The role of financial technology and entrepreneurial finance practices in funding small and medium-sized enterprises

***Piotr Łasak*[1]**

Abstract

PURPOSE: *The traditional sources of financing (bank loans) cannot be treated as an essential source of financing for SMEs in developing countries. For this reason, this group of entities uses many alternative sources, from bootstrapping to microfinance and crowdfunding. During the last decade, a significant contribution in this area has been done by financial technology. The purpose of this study is threefold: 1) to present the role of financial technologies in financing SMEs, 2) to examine the role of entities based on financial technology in financing SMEs in developing countries, and 3) to consider other non-bank aspects of financing SMEs, leading to the improvement of the financial situation of these entities. The in-depth analysis of these entrepreneurial finance practices will be developed in the following papers presented in this Issue.* ***METHODOLOGY:*** *This study employs a theoretical approach based on a narrative literature review. The primary attention is focused on applying financial technology as a stimulant for the finance of SMEs in developing countries.* ***FINDINGS:*** *As a consequence of the financing gap for SMEs within the traditional financial system, these entities use non-bank financing based on financial technology. The research confirms that financial technology plays a crucial role in fostering the financial situation of SMEs in developing countries and providing greater financial inclusion for these entities. Both, financial technology and enterprises based on this technology contribute significantly to the improvement of efficiency of financing SMEs in emerging markets. They also provide a broader range of services, than were offered by the traditional financial sector. Regarding the other aspects of SME finance, it is essential to implement such ways of financing like microfinance services and crowdfunding. Such funding mechanisms, together with the budget process and the compliance under the conditions of e-tax systems, are important determinants of current entrepreneurial finance.* ***IMPLICATIONS:*** *The paper describes the financing of*

1 Piotr Łasak, Ph.D. Hab., Institute of Economics, Finance and Management, Jagiellonian University, ul. Prof. Stanisława Łojasiewicza 4, 30-348 Kraków, Poland, e-mail: piotr.lasak@uj.edu.pl (ORCID: https://orcid.org/0000-0002-3726-3862).

Received 27 December 2021; Revised 26 February 2022; Accepted 28 February 2022.

SMEs in developing countries. The in-depth picture of the SME's financial situation, focusing on the technological development in this area, provides essential insight into this still poorly explored area. It also offers important premises for shaping the post-pandemic policy to support their further growth. ***ORIGINALITY/VALUE:*** *Despite growing theoretical and empirical literature about entrepreneurial finance, this study aims to contribute to the role of financial technology in this area. The impact of financial technologies and the role of fintech-based entities on SME activity in developing countries are still poorly researched. Moreover, the research provides a brief overview of other SME funding sources and their determinants in this group of countries.*
Keywords: *financial technology, fintech, small and medium enterprises (SMEs), developing countries.*

INTRODUCTION

At the beginning of the third decade of the 21st century, and during the particular circumstances caused by the COVID-19 pandemic, it is essential to raise some questions about financing small and medium-sized enterprises (SMEs). This subject is of particular importance in developing countries, where, on the one hand, entrepreneurship is the basis for the functioning of broad social strata. On the other hand, the availability of financing primarily determines the development of economic activity. It is highlighted in the literature that limitations in access to finance are one of the biggest obstacles associated with the functioning of SMEs (IFC, 2020). The size of an enterprise always matters when considering financing business activity. SMEs have more significant problems with access to financial sources than their larger counterparts (Gabriel, 2015; Godke Veiga & McCahery, 2019; Thanh et al., 2011). SMEs in developing countries often face numerous obstacles to accessing finance, and the obstacles are more remarkable for them than for larger firms. Due to their size, previous experience, and business profile, these enterprises often have limited access to financing through the traditional banking system. In such a situation, they are looking for other alternative sources of financing.

The COVID-19 pandemic had a very negative impact on the functioning of small and medium-sized enterprises. This applies to both their operating activities as well as financing (Mutinda Kitukutha, Vasa, & Oláh, 2021). A study published by the International Finance Corporation (an entity belonging to the World Bank Group) emphasises that SMEs were affected by the COVID-19 pandemic in a more brutal way than larger firms (Adian et al., 2020). There are several channels of the negative impact of COVID-19 on this group of enterprises, namely: a supply channel, a demand channel, uncertainty, and restrictions in access to financing. Significantly, SMEs are overrepresented in these sectors most affected by the crisis. Smaller firms are also more fragile and have weaker supply chain capabilities than larger entities. They also do not have good tools to help them build resilience during the crisis. The situation caused by the pandemic means that the problem of financing SMEs has regained its importance. This is due to the deepening of the problems of access to financing, but also to the dynamic increase of the use of financial technologies, which has been taking place since the beginning of the pandemic.

The pandemic caused most SMEs to leave without access to traditional financing (bank loans). Many reasons explain why this kind of enterprise has worse access to funding than larger companies. Among them are a lack of history, sizeable assets, and lower resistance to economic fluctuations than large entities. The country of origin is also significant. Bakhtiari et al. highlight that an underdeveloped financial system can also aggravate the credit constraints for SMEs (Bakhtiari et al., 2020). All of these factors cause that SMEs should pay greater attention to searching for alternative financing sources than in the case of large enterprises. For this reason, such solutions like bootstrapping and crowdfunding became vital aspects of supporting private business initiatives financially (Konhäusner, Semmerau, & Grunert, 2021). They play a crucial role in those projects where traditional market financing would not be applicable. It is imperative to reflect on what factors determine the success of such types of funding. For many SMEs operating in developing countries, their successes depend not only on the availability of financing but also on many other aspects related to entrepreneurial finance. Nowadays, a big challenge for businesses, especially SMEs in developing countries, is to optimize conditions for the company's functioning. It includes both external and internal factors and processes. External factors embrace local needs in a particular country, like local financial market development, tax systems, the social situation of entrepreneurs (the significance of race, gender, and social class), and the government policy-oriented supporting financing processes (microfinance).

