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# A Systematic Review and Integrated Framework of Fintech's Role in SME Internationalization

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#### **ABSTRACT**

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This systematic review investigates the growing role of financial technology (fintech) in aiding the internationalization of small and medium-sized enterprises (SMEs). With the increasing interconnectivity of global markets, it is essential to comprehend fintech's impact on SME expansion. The study employs a meticulous bibliometric analysis to consolidate existing literature and formulate an integrated framework that clarifies the fintech-SME internationalization relationship. In this research, a systematic review of 110 articles related to both "financial technology" and "internationalization", from 2017 to 2023, have been examined. The methodology involves a thorough examination of reviewed articles, utilizing sophisticated bibliometric techniques to pinpoint key themes, trends, and research clusters. This approach provides a comprehensive understanding of the field's development and current state. The findings indicate that fintech significantly reduces barriers to international trade for SMEs by offering innovative financial solutions. The integrated framework developed in this review illustrates the diverse ways fintech enables SMEs to overcome traditional challenges in international expansion.

This study adds to the expanding body of literature on internationalization and provides valuable insights for policymakers, practitioners, and researchers. It emphasizes the transformative potential of fintech in reshaping SME internationalization strategies and highlights areas for future research in this rapidly evolving field.

**Keywords:** financial technology, internationalization, systematic literature review, small and medium enterprises.

#### INTRODUCTION

The World Bank has highlighted a significant factor that hampers the growth of small and medium-sized enterprises (SMEs) in emerging markets and developing nations: access to finance. In their assessment, this obstacle takes the top spot.

Increasing financial inclusion in countries can be facilitated by enhancing the accessibility of equity and bond financing for firms. This can particularly benefit small-to-medium enterprises (SMEs) by mitigating institutional deficiencies and enhancing competition within the financial sector (Abdallah AA et al.,2020)

Traditional financial institutions often shy away from extending loans to these enterprises due to perceived risks, insufficient collateral, or limited credit histories. Consequently, SMEs may find themselves constrained in their ability to invest in technology, hire additional staff, purchase essential inventory, or reach new markets (Peuker, Steinhäuser, de Oliveira Paula, & van Aduard de Macedo-Soares, 2021).

There are different methods for providing financial resources for commercial activities that banks and different financial institutions can use to provide financial resources for enterprises (Esmaeilzadeh & Amiri, 2016).

Previously impoverished nations, now labeled as emerging markets, are swiftly advancing and modernizing in an unprecedented manner. Globalization has enabled the rapid movement of liquidity across borders, leading to

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significant transformations in the international financial realm and reshaping the world as we know it. (Westbrook, D.A., 2016).

New technologies are valuable opportunities for small and medium-sized enterprises to enhance their competitiveness and internationalization (Chen, Mou, & Cohen, 2022). Accordingly, internationalization has become a strategic choice for small and medium-sized enterprises seeking growth and profitability (Bagheri, Mitchelmore, Bamiatzi, & Nikolopoulos, 2019). Thus, many countries have addressed this issue (Hänle, 2021). For example, Fintech can help small and medium-sized enterprises establish business relationships with other enterprises worldwide and manage their information faster and more accurately. It is also useful in providing financial resources for the development of international activities (Manuela, 2017). Some of other technologies are granting loans, issuing bonds, and electronic payment facilities (McCarthy, 2023). Using fintech, small and medium-sized enterprises can significantly improve risk management (Sharma, Ilavarasan, & Karanasios, 2023).

Fintech promises excellent potential for further study by various stakeholders in the industry (Alnaimat et al., 2023). Fintech acts as a lever of the organization's dynamic capabilities to enhance new business opportunities and enrich and exploit their existing capabilities. Fintech facilitates and accelerates the transactions and capital transfers for enterprises. It also reduces the barriers hindering international business transactions (Lian, 2022, Mamduh, Mukhlis, & Murwani, 2022).

Cumming's research indeed sheds light on how fintech innovations are driving the internationalization of entrepreneurship. By focusing on crowdfunding, peer-to-peer lending, and online banking, it underscores the pivotal role these technologies play in opening up global markets to entrepreneurs. (Cumming et al., 2023).

Fintech has become an integral part of the industry. It is no longer a choice, but a necessity (Dabić et al., 2020; Mamduh et al., 2022). However, due to the multidimensional nature of fintech's impact on the internationalization of SMEs, it is not clear how fintech affects the internationalization of SMEs. This study aims to address this research gap by providing a comprehensive understanding of how these companies internationalize and how fintech relates to it.

