998), should be 0.5 or above. Factor loading is utilized for “discriminant validity,” and according to Chin (1998) and Hair (2010), any item having a greater loading on a different concept should be eliminated. As a result, the modified goods used

in this study may be considered trustworthy, as none of the items had a dependability score of less than 0.4.

Hair, Ringle, and Sarstedt (2011) guarantee that every one of the parts have stacked into their separate develops with values going from 0.557 to 0.831, which is considered OK since they are more than the trim off worth of 0.4. Hair and co. 2011) guarantee that the composite unwavering quality is additionally inside the satisfactory reach, with values somewhere in the range of 0.781 and 0.826, which are higher than the suggested degree of 0.7. The AVE was used to test convergent validity, and the results ranged from 0.544 to 0.548, which was higher than the minimum cut-off point of 0.5 suggested by Hair et al. (2011).

In order to prove “discriminant validity”, the “correlation squared” of the relevant variables for the connected constructs was compared to the AVE, demonstrating proper discriminant validity. Table 1 displays the factor loading, while Table 2 displays the “discriminant validity”.

Table 1: Factor Loading

Construct	Items	Factor Loadings	Composite Reliability	AVE
“Fintech Services”	Ftch1	.790	.781	.544
	Ftch 2	.698		
	Ftch 3	.722		
	Ftch 4	.667		
	Ftch 5	.826		
	Ftch 6	.831		
“SMEs' access to finance”	AF1	.789	.826	.548
	AF2	.794		
	AF3	.557		
	AF4	.793		
	AF5	.719		

Table 2: Discriminant validity

Constructs	Fintch	AF
“Fintech Services”	.738	
“SMEs' access to finance”	.333	.789

## Structural Model

When the construct validity and reliability requirements for the measurement model were satisfied, the next phase entailed using Smart PLS 4.0's PLS Algorithm and Bootstrapping to evaluate the provided hypotheses. Table 3 and Figure 3 show the results of hypothesis testing.

Table 3: Hypothesis Testing Results

Hypotheses	Relationship	Beta ( $\beta$ )	S E	T Statistics	Decision
H1	PSES -> PER	.367	.051	7.12**	Supported

“Note: \*\*Significant at 0.01 (1-tailed), \*significant at 0.05 (1-tailed)”

According to Table 3, statistical analysis validated H1, which states that Fintech services considerably increase SMEs' access to financing in Jordan ( $=0.367$ ;  $t=7.12$   $p<0.01$ ).

### Discussion and Conclusion

This study aims to investigate how Fintech services enhance SMEs' access to financing. This review has commonly been fruitful in improving comprehension. We might interpret the significant components affecting SMEs' admittance to financing by scrutinizing the previously mentioned research speculations. The review's discoveries showed major areas of strength between utilizing fintech administrations and SMEs' capacity to obtain support in Jordan. The report says that SMEs that use fintech services are more likely to get financing than those that don't. The survey also discovered that SMEs who utilize fintech services saw a variety of advantages over conventional financing methods, including ease, speed, and lower costs.

However, the survey found that using fintech services presents a number of difficulties, including a lack of knowledge and trust as well as worries about security and privacy. The study comes to the conclusion that Jordanian SMEs' access to financing might be improved via fintech services. In comparison to more conventional forms of financing, fintech services provide a number of advantages, such as speed, convenience, and cost savings. To fully exploit the promise of fintech services, however, regulators and financial institutions must address the problems that come with their use, such as a lack of knowledge and trust as well as worries about security and privacy. To help SMEs make educated decisions about using fintech services, it is also necessary to improve their financial literacy.

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