Despite the external conditions, fundamental for their growth and performance are the internal aspects of funding SMEs. These factors include various financial and social processes that significantly impact business operations. Many of them are critical determinants of functioning SMEs in developing countries. The development of financial technology and the new economic circumstances caused by the COVID-19 pandemic have a significant impact on the financing of SMEs. The enterprises use technology to enable their access to funding and provide diversification of the funding for SMEs. Even those entities, which have access to bank financing, can reduce their exposure to banks by applying for non-bank funding (Disse & Sommer, 2020; Eça et al., 2021). The new ways of financing are significant in emerging markets where SMEs have limited access to traditional financing. Non-bank financing in these countries is usually more accessible and cheaper than the conventional sources (Arner et al., 2015). It is the consequence of the fact that many SMEs in these countries have been excluded from traditional financing (Fouejieu et al., 2020). Apart from other forms of funding, like microfinance services provided by non-bank institutions, bootstrapping and crowdfunding, the entities whose activity is based on financial technology (called fintech) play a crucial role in financing SMEs. They bridge the gaps between financial service providers and SMEs, leveraging data and lowering transaction costs (Stickney, 2016).

The literature on financial technologies and fintech-based enterprises highlights the growing role of financial technology in financing SMEs and its impact on the inclusive growth of these enterprises (Łasak & Gancarczyk, 2021a). The importance of financial technology comes not only from the fact that it enables greater efficiency of traditional financial institutions but also from their ability to modify traditional financial services and create new services. In consequence, traditional relations of SMEs with banks are replaced by non-bank financing providers or even networks of such providers (unique financial ecosystems are created) (Blancher et al., 2019; Łasak & Gancarczyk, 2021a). Very often, fintech enterprises are integrators of such ecosystems, and their activity is more important for financing SMEs than incumbent banks and other traditional financial institutions.

METHODOLOGICAL APPROACH

This paper aims to identify and interpret the role of financial technology (fintech) in financing small and medium-sized enterprises. The second aim is to define the character of fintech entities in financing SMEs in developing countries. The third goal is to present in a synthetic way the content of other papers presented in this Issue. They are non-bank ways of financing SMEs and some related aspects, significant in the current field of entrepreneurial finance. The starting point in the discussion about the role of fintech indicates the growing importance of financial technology and enterprises based on this technology in financing SMEs. The concept of fintech is usually understood in two ways. It means, firstly, a technology used in financial services, and secondly, enterprises (start-ups) whose operation is based on financial technology. This paper uses the terms "financial technology" (the first meaning) and "entities based on financial technology" (the second meaning) to distinguish between the two.

The growing but a premature stage of research on the impact of financial technology on business activity and entrepreneurship, and the predominance of qualitative studies in this area, justify the adoption of the narrative literature review. The focus was primarily on the body of work related to financial technology (fintech) in the context of SME functioning. The literature search was performed in the Scopus resources published in 2010–2021. In total, 65 items were returned upon the use of the keywords "financial technology" or "fintech" and "SME." After the initial search, the further selection was narrowed down to those papers with "open access" status, resulting in 15 items. After in-depth studies of the papers selected in this way, a manual search was performed in the Google Scholar source. In this way, 65 items related to this research topic were obtained. The other sources, which Google Scholar also identified, refer to the problem of entrepreneurial practices in financing SMEs. They correspond and create a research background to the different papers presented in this Issue.

A narrative literature review is applied to present the main processes in the studied area and present the main assumptions. The contribution of the paper is to identify the current situation in the research area and the main aspects of fintech contribution to SMEs financing in the context of other forms of financing these entities, as well as the role of other instruments of corporate finance management (e.g., tax management, budget processes, the part of microfinance capital). The critical context to the analysis is provided by the current situation created by the COVID-19 pandemic. The research questions that guides this paper and this Issue are:

RQ 1) What is the role of financial technology in financing SMEs?
RQ 2) What is the role of fintech entities in financing SMEs in developing countries?
RQ 3) How does non-bank financing improve the financial situation of SMEs in developing countries?

The COVID-19 pandemic creates the background for the research. It has proved a substantial negative financial impact on businesses, especially SMEs. The main focus of the Issue is on enterprises from developing countries, as they are the most exposed to negative consequences resulting from limited access to traditional financing and the most affected by economic disruptions caused by the pandemic. The use of new technologies increased access to non-bank financing sources. The use of various activities related to financial management may significantly improve the situation of these enterprises.

The remainder of the paper is organized as follows. Section 2 presents the literature review focused on various aspects of financing small and medium-sized enterprises in developing countries. Section 3 contains the Issue's contribution and highlights how financial technologies improve SME access to finance. Moreover, it discusses such non-technological aspects as the budget process and the role of microfinance. Section 4 presents directions for further research related to the issues addressed in this Issue.

LITERATURE BACKGROUND

The role of financial technology in fostering SME finance

SMEs play a significant role in the economies of developing countries. They are pivotal for the economic development of these countries. Usually, such enterprises are responsible for a large share of local employment and provide a livelihood for a large part of these societies (Jha & Kumar, 2020). They also trigger local investment and the growth of innovations. These enterprises, contributing to the economic development of developing countries, face many obstacles related to their activity and access to funding sources (Disse & Sommer, 2020). Here is an excellent opportunity for the application of new financial technologies. Their participation improves operation efficiency and provides capital where traditional financial institutions cannot offer such ways of funding. They are significant, especially for the poorest parts of these societies (Bhagat & Roderick, 2020; Lu et al., 2021). Digital finances have become responsible for providing new financial services via the Internet, mobile phones, and other digital solutions.