The critical questions of this study are:

- How does fintech affect the performance of SMEs that have expanded internationally?
- What are the types of fintech that influence the internationalization of SMEs?
- What are the mediating variables that can alter the impact of fintech on the internationalization of SMEs?

The structure of this article is as follows. First, it provides a comprehensive understanding of the relationship between fintech and its impact on internationalization. Next, it provides a systematic analysis of the existing literature. Finally, it categorizes and synthesizes it and develops a unified framework that organizes the existing literature and provides a framework for future researchers to develop this field further.

### **METHODOLOGY**

In this research, a systematic review method has been used to examine the background of the subject. A systematic literature review is the most suitable method for conducting research on the impact of fintech on the internationalization of small and medium enterprises.

### Search protocol

The authors of this study formulated the research question through discussions and consultations with academic and industrial experts. Accordingly, we raised the following questions:

- What is the impact of fintech on the performance of small and medium-sized enterprises that have expanded internationally?
- What are the different types of fintech that affect the performance of small and medium-sized enterprises that have expanded internationally?

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- What are the mediating variables that can change the impact of fintech on the internationalization of small and medium-sized enterprises?

### **Inclusion criteria**

At First, the reference database for the search boundaries was Scopus. The decision to select this citation database for the literature search is based on its coverage of comprehensive journals for the field of business and their frequent use by other advanced systematic reviews (Dada, 2018). Finally, to collect all related texts, the study period was from 2017 to May 2023.

### **Search process**

The search for relevant literature was conducted in the title, abstract, and keyword fields of the citation databases mentioned above, following a similar approach to Danese, Manfè, and Romano (2018), as these fields typically contain search terms. We divided the terms used in the search of scientific databases into two thematic groups focusing on financial technology and internationalization of small and medium-sized enterprises. Finally, the used search formula was (("Small and Medium-sized enterprises" OR "international\*") AND ("financial technology" OR "fintech")). The search for relevant articles based on the inclusion criteria yielded 769 articles.

The search was limited to academic journal publications with full texts, and non-academic articles such as book chapters, editorials, conference papers, extended abstracts, and book reviews were excluded. Then, the articles in the Persian language were reviewed. After excluding duplicates, 268 articles primarily involved the evaluation of the titles and abstracts of the articles and, in some cases, a brief review of the introduction section.

In the second round of review, the remaining 189 studies were subjected to additional exclusion criteria. We included only those studies that were relevant to the review subject, made significant contributions and insights to the existing knowledge of prominent fintech, and played a role in internationalization. Therefore, we included only those studies that were relevant to the review subject, made significant contributions and insights to the existing knowledge of prominent fintech and their role in internationalization. After the second review, 100 papers were selected.

The lists of all selected articles were searched manually. It led to the retrieval of seven more articles. Accordingly, the number of selected studies increased to 107 articles. The studies were screened according to inclusion, exclusion, and quality criteria using title, abstract, and full-text analysis. Final step provided three more articles. After confirming the criteria, 110 articles published in academic journals were searched. Figure 1 shows the applied review process.

# Extraction, analysis, and synthesis

Based on the information obtained through data extraction, the remainder of this study focuses on analyzing and reporting the results of the systematic review, using descriptive and thematic analysis, and mapping fieldwork and synthesizing results in an integrated framework. Figure 2 shows how articles were reviewed.

#### Descriptive review of the literature

The existing literature review revealed different trends regarding fintech and its role in internationalization. This section reports observations related to the publication media from which the data were collected. It reports research fields, year of publication, type of published articles, author characteristics, detailed analysis of the reviewed articles, and methods used for presentation. Then, it provides an initial map of the existing literature and identifies potential gaps that deserve further investigation

### Year of publication of articles

The number of articles published on fintech has increased every year since 1980. Although this line of research began more than 40 years ago, the results indicate that fintech, as a field of research, and its impact on the internationalization of SMEs. Big companies continue to grow. Scientific output on this topic has increased exponentially over the past decade, as shown in Figure 3. The number of published articles has increased in recent years, indicating a growing research field. Rapidly evolving towards "teenagers". This field of research does not stand still but has evolved over the years, as have all types of fintech, from payment methods to asset management and blockchain.

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According to Figure 3, the year with the most publications in this field concerns 2020 with 50 documents, followed by 2021 with 53 documents. With the increasing rate of literature publication, this growth is expected to continue in 2023 as research in the SME fintech sector increases significantly in international business.

### Output of journals, research areas, and citation impact

As shown in Figure 4, the research areas of the articles were examined based on the search domain. The most crucial area is economics as it includes 25% of the articles. The second area is related to business and management issues, which includes 23 percent, and the third area is related to social science issues with 20 percent.