There is often a reference to the term "fintech" in the literature, which is a shortcut of the term "financial technology." However, such a definition is too much of a simplification and requires clarification. The term "fintech" can be understood in two ways. Firstly, it is a technology, and solutions based on this technology are used in financial services. Here can be included such technologies and solutions as: artificial intelligence (AI), big data analytics, Distributed Ledger Technology, cloud computing, and some others (Chen et al., 2019; *FinTech Action Plan*, 2018; Mehrotra, 2019; Ozili, 2018). Secondly, the meaning of the term "fintech" is connected with entities (start-ups) based on financial technology (Choi & Huang, 2021; Drasch et al., 2018; Gomber et al., 2017; Schmidt et al., 2018; Walker & Morris, 2021). There are many areas in financial services where such start-ups can operate – from mobile payments services, through online lending, to savings and investment (Langley & Leyshon, 2021).

Financial technology significantly changes the existing business models of banks, other financial and non-financial institutions, and also SMEs. Through digital transformations, all these entities became beneficiaries – banks, fintech start-up companies, SMEs, and their customers (Łasak & Gancarczyk, 2021a). Lu et al. (2021) point out three aspects of financial processes related to application of financial technologies in business in developing countries. They are: decrease in information asymmetry (due to the applications of data analytics), the geographical dimensions and space (due to ITC implementation), and the reduction of costs of many activities and offered services (due to the application of many different financial technologies) (Lu et al., 2021). Financial technologies also play a significant role in the transformation of SMEs and their better adjustment to the current economic needs (e.g., circular economy, sharing economy) (Pizzi et al., 2021).

The COVID-19 pandemic was a stimulus for the acceleration of the involvement of financial technologies in the development of financial processes. Similarly to big companies, SMEs also utilized new financial technologies and innovations based on these technologies to adjust to unique circumstances created by the COVID-19 pandemic (Banaszyk et al., 2021). In the face of the pandemic, many SMEs implemented new technological solutions and adapted new financing techniques to their business models (Harel, 2021). This is significant, especially in developing countries where the access of SMEs to traditional financing is limited. The intensified digitalization processes lead to greater access to new, non-bank solutions like crowdfunding or digital lending platforms (Augustine, 2019; Wahjono et al., 2021). It is essential for firms with a worse financial situation (e.g., lower liquidity and level of stable funds) (Eça et al., 2021). They are also responsible for providing financial instruments like mobile money and creating financial ecosystems in which non-bank technological companies offer many essential services (Disse & Sommer, 2020; IFC, 2020). Such fintech solutions are completed by local banks, which have better access to SMEs than big banks (Lu et al., 2020). It creates an excellent opportunity for developing the mechanisms of financing SMEs, especially in financially excluded developing countries.

The entrepreneurial practices in financing SMEs

The specificity of financing and financial policy performance in SMEs differs from large companies. In the case of such entities, access to financing sources is essential, and the internal features and activities undertaken in these entities are related to the management of their finances. Business conditions also have great importance in the finance of these entities. Among the firm-specific internal factors and determinants of financing, might be enumerated: profitability, age, tangibility, and growth. Regarding the business conditions, there are country-specific (macroeconomic) conditions and industry-specific (competition, level of development, etc.) conditions (Kumar & Rao, 2015). It can be seen that in the case of SMEs, behavioral aspects are also important (Kijkasiwat, 2021; Yazdipour, 2011). For this reason, of great importance is the development of sources of financing placed outside the traditional financial system and many social and psychological factors supporting the process of funding SMEs.

Researchers dealing with SME issues for many years have been combining the financial performance of these entities with the processes used in the financial policy and accounting systems used by these entities (Häckner & Nilsson, 1999; Khin et al., 2014). One of the most essential aspects of SMEs financial policy is the budget process. This process belongs to firm-specific mechanisms and is part of a more extensive process of management, oriented on improving the financial performance of a business. The budgeting process is at the center of SMEs' financial policy. It combines other functions and procedures that contribute to the final result of the company's activity (Meric & Gercil, 2018; Schubert & Kirsten, 2021; Vuong & Rajagopal, 2020). The budget procedure should be integrated with other processes implemented within the enterprises' structures (Nso, 2020).

The functioning of SMEs depends to a large extent on the systemic regulations and solutions in force in a particular country. One such factor that plays a significant role is the tax system. The digitalization of public services provided a new solution – an e-tax system. Among the main advantages associated with the system are the improvement of revenue collection by the country's public finance and the improvement of compliance for SMEs. Such aspects like tax compliance costs and difficulties in adaptation to the existing guidelines have been a significant obstacle for SMEs in many countries (*Taxation of SMEs in OECD and G20 Countries*, 2015). The convenience introduced thanks to electronic taxation (integration of many services like tax declaration, payment, and refund all in one IT application) facilitates many enterprises' activity and reduces complicated tax payment procedures (Le et al., 2021). It becomes significant to recognize the broader role played by the tax system towards all participants of this system. The e-tax system can be an essential tool for shaping the state policy oriented on entrepreneurship development.

Microfinance also plays a crucial role in SME development, apart from tax policy and financial policy. Such enterprises have limited access to capital markets, and a similar situation is often related to banking financing. For this reason, microfinance has become a significant source of their funding. It is prevalent in developing countries where there is limited access to traditional financing (Kucii, 2018; Moussa, 2020).