The word cloud generated by Bibliometrix can provide a quick overview of the primary subjects and themes covered in the literature. It can help researchers identify keywords and related terms to use in their research. Figure 5 shows the most important themes found while searching for keywords, including financing, international trade, investment, economy and sustainable development, and social impacts.

A bibliometric pair of 50 common keywords was performed, and four primary clusters were shown in red, blue, purple, and green (Figure 6). These clusters show the concept of related keywords in an integrated way. The red cluster is related to financing, international trade, risk management tools, financial innovations, and fintech, including blockchain and public policy. The blue cluster was primarily related to aspects of business operations, such as investment, sustainable development, economics, and financial markets. The purple cluster covers issues related to international cooperation and society, social responsibilities, and financial system services. Finally, the green cluster is related to the environment, ecology and pollution control, and climate change issues. Among the mentioned subjects, financing, international trade, and investment were the most important. The red cluster is most related to the present research area.

### **Evaluate literary content**

In this section, we analyze and describe the theoretical content of the reviewed studies to understand the nature of the studies' theoretical underpinnings.

### **FINDINGS**

The success of fintech in the internationalization of small and medium-sized enterprises (SMEs) is influenced by several key factors. These factors include enhanced access to financial services, the adoption of digital payment systems, and the reduction of information asymmetry, all of which contribute to improved financial performance and operational efficiency for SMEs.

#### **Access to Financial Services**

Fintech provides SMEs with affordable and convenient financial services, leveling the playing field with larger enterprises.

### **Digital Payment Systems**

The integration of digital payment systems has a strong positive impact on the financial performance of SMEs, enhancing their ability to transact efficiently. Consumer trust in these systems is crucial, as it moderates the relationship between digital payments and financial success.

### **Reduction of Information Asymmetry**

Fintech innovations have improved the collection and processing of information about SMEs, thereby reducing transaction costs and enhancing access to capital.

This transformation allows for quicker lending cycles and better loan screening processes, which are essential for SMEs seeking financing (Sanga & Aziakpono, 2023).

The studies identified in this review are analyzed and synthesized in a multidimensional framework (Figure 7). In the first section of the framework, the impact of fintech on the internationalization of small and medium-sized enterprises is classified into three areas political, economic, and social. In the second section, the types of essential

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fintech and how they affect the internationalization of small and medium-sized enterprises are described. The third section presents the role of mediating factors through which fintech affects the internationalization of small and medium-sized enterprises. The framework developed is dynamic and can be expanded with new results. This framework not only provides a theoretical foundation for future research, but also integrates the fragmented literature to enhance our understanding of the relationship between FinTech and its impact on SME internationalization.

The first section of the framework: Investigating the impact of fintech on the performance of SMEs that have expanded internationally:

Table 1 describe the different areas in which fintech affects the internationalization of small and medium-sized enterprises. Among the review samples, several features are used from several areas. This is an encouraging sign as it suggests that this area of research is interdisciplinary, which indicates a promising direction for the field's future development

Fintech has fundamentally changed global politics. This impact permeates the entire political, economic, and social process. It affects the flow of information among citizens and political actors, the communication between the public people and political elites, and the development of political responses to social problems. Politicians and governments worldwide are using technology, especially fintech, as a political weapon in coping with sanctions. Also, policymakers need to address the challenges and risks involved to ensure that fintech benefits all stakeholders. Fintech facilitates the provision and use of financial services. Countries with more profound and developed financial systems will have higher economic growth. They will also reduce poverty and income inequality quickly.

The second section of the framework: Determining the types of fintech affecting the internationalization performance of small and medium-sized enterprises

According to the activities of fintech, the most widely used fintech used by small and medium-sized enterprises in their internationalization was investigated.

Fintech is an innovative tool with simple and user-friendly applications. They have become the significant reasons for the success of users, particularly small and medium-sized enterprises (due to agility). As shown in Table 2, the most used type of fintech is blockchain technology (n=20). It has been one of the most popular technologies in the economic markets in recent years. These technologies can facilitate global financing by facilitating and accelerating communication between users in multiple countries. Also, the existence of digital platforms has increased the possibility of accessing international markets and their identification and analysis.

The third section of the framework: Determine the mediating variables that can change the internationalization of small and medium-sized enterprises due to the impact of fintech"

Finally, to clarify the role of mediators through the reviewed literature, the keywords of each area were identified. The results of the literature review are presented in five general areas (based on Table 3).

Based on Table 3, most studies among the most relevant selected articles of this research are about the impact of innovation (n=12) on the indirect relationship between fintech and the internationalization of small and medium-sized enterprises. After innovation, resources (n=9) have the highest frequency. The least studied area belonged to culture (n=4). This result can be explained in this way: Fintech innovation can create the most competitive advantage for small and medium-sized enterprises, and these enterprises can find their place in international markets faster. Hence, most studies have investigated this area. The international business environment is dynamic and unpredictable, and the enterprises operating in this area should be active to continue to compete and be successful. Management capabilities increase the ability to integrate, create, and configure financial and non-financial resources. Figure 7 shows the multidimensional framework designed in this study. In this model, the impact of fintech on the internationalization of small and medium-sized enterprises (SMEs) was investigated in two forms: direct impact (1) and indirect impact by examining the role of mediators (2).

SMEs have several advantages, such as quick decision-making, quick adaptation to the environment, and excellent response to customers. However, some factors lead to the failure of these enterprises, such as lack of management of

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financial resources, lack of risk management, and lack of knowledge. For this reason, a significant number of these enterprises are destroyed at the international level and do not reach the stages of development. A successful SME manager should seek to exploit new opportunities to enter global markets with maximum risk control. According to this multidimensional framework, an analysis of the relationship between fintech and its results on the internationalization of small and medium-sized enterprises is presented.

#### **CONCLUSION**

A systematic mapping study has been provided a comprehensive review of current Fintech publications, analyzing the current state, maturity level, and future directions of Fintech research. Reviewing 518 Fintech articles across four academic databases from 2008 to 2021, they find a significant increase in Fintech studies, especially in Quartile 1 and Quartile 2 journals. Fintech and banking, Fintech development and Fintech adoption are the most popular research areas, and articles in these areas are increasing. They propose a classification scheme for Fintech studies across five dimensions. Their study provides a unique perspective on the subject, enabling researchers and practitioners to re-evaluate the direction and scope of future Fintech research.

In other paper conducted a comprehensive analysis based on bibliometrics and science mapping analysis. First, 848 publications have obtained from Web of Science. Their fundamental characteristics have analyzed, including the types, annual publications, hot research directions, and foci (by theme analysis, co-occurrence analysis, and timeline analysis of author keywords). Next, the prolific objects (at the level of countries/regions, institutions, journals, and authors) and corresponding pivotal cooperative relationship networks had been used to highlight who pays attention to FinTech. Furthermore, the citation structures of authors and journals had investigated, including citation and co-citation. Additionally, this paper had been presented the burst detection analysis of cited authors, journals, and references. Finally, combining the analysis results with the current financial environment, the challenges and future development opportunities have discussed further. Accordingly, a comprehensive study of the FinTech documents not only has reviewed the current research characteristics and trajectories and also has helped scholars find the appropriate research entry point and conduct in-depth research (Li et al.,2021).

The purpose of this study is to investigate the impact of fintech on the performance of internationally expanding SMEs. The provided framework represents extant literature in the form of a causal relationship between fintech and internationalization of SMEs in addition to suggesting some factors, such as innovation, market orientation, and network ties that may mediate above relationship. These findings contribute to the literature on fintech and international entrepreneurship, and have practical implications for SME managers and policymakers.

First, this study presents systematic and multidimensional research on fintech and its impacts on the internationalization of small and medium-sized enterprises (directly and indirectly). As a result, the various subareas of research on this phenomenon occurring in different areas in the field of business are outlined, and their focus, findings, and primary principles and concepts are highlighted. But (Cumming & Johan, 2016) is about how crowdfunding, or the practice of raising funds from a large number of people through an online platform, can enable and support entrepreneurs to expand their businesses across borders. Crowdfunding can facilitate entrepreneurial internationalization by providing access to capital, market information, customer feedback, network connections, and legitimacy. The article also provides a literature review and a conceptual framework of crowdfunding (a kind of financial technology) and entrepreneurial internationalization.

Second, this framework examines the mediating variables that can change the impact of fintech on the internationalization of SMEs, while (Peuker et al., 2021) reviews the main factors that influence the internationalization of SMEs in general. Future investigators will be able to examine different plausible roles for essential notions using these parts.

Third, this study shows that the phenomenon we are looking at is a new and exciting area of research in international business. By doing a systematic review of the literature, we can learn a lot about the different ways to improve our existing theories. Also, the motivation for using a systematic literature review is to provide valid evidence, which can guide future researchers. Thus, we have searched for relevant literature not only in international business and innovation, but also in other fields, such as social scope, information technology management, economics, and

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human resource management studies. We hope that this study will serve as a useful reference for researchers from these and other areas, and that it will inspire more research on this topic.