THE CONTRIBUTIONS

Fintech participation in SMEs' financial inclusion

Today the entire world is undergoing a digital revolution that is taking many forms and extending its reach to new sectors of the economy. The ongoing changes also affect the financial markets, where financial technology becomes more and more important (Chen et al., 2019; Zavolokina et al., 2017). In addition to many other areas related to the functioning of financial markets, financial technology is playing an increasingly important role in financing business activity. Some researchers highlight that fintech companies are an important financing source for financially constrained enterprises (Cornelli et al., 2019; Xiang et al., 2018). This has become particularly visible since the outbreak of the global financial crisis of 2008–2009. The crisis reduced access to finance for many businesses, especially SMEs, which became too risky for local banks in many countries (Ahmed et al., 2016).

It is worth emphasizing the great importance of financial technologies in the context of business activities because, in the vast majority of research, much more attention is paid to the impact of technology on society (consumers) (Safitri, 2020). This aspect is vital that some developing countries have decided to implement reforms supporting SMEs non-bank financing (Gutierrez et al., 2019; Lukonga, 2021; Mavilia & Pisani, 2020). These reforms have fostered non-bank funding sources, alternative equity markets for SMEs, venture capital, microfinance, and leasing. To a large extent, these initiatives are limited due to the low level of technological advancement in some countries (e.g., African or Asian). For this reason, many countries place great emphasis on the need to digitalize business activities in their domestic economies. They put digitalization at the center of implemented reforms (Loo, 2019; Lukonga, 2021; Setianto, Sipayung, & Azman-Saini, 2022). This is especially important in such countries where SMEs experience a lack of public support and access to public finance.

Considering the two definitions of fintech presented earlier, it is an imperative research challenge to analyze their significance in the context of financing SMEs. The first essential aspect is the role that financial technology plays in supporting the activities of SMEs, and how financial technology enables the financing of SMEs in developing countries.

When answering this question, it should be noted that digitalization and financial technology development provide many services for SMEs, like payment, settlement, investment, and financing. It is the same range of services as the services provided to the public (non-business customers). In developing countries, however, the process of financial inclusion is much more important than in developed countries, which results from limited access to financial services via the traditional financial sector. The process of financial inclusion covers both these entities and society. It enables business entities to access bank accounts and remotely perform many transactions and other services. The development of financial services for SMEs, thanks to financial technologies, also contributes to the growth of employment, trade, and innovation development (Coffie et al., 2021; Hasan et al., 2020; IMF, 2019). The application of advanced technologies contributes positively to the investment processes and enhances the competitiveness of these enterprises. Table 1 presents selected mechanisms of the impact of financial technologies on SMEs in some developing countries. Significantly, financial technologies offer SMEs a broader range of services than traditional financial lenders. Apart from services like payment or lending, they support SMEs growth by providing innovative business models (Kandpal & Mehrotra, 2019). It should be noted that the impact of financial technologies on SMEs is not the same everywhere. There are some countries with limited access to technology, and fintech funding is responsible for only a small part of traditional funding. However, there are also locations where the importance of this financing is increasing. Such countries include China and other Asian countries (Cornelli et al., 2019; Lu et al., 2021).

Table 1. The examples of financial technology that support financing SMEs in developing countries

Type of technology	The role in financing SMEs	Financial service and business activities	Countries
Artificial intelligence	Improvement of the credit assessment process; enable biometrically identification	There are several dozen fintech companies in Nigeria that enable access for SMEs to financial services	Nigeria
Big data	Platformisation of SMEs; big data credit scoring	This technology fosters the development of microfinance services	Ethiopia, Kenya
Distributed Ledger Technology (Blockchain)	Enables open shared and distributed public records of information that cannot be altered	This technology facilitates faster cross-border payments and the creation of reliable electronic registers of leased and moveable assets	Algeria, Iran, Jordan, Lebanon, Egypt, Pakistan, Tunisia

Source: own elaboration based on Babajide et al. (2020); Brooks (2021); Hill (2018); Pompella and Matousek (2021).

The second essential aspect related to the fintech-driven mechanisms is the role of fintech entities in financing SMEs in developing countries. This research problem is related to the second meaning of the definitions of the fintech term. Before answering this question, it should be noted that, contrary to the theoretical approach, in practice, there is no clear distinction between different types of fintech-driven start-ups. The use of financial technologies in entities may come down to various organizational forms (BIS, 2018). Lai (2020) highlights that they can be both large technology firms and small start-ups. The core feature is that they are non-financial companies entering into financial services provision and their competitive advantages come from innovative technologies (Lai, 2020). The cooperation between banks and fintechs creates synergies, which is also beneficial for non-financial enterprises. The implementation (utilization) of fintechs into business processes makes all participants more efficient compared to their former way of activity (Łasak & Gancarczyk, 2021b).

Similarly, like in the case of technology, the fintech-driven entities exert significant influence on SMEs in developing countries (Table 2). The selected examples and many others confirm that the range of services offered by fintechs for the SMEs in developing countries is much broader than the services offered by incumbent financial institutions. Despite the fact that fintechs play a crucial role in the provision of basic financial services for society and especially SMEs (like payments and settlements) (Mavilia & Pisani, 2020; Sjamsudin, 2019), they also offer such services as decentralized fundraising, facilitating public-private partnership, offering data-analytic services (monitoring the market and business results) and many other services (Ahmed et al., 2016; Nemoto & Yoshino, 2019). Fintechs can create platforms that connect SMEs with other entities, their customers, cooperators, and society.