Fourth, our study offers useful insights and advice for officials by combining the literature on fintech and SME internationalization. This review gives valuable information on how internationalization, fintech, and the various factors that influence this relationship are related directly or indirectly. Furthermore, our review helps executive managers understand the ways that fintech affects SME internationalization.

Fifth, this study provides a general framework for small and medium-sized enterprises that want to develop their enterprise through internationalization. Innovation, trade networks, management capabilities, and the development of resources and culture are essential components that contribute to the success of SMEs' internationalization.

Over the past decade, much research has been conducted on how different types of financial innovations affect the internationalization of SMEs, improving our knowledge about the impact of financial innovations on different innovation outcomes. However, there are still gaps in the relationship between these two concepts.

We provide a systematic overview of the research conducted in this field, summarize the results of a wide range of studies, and provide some suggestions for future research to further develop and advance this research field. We have provided a general framework. We hope that this study will motivate business scholars to do more studies to deepen the understanding of this research topic.

#### Limitations and recommendations for future studies

Considering the results of this study, several limitations can be discussed. First, due to the diversity and multidisciplinary nature of the studied subject, this study needed to remain at a more general level at some point in time and to prefer breadth rather than depth when analyzing the results. Second, although the literature search was performed carefully, individual studies may have been inadvertently overlooked.

Third, due to the creation of keywords and the use of specific databases, potentially relevant literature may be missing. Finally, this study did not present research propositions that link the elements since it focused on the analysis and integration of existing studies. We analyzed the results in a descriptive and thematic way and synthesized them in this study. Future studies should explore the mechanisms through which fintech affects the international performance of SMEs and identify the contextual factors that shape these relationships. This framework is based on research data available in databases. Although this approach provides access to a large volume of documents, it has challenges, such as the limitation of lack of insight in practical examples. Thus, this limitation creates an opportunity to collect statistical data for future studies and make studies more complete using practical experiences.

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### **Research Article**

### **Tables**

**Table 1.** The first section of the conceptual model framework - Description of the impact of fintech on the internationalization of small and medium-sized enterprises in selected areas.

Group	The impact of fintech on	Key references	
Group	internationalization in each area	Rey references	
Political	- Regulation of appropriate international trade	(Akartuna et al., 2022; Michael &	
Tonticui	regulations (consumer protection, financial	Korolevska, 2021; Michael et al., 2022; Xu	
	stability, fair competition)	et al., 2021)	
	- Increasing international cooperation (facilitating	et ui., 2021)	
	payments and cross-border trade in line with		
	international standards and regulations)		
	- Developing support programs to increase the		
	industry's growth by supporting digital payment		
	platforms without the need for an intermediary		
	(bank).		
	-Increasing data security (privacy of data and		
	financial information of international customers)		
Economic	- Entering new global markets and access to goods	(Gerlach & Rugilo, 2019; Hrabynska et al.,	
	and services that are not in the domestic economy	2022; Shelepov, 2021; Suryanto et al.,	
	of countries.	2020; Szczepanska-Przekota, 2021)	
	- Increasing the flexibility of the financial system by	•	
	diversifying financial sources or improving risk		
	management		
	- Increasing investment opportunities		
	- Increasing efficiency (increasing the efficiency of		
	financial transactions and reducing costs)		
	-Increasing the gross domestic product of the		
	country and exporting more goods, exchange rate,		
	inflation level, and interest rate		
Social	- Reducing poverty in developing countries and	(Arabadzhieva & Vutsova, 2019; Martinez &	
	preserving the environment	Cooper, 2017; Tiberius et al., 2022)	
	- Job creation and fair distribution of wealth		
	- Improving access to financial services for the		
	general public (empowering customers)		
	- Creating employment by creating diverse jobs at		
	the international level		
	-Strengthening collective insight		

**Table 2.** Description of the applications of fintech in the internationalization of small and medium-sized enterprises in the review of the subject literature.

Applications	The impact of each application on the internationalization of	References	Number
	enterprises		
Mobile payment	Reducing the cost, increasing the speed of transactions, and	(Anshari et al., 2020; Cheng, 2022; Gupta & Agarwal, 2023;	15
	reducing the time of cross-border	Khan & Singh, 2017; Lian, 2022;	
	transactions	Michael et al., 2022; Novak et al., 2020; Okello Candiya Bongomin	
		et al., 2021; Oluwaseye et al.,	

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	1		
		2020; Qureshi et al., 2021;	
		Sekantsi & Lechesa, 2018; Sohana	
		& Winai, 2023; Thangaraj, 2019;	
		Tut, 2023; Wu et al., 2023)	
Cryptocurrency	Financing small and medium-	(Prasad, 2023; Benavides et al.,	11
	sized enterprises quickly by	2022; Akartuna et al., 2022;	
	international participants and	Savona, 2022; Zuchowski et al.,	
	reducing exchange costs.	2022; Bhatia & Bedi, 2022. Chiu,	
		2022; Szczepanska-Przekota,	
		2021; Morozova et al., 2020;	
		Abdeldayem & Dulaimi, 2020;	
		Azarenkova et al., 2018)	
	Decentralization and no need for a	(Huang & Gan, 2023; Delina et al.,	20
Blockchain	third party, creating transparency	2023; Ibrahim & Truby, 2022;	
	and authentication, changing	Savona, 2022; Khan et al., 2022;	
	procedures and updating old	Zuchowski et al., 2022; Lian,	
	support systems for financial	2022; Campbell-Verduyn &	
	services, expanding the presence	Giumelli, 2022; Schulz & Feist,	
	of small and medium-sized	2021; Mishchenko et al., 2021;	
	enterprises in international	Michael & Korolevska, 2021;	
	markets at the global level.	Artemenko & Zenchenko, 2021;	
		Mykhailov et al., 2021;	
		Kjærsgaard, 2020; Arabadzhieva	
		& Vutsova, 2019; Thangaraj, 2019;	
		Azarenkova et al., 2018; Manuela,	
		2017; Ahi, 2022)	
e-commerce platform	Providing more straightforward	(Wu et al., 2023; Levashenko et	14
o commerce piacionii	access to global financial	al., 2023; Gospodarchuk &	-7
	resources, reducing costs and risks	Zeleneva, 2022; Laband, 2022;	
	of entering international markets,	Savona, 2022; Ibrahim & Truby,	
	and increasing visibility and	2022; Guo Cheng, 2022; Cheng et	
	competitiveness such as	al., 2022; Okello Candiya	
	crowdfunding platforms and	Bongomin et al., 2021; Korolevska,	
	digital lending.	2021; Qureshi et al., 2021;	
	digital lending.	Dziawgo, 2020; Suryanto et al.,	
		2020; Deng et al., 2019)	
Artificial intelligence	Access and analysis of a large	(McCarthy, 2023; Qureshi et al.,	10
(AI)	amount of data in a short time and	2021; Chapman, 2021; Artemenko	10
(AI)	thus reduce the risk of entering the	& Zenchenko, 2021; Waliszewski &	
	international market, such as	Warchlewska, 2020; Truby, 2020;	
	consultant robots.	I	
	consultant robots.	Oluwaseye et al., 2020; Thangaraj,	
Digitaliastica	Duoviding nove and action to	2019)	0
Digitalization	Providing new opportunities to	(Alnaimat et al., 2023; Tsindeliani	8
	access and serve foreign markets,	et al., 2021; Shelepov, 2021;	
	increasing their capabilities to	Artemenko & Zenchenko, 2021;	
	innovate, improving efficiency and	Kuznetsov, 2020; Novak et al.,	
	flexibility, and reducing barriers to	2020; Feliciano-Cestero, 2023;	
	entering international markets.	Ahi, 2022)	
Machine learning	Helping enterprises learn from	(Tiberius et al., 2022; Stojanović	3
	their own and others' experiences,	et al., 2021; Qureshi et al., 2021)	

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	improving decision-making and		
	performance to adapt to		
	international markets and diverse		
	global customers, and creating		
	new proposed values.		
Green finance	Support in the financing of	(Levashenko et al., 2023; Delina et	4
	international environmental	al., 2023; Sarma & Roy, 2021; Liu	
	projects, such as renewable	et al., 2021)	
	energy, energy efficiency, or green		
	infrastructure.		