Regarding the issue of financial inclusion for SMEs in developing countries, three different things should be highlighted. Firstly, small fintech start-ups often play a significant role in big companies. Such big companies like Baidoo, Alibaba, or Tencent (BAT) are using financial technologies to play a substantial role in financing SMEs in developing countries. The literature highlights that such fintech loans complement credits offered by traditional financial institutions (Cornelli et al., 2020; Zhang-Zhang et al., 2020). Secondly, even in developing countries, the scope and degree of use of fintechs in the provision of services to SMEs depend on many factors. Here, such factors as firm ownership, size, and former access to traditional banks can be enumerated (Xiang et al., 2018). Thirdly, financial ecosystems should be built for the greater inclusion of such companies. Fintech is present in many areas of banking activity, and for this purpose, they create financial ecosystems. Also, they very often act together with traditional banks. Due to complex ecosystems, they offer a broad range of services for business (among others: payment, lending, saving, and insurance) (Palmié et al., 2020). The participation of financial technology improves the efficiency and costs of financial services, and serves all market participants, especially SMEs.

Table 2. The examples of entities based on financial technology and their impact on SMEs in developing countries

Name / Type of fintech	Example	Financial service and business activities	Countries
M-Pesa (Vodafone M-Pesa Ltd.) Information communication technology (ICT) company	M-Pesa is a mobile phone-based money transfer service. The service is offered in many developing markets. In some countries (e.g., Kenya), over 95 percent of SMEs' payments are accomplished via this service.	Payment services (mobile money, card payments, online payments)	China, India, Egypt, Jordan, Lebanon, Morocco, Pakistan, Tunisia, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Uzbekistan, Kenya, Nigeria
JUMO Information communication technology (ICT) company	JUMO is a fintech company that facilitates contacts between SMEs and customers in developing countries.	Maintaining relations with customers	
WeBank Fintech start-up lender	The Chinese entity WeBank is an example of a fintech dedicated to supporting SMEs	Support for the growth of SMEs. About 80% of SMEs do not have access to bank credit in China, and such entities like WeBank finance them.	
Lydia P2P payment start-up	Lydia is a social interface that enables payments and access to loans for SMEs. Its activity embraces a broad range of services like setting up accounts, and getting payment cards, loans, insurance, and some other financial services.	Reduce the SME funding gap.	

Source: own elaboration based on literature: Babajide et al. (2020); Bhagat and Roderick (2020); Hammerschlag et al. (2020); Hill (2018); Iman (2018); Zhang-Zhang et al. (2020).

Entrepreneurial finance practices of funding SMEs

The current Issue is also aimed at considering other non-bank aspects of financing SMEs. The in-depth analysis of these entrepreneurial finance practices is developed in the following papers. Their goal is to answer the question, how do non-bank ways of financing improve the financial situation of SMEs in developing countries? They provide several topics related to the practices applied in funding SMEs. Together with the former part related to financial technology, they offer a significant contribution to the description of the contemporary situation in the field of SME financing. The additional value of the research results from the current situation, caused by the COVID-19 pandemic, and searching for new sources of financing by SMEs. All of the papers present a whole Issue relating to three levels: 1) the internal processes in financial management, 2) the external conditions enabling financing SMEs, and 3) the impact of the pandemic on the functioning SMEs. These themes are based on quantitative and qualitative research and critical literature reviews in developing countries. The research issues included in the individual papers (except for the text about crowdfunding) are based on the data or examples related to business situations in selected developing countries, namely, Kosovo, Pakistan, and Vietnam. They contribute to a better understanding of the financial determinants of SME activity in such countries. The paper about crowdfunding has a more general nature and links theoretical issues with the mechanisms of reward-based crowdfunding in Germany.

Considering the external conditions of SME finance, attention should be paid to the environment that shapes the requirements for the functioning of SMEs and their finance. This dimension is represented by the paper on adopting an e-tax system in this Issue. This topic is presented in the paper written by Do et al. (2022), which investigates the mediating impact of adopting the e-tax approach. The given case considers the situation in Vietnam, where the tax administration promotes reforms with a taxpayer-centred orientation. The paper discusses the mediating impact between attitude towards the e-tax system and tax compliance. The authors reveal the two independent variables (attitude towards e-tax design and adoption of the e-tax system) with the dependent variable tax compliance. This is paper, in which a quantitative analysis based on data collected from the selected market was applied – here, the research sample comes from 435 SMEs operating in Vietnam. The calculations were performed with Cronbach's Alpha tool followed by exploratory factor analysis (EFA). The research leads to some policy implications aimed at improving tax compliance in the considered country: enhancing the IT infrastructure, disseminating tax law, ensuring coordination between many participants (tax authorities, tax officials, enterprises, and other authorities), improving supervision, promoting the education of tax issues, and developing a strategy based on tax compliance.

Among the significant internal mechanisms that shape the financing of SMEs is considered the budget process. Tuan and Rajagopal (2022) wrote a paper related to this Issue. The authors discuss the situation of the Vietnamese business and its performance. They present research about the mediating effect of the budget process and its supporting role for SME growth. The paper highlights that proper management needs to adopt an adequate approach to budget processing. It is critical for cash flow management and the overall financial situation of SMEs. The authors applied Cronbach's alpha exploratory factor analysis to provide the research's high level. The important contribution is that it presents a case study of Vietnamese SMEs. The authors are aware of the limitations of Vietnamese SMEs and their impact on their international competitiveness. As suggested in the paper, a greater focus on the budget process should improve these enterprises' competitiveness and contribute to the overall performance of these entities. As they assume, the mediating role of the budget procedure is critical for the financial situation of these businesses. It also enables them to enhance their competitive advantages globally. To take advantage of this opportunity, enterprises must be more committed to implementing the budget processes. The second significant contribution is that the authors highlight the links between the economic processes and social aspects of SME functioning (labour market). They pay attention to the fact that SMEs play a significant role in supporting the socio-economic situation in Vietnam. The conducted research also identified additional factors impacting SME performance. These factors embrace strategy implementation, organizational commitment, and managerial control. It can play a significant role in future research.