**Table 3.** Description of the role of mediators in the reviewed literature.

Area	Application	Keywords	References	Number
innovation	The availability of fintech	Improving the quality of	(Clò et al., 2022; Soni	12
	tools and platforms	products and services,	et al., 2022; Cheng et	
	enables small and	increasing competitiveness	al., 2022; Nalin &	
	medium-sized	in global markets and	Yajima, 2021;	
	enterprises to overcome	reducing costs, increasing	Alaassar et al., 2021;	
	barriers to	the possibility of accessing	Mishchenko et al.,	
	internationalization and	international markets and	2021; Kolbadi et al.,	
	expand their market	building relationships with	2021; Anshari et al.,	
	scope. Fintech	business partners, creating	2020; Oluwaseye et	
	innovations can also	e-commerce platforms,	al., 2020; Bernards &	
	create regulatory	cloud computing, and	Campbell-Verduyn,	
	challenges for	artificial intelligence to	2019; Azarenkova et	
	internationalization. For	expand access and	al., 2018; Toxanova et	
	example, differences in	relationships with	al., 2017)	
	regulatory frameworks	customers and suppliers in		
	across countries can	different countries.		
	create barriers to cross-			
	border fintech			
	transactions.			
	Policymakers should			
	consider how to address			
	these challenges to			
	promote fintech			
	internationalization.			
Trade	Leveraging trade	Finding and accessing new	(Wu et al., 2023;	5
network	networks is an important	markets and growing in	Okello Candiya	
	activity for building	existing markets, finding	Bongomin et al.,	
	relationships with key	new customers, suppliers,	2021; Lai & Samers,	
	stakeholders.	and partners in different	2021; Beytollahi &	
	Similarly, a large group	countries, accessing	Zeinali, 2020; Wang,	
	of investors allows	resources, knowledge, and	2018)	
	companies to tap into	support in foreign markets,		
	and leverage collective	and building trust.		
	knowledge.			
	Enterprises benefit from			
	crowd sourced			
	knowledge and receive			

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	T		<u> </u>	
	non-financial			
	feedback/input from			
	large numbers of people,			
	especially regarding			
	products, services, and			
	markets.			
Management	Management capabilities	Performance improvement,	(Tolkachev et al.,	8
capabilities	enable SMEs to use	accurate planning for the	2023; Abad-Segura et	
	fintech solutions for	production of new products	al., 2020; Suryanto et	
	product development,	and product quality	al., 2020; Tran et al.,	
	marketing, supply chain	improvement, increasing	2020; Slepov et al.,	
	management, and	strategic capabilities and	2019; Sabandar,	
	international expansion.	operational capabilities,	2019; Mishchenko et	
		attracting new customers	al., 2018; Ahi, 2022)	
		and increasing sales,		
		increasing the quality of		
		international processes, the		
		ability to create marketing		
		strategies, managing digital		
		transformations, identifying		
		and reducing risks related to		
		trading in foreign markets,		
		such as currency		
		fluctuations, and political		
		instability		
Resource	Resource growth is	Growth of financial, human,	(Syromyatnikov et al.,	9
	achieved through	and technological resources,	2021; Zvieriakov &	
	knowledge transfer,	improving production	Zavadska, 2021;	
	learning from	processes, and improving	Nailevich et al., 2020;	
	international markets,	the quality of products and	Sabandar, 2019;	
	and cooperation with	services, financial resources	Kravchenko et al.,	
	international partners.	and absorption capacity,	2019; Guercio et al.,	
	Fintech can support	skilled human resources and	2019;	
	resource growth by	competent managers,	Dyussembekova et al.,	
	providing efficient	helping the environment,	2019; Toxanova et al.,	
	financial management	improving the green	2017; Khan & Singh,	
	tools, facilitating access	climate, and using hardware	2017)	
	to funding platforms, and	and software resources, and	,,	
	enabling knowledge	infrastructure		
	exchange through digital			
	platforms.			
Culture	To enter the	Establishing relationships	(Abbasi et al., 2021;	4
		with business partners in	Novak et al., 2020;	·
	international markets			
		other countries and	Anagnostopoulos.	
	and cooperate with other	other countries and	Anagnostopoulos, 2018; Nurunnabi,	
	and cooperate with other partners, people have to	other countries and establishing effective	2018; Nurunnabi,	
	and cooperate with other partners, people have to adapt to the culture of	other countries and establishing effective communication with		
	and cooperate with other partners, people have to adapt to the culture of other countries, which	other countries and establishing effective communication with international customers, the	2018; Nurunnabi,	
	and cooperate with other partners, people have to adapt to the culture of other countries, which requires acquiring	other countries and establishing effective communication with international customers, the ability to adapt to the	2018; Nurunnabi,	
	and cooperate with other partners, people have to adapt to the culture of other countries, which	other countries and establishing effective communication with international customers, the	2018; Nurunnabi,	

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#### **Research Article**

and adapting to different	
norms, values, and business	
practices, preventing	
cultural misunderstandings	
that may lead to business	
failure and cultural	
Intelligence	