Another dimension of these conditions that shape financing SMEs is the microfinance environment. The paper by Jalil, Ali and Ahmed (2022) is dedicated to the role of microfinance capital for small and medium-sized enterprises in emerging markets. It considers two aspects: firstly, the impact of microfinance services on the growth of micro and small enterprises (MSEs), and secondly, the role of social and psychological capital in enhancing the productivity of microfinance services for MSEs. In many countries, microfinance is essential for MSE survival, whereas social aspects are also very significant for financing MSEs. The research presents the case of Pakistan and reveals that the microfinance services (such as micro-credit, micro-savings, and micro-insurance) have a significant role in fostering MSE growth. The authors also highlight that social and psychological capital is crucial in mediating the relationship between microfinance services and MSE development. There are many reasons why the paper written by

Jalil, Ali, and Ahmed (2022) is a significant contribution to the research on entrepreneurial finance and financing SMEs. Firstly, it presents a valuable case study of microfinance in Pakistan. The analysis was carried out in 357 enterprises in the Pakistan market, which creates a significant insight into this business category in this country. The calculations made in the empirical part of the paper were made using Confirmatory Factor Analysis (CFA) and two-step structural equation modeling (SEM). The computational domain is the crucial axis of the theoretical analysis. Secondly, it highlights the role of social and psychological capital in fostering SME growth. This approach defines the paper's originality because no one has investigated how social and psychological capital connects microfinance services and SME growth. Thirdly, it presents strong arguments that all interested parties, namely, microfinance institutions, practitioners, and policymakers, should enhance their activity to support microfinance services and create suitable conditions for developing these services. The authors argue that the microfinance program and the accompanying facilities will lead to social and psychological capital development. There are expectations that these conditions, in turn, will contribute to the dynamic development of entrepreneurship and, in particular, favor the growth of SMEs.

Regarding the external conditions of SME finance, they embrace funding by crowdfunding. The paper written by Pinkow (2022) is dedicated to reward-based crowdfunding issues. It focuses on analyzing the success factors of crowdfunding projects, especially the cases of overfunded projects. The paper's main aim is to analyze the factors contributing to the success of the financed projects and their overfunding. The research provides a solid contribution to the theory, investigating the project overfunding based on Two-Factor Theory, which helps better understand the motives of crowdfunding founders and distinguishes the factors that contribute to project success from those that contribute to project overfunding. While many of the recent research studies were focused on crowdfunding, the topic of overinvesting as part of the process still requires further research. For this reason, this paper is of great cognitive importance. The presented case study is based on data gathered from the most significant German reward-based crowdfunding platform StartNext. A hierarchical robust logistic regression approach and Blinder-Oaxaca decomposition were chosen to analyze the collected data. This study highlights that the factors that increase the likelihood of success in crowdfunding campaigns do not explain the situation of overinvestment in these campaigns.

The presented research is of great theoretical and empirical importance. It allows a better theoretical understanding of the nature of crowdfunding campaigns. The practical implications are essential for entrepreneurs considering using reward-based crowdfunding to finance their activity. Nowadays, crowdfunding is becoming a more popular way of financing, and it can also be dedicated to SMEs in developing countries. The inclusion of new financing methods is an opportunity for development, especially for enterprises with limited access to the banking sector and other traditional sources. For these enterprises, the knowledge of the factors increasing the chances of obtaining capital for investments is an essential determinant of effective financial management.

The abovementioned papers present the conditions about funding SMEs, which has been in force in recent years. However, the economy's current situation and the changes triggered by international processes also play a significant role and substantially impact the enterprises' performance. Sometimes these processes start imperative changes in these entities. An example of such influence is the economic situation caused by COVID-19. The pandemic has had a significant impact on the conditions for business activity, among others, on SMEs. The purpose of the paper written by Kryeziu et al. (2022) is to examine the impact of COVID-19 on firms in Kosovo and to analyze their reaction to the challenges created by the pandemic and the implemented strategies aimed to mitigate the risks. The presented quantitative research is based on firm survey data collected by the Institute for Entrepreneurship and Small Businesses in Kosovo in the first half of 2021. It has proved that there has been a substantial negative financial impact on businesses, irrespective of their size, ownership, and industry characteristics. The study also reveals the firms' reaction to the pandemic. As pointed out, they often employ digital technology to a greater extent than before, change management practices, focus on improving organizational efficiency, and implement changes in investment strategies. The authors point out that creating more robust social networks also gained more importance.

A significant contribution from this study comes from the fact that it is dedicated to the situation of SMEs. In contrast, former studies had a broader scope and were related to bigger businesses. Currently, many studies are devoted to assessing business conditions as a consequence of the COVID-19 pandemic. Still, a few of them are related to the situation of SMEs with detailed characteristics of their activity. Another significant contribution of the paper is examining the firms' reaction to the pandemic. This study presents detailed results of SME activity during the pandemic, depending on ownership form, management practices, and the change of behavior of these entities. The authors of this research confirm that the first reaction was changing technological preferences and accelerating the use of digital technologies. It is argued that such an approach enabled the improvement of the efficiency of SME activity. The research also confirms the significant role of e-commerce during the pandemic. Moreover, the authors provide some suggestions related to the policy applied to these enterprises. They indicate a necessity to design policies that focus on these enterprises liquidity problems and provide tax delays, incentives, and other financial support for them. It is also highlighted that such enterprises' needs should be monitored, enabling them to adjust the government policy to their current expectations and needs. All of these aspects give an in-depth picture of the situation of SMEs during the pandemic. They indicate the need for activities to support the development of these enterprises in the post-pandemic period.