### **Figures**

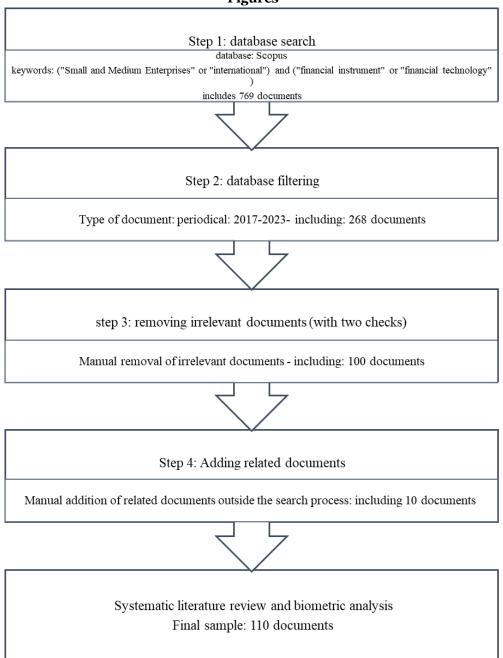


Figure 1. The process of identifying and selecting related articles.

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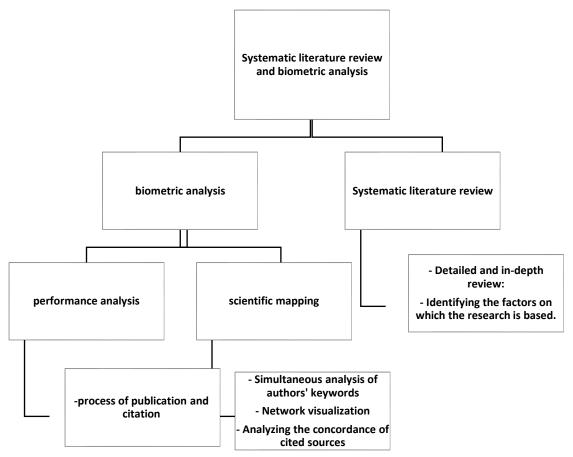


Figure 2. Literature review framework (Molina García, 2023).

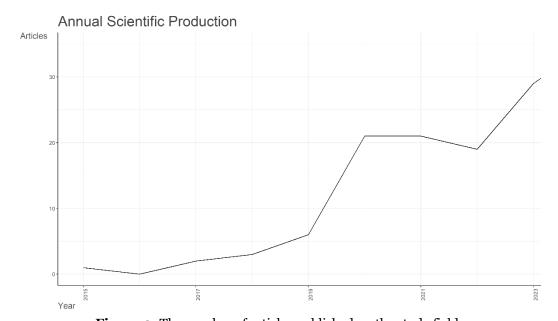


Figure 3. The number of articles published on the study field.

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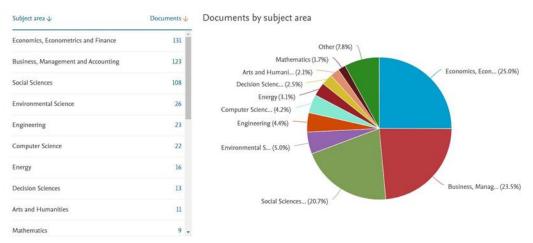
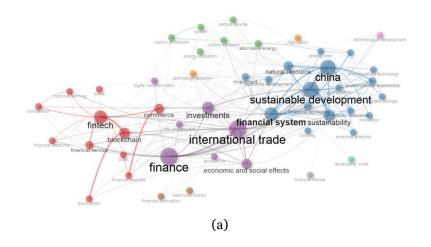


Figure 4. The research area of the reviewed articles.



Figure 5. Word cloud of the research field.



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**Figure 6.** (a) Clustering of 50 most used keywords over 20 years and (b) trend subjects in the last 20 years - Source: authors through Rstudio software.

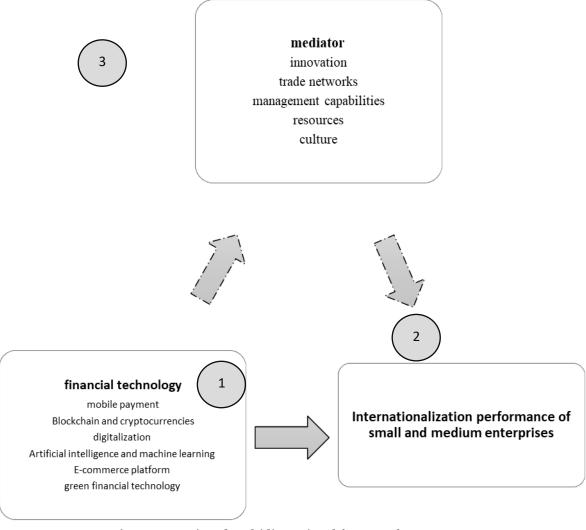


Figure 7. Designed multidimensional framework.