FUTURE RESEARCH

The issues related to the use of financial technologies in the activity and processes of SME development have a huge potential for further research. This is especially the consequence of two reasons. Firstly, these issues are part of a broader research area related to the transformation of economies under the influence of digital technologies. Secondly, despite many former studies, the issues related to SMEs have not been treated as a priority and, relatively, this topic is still poorly described. Therefore, many research gaps can be indicated in this area. The processes occurring within the SME group (transformation under the influence of financial technologies) and the geographical differentiation of the functions taking place require in-depth examination. Undoubtedly, a comparative analysis of the considered processes from the perspective of developed and developing countries may also be the subject of further research.

Further research areas are also indicated in the following papers related to entrepreneurial finance. The paper written by Do et al. (2022) provides a significant contribution related to the impact of an e-tax system on SMEs in developing countries. Still, the research was conducted on the single market in Vietnam. It is expected that further research on this subject will be carried out in other developing countries. At the end of this paper, the authors formulate policy implications for improving tax compliance. The paper shows that compliance is a natural consequence of adopting an e-tax system. Adopting an e-tax system requires the adoption and enhancement of financial technology necessary for the proper functioning of the whole system. It should be noted that this paper presents rather general premises. In the future, it is worth conducting in-depth research on the impact of an e-tax system on SMEs in developing countries.

The paper by Tuan and Rajagopal (2022) focuses only on the manufacturing sector related to the selected city in Vietnam. Similarly, like the former paper, it creates an opportunity to extend the geographical dimension of such research in the future. It is also significant to develop the study and to confirm these results in other sectors of the economy. The research identified additional factors impacting SME performance in Vietnam (strategy implementation, organizational commitment, and managerial control). These factors can also be included in future research.

The analysis of the mediating perspective of the social and psychological capital, presented in the paper by Jalil, Ali, and Ahmed (2022), is a new research area related to the quite commonly researched topic of microfinance services. This area deserves further in-depth research. Firstly, the authors indicated the social and psychological components that impact on the support of microfinance services for MSE growth processes. They can be used in further research. Secondly, the authors highlight that their paper has several limitations that give plenty of room for future research. Here should be included the sample size, the focus of the research being solely on the manufacturing sector, and the restriction of the research to Pakistan. Therefore, there is a need to verify the presented research in other research groups and on other markets.

The results presented in the paper written by Pinkow (2022) are also essential for further research on the nature of crowdfunding. He showed that understanding the reasons for overfunding crowdfunding campaigns will require broadening the future research scope. The author highlights that the differentiation of motivating factors for overfunding in reward-based crowdfunding offers immense research opportunities. The author also points out that overinvestment may result from subjective factors, which indicates the need to include other countries and communities in further research.

The research related to SMEs during the pandemic, presented in the paper written by Kryeziu et al. (2022) is related to SMEs in Kosovo. The focus on such a small area is an essential weakness of this study, and there is a need for further studies related to the situation in other countries. Moreover, the pandemic significantly influenced SMEs, and further research is necessary for the field associated with the impact of the pandemic on SMEs and the processes of these enterprises' adaptation to the new post-pandemic circumstances. Also, the methods of SME digitalization require further in-depth research. A question can be raised as to whether the digitalization of SMEs is a short-term response to the pandemic or whether they have initiated a long-term process of far-reaching digitalization in the SME area.

CONCLUSION

This paper presents two research areas. The first one covers the impact of financial technologies and the fintech-based entities on SME activity in developing countries. It is a field that is still poorly researched. The second research area embraces selected aspects of SME finance, which are discussed in more detail in this Issue's subsequent papers. As described, due to the consequence of the financing gap for SMEs within the traditional financial system, these entities use technological opportunities that provide non-bank financing, namely the possibilities created by financial technology. Financial technology plays a crucial role in fostering the financial situation of SMEs and provides greater financial inclusion for these entities. This situation regards especially SMEs from developing countries, where limited access to traditional financing is a big obstacle for the growth of SMEs. Firstly, financial technology facilitates and improves the current practices of financing SMEs in emerging markets and, secondly, they create new possibilities of financing (platformization, greater access to data). Fintech entities are also very important in the case of developing countries. The presented examples show that the scale of financial exclusion in developing countries is very large. Fintech entities are able to provide financing to all those entrepreneurs that cannot receive financing from traditional banks. The outbreak of the COVID-19 pandemic has further restricted entrepreneurs' access to conventional sources of finance. At the same time, the use of financial technologies has been deepened, which creates new opportunities for them. Apart from providing access to financing sources and offering payment services, they also strengthen relationships between enterprises and customers and develop new relationships. In addition, they enable SMEs to undertake many other activities to support their growth.

The research presented in the following papers relates to many essential aspects of entrepreneurial finance. They discuss the essential elements that combine SME financing processes with new financial technologies. Much importance has also been placed on the social dimension and psychological factors (e.g., mediating effect of the budget process, social and psychological capital in microfinance, etc.).

The premises from the paper written by Kryeziu et al. (2022) can significantly shape policy after the pandemic. Communication between the policymakers and the private sector is crucial. Therefore, this research can contribute to a better understanding of the needs defined by shaping the post-pandemic world. It is an important step for preparing proper policy supporting the further development of SMEs in developing countries.

These unique studies presented in this Issue enrich our knowledge in SME financing. The papers contribute to understanding the nature of business performance and link corporate finance issues with other, mainly social problems. We want to express the hope that the papers presented here will be of interest to readers, scholars, and researchers worldwide. They provide theoretical concepts, present exciting case studies from developing countries, and indicate pathways for further research. Many of the marked areas require further, in-depth analysis.

References

Adian, I., Doumbia, D., Gregory, N., Ragoussis, A., Reddy, A., & Timmis, J. (2020). *Small and medium enterprises in the pandemic. Impact, responses and the role of development finance.* Policy Research Working Paper No. 9414, World Bank Group. Retrieved from Small and Medium Enterprises in the Pandemic: Impact, Responses and the Role of Development Finance (worldbank.org).

Ahmed, U., Beck, T., McDaniel, C. A., & Schropp, S. (2016). Filling the gap: How technology enables access to finance for small- and medium-sized enterprises. *Innovations: Technology, Governance, Globalization, MIT Press Journal*, *10*(3/4), 35-48.

Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisis paradigm. *Georgetown Journal of International Law*, *47*, 1271-1293.

Augustine, A. A. (2019). Crowdfunding and SMEs financing in Nigeria - threat and opportunities. *International Journal of Development Research*, *9*, 30092–30100.

Babajide, A. A., Oluwaseye, E. O., Lawal, A. I., & Isibor, A. A. (2020). Financial technology, financial inclusion and MSMEs financing in the south-west of Nigeria. *Academy of Entrepreneurship Journal*, 26(3), 1-17.

Bakhtiari, S., Breunig, R., Magnani, L., & Zhang, J. (2020). Financial constraints and small and medium enterprises: A review. *Economic Record*, *96*(315), 506–523.

Banaszyk, P., Deszczyński, P., Gorynia, M., & Malaga, K. (2021). The Covid-19 pandemic as a potential change agent for selected economic concepts. *Entrepreneurial Business and Economics Review*, *9*(4), 35-50. https://doi.org/10.15678/EBER.2021.090403

Bhagat, A., & Roderick, L. (2020). Banking on refugees: Racialized expropriation in the fintech era. *Environment and Planning A: Economy and Space*, *52*(8), 1498–1515.

BIS. (2018). *Sound practices: Implications of fintech developments for banks and bank supervisors*. Basel Committee on Banking Supervision, Bank for International Settlements. Retrieved from https://www.bis.org/bcbs/publ/d431.htm

Blancher, N., Appendino, M., Bibolov, A., Fouejieu, A., Li, J., Ndoye, A., Panagiotakopoulou, A., Shi, W., & Sydorenko, T. (2019). Financial inclusion of small and medium-sized enterprises in the middle east and Central Asia. *Departmental Papers / Policy Papers*, *19*, 2, International Monetary Fund. https://doi.org/10.5089/9781484383124.087

Brooks, S. (2021). Configuring the digital farmer: A nudge world in the making? *Economy and Society*, *50*(3), 374-396

Chen, M. A., Wu, Q., & Yang, B. (2019). How valuable is FinTech innovation? *The Review of Financial Studies*, *32*(5), 2062–2106.

Choi, P. M. S., & Huang, S. H. (2021). *Fintech with Artificial Intelligence, Big Data, and Blockchain*. Singapore: Springer.

Coffie, C. P. K., Hongjiang, Z., Mensah, I. A., Kiconco, R., & Simon, A. E. O. (2021). Determinants of FinTech payment services diffusion by SMEs in Sub-Saharan Africa: Evidence from Ghana. *Information Technology for Development*, *27*(3), 539–560. https://doi.org/10.1080/02681102.2020.1840324

Cornelli, G., Davidson, V., Frost, J., Gambacorta, L., & Oishi, K. (2019). *SME finance in Asia: Recent innovations in fintech credit, trade finance, and beyond.* ADBI Working Paper Series. Working Paper No. 1027. Retrieved from https://www.econstor.eu/handle/10419/222794

Cornelli, G., Frost, J., Gambacorta, L., Rau, P. R., Wardrop, R., & Ziegler, T. (2020). *Fintech and big tech credit: A new database*. BIS Working Paper No. 887, Bank for International Settlements. Retrieved from Fintech and big tech credit: A new database (bis.org).

Disse, S., & Sommer, C. (2020). *Digitalisation and its impact on SME finance in Sub-Saharan Africa: Reviewing the hype and actual developments.* Working Paper No. 4/2020. https://doi.org/10.23661/dp4.2020

Do, H.T.H., Mac, Y.T.H., Tran, H.T.V., & Nguyen, T.T.L. (2022). The impact of attitude towards an e-tax system on tax compliance of Vietnamese enterprises: Adoption of an e-tax system as a mediator. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 35-64. https://doi.org/10.7341/20221812.

Drasch, B. J., Schweizer, A., & Urbach, N. (2018). Integrating the 'troublemakers': A taxonomy for cooperation between banks and fintechs. *Journal of Economics and Business*, *100*, 26–42. https://doi.org/10.1016/j.jeconbus.2018.04.002

Eça, A., Ferreira, M. A., Prado, M. P., & Rizzo, A. E. (2021). *The real effects of fintech lending on SMEs: Evidence from loan applications*. ECB Working Paper No. 2022/2639. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4035081

Ferrando, A. (2020). *Firms' expectations on access to finance at the early stages of the Covid-19 pandemic*. ECB Working Paper No. 2020/2446. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3656265

FinTech action plan: For a more competitive and innovative European financial sector. (2018). European Commission - European Commission. Retrieved from https://ec.europa.eu/info/publications/180308-action-plan-fintech_en

Fouejieu, M. A., Ndoye, A., & Sydorenko, T. (2020). *Unlocking access to finance for SMEs: A cross-country analysis*. Working Paper No 20/55, International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/WP/Issues/2020/03/13/Unlocking-Access-to-Finance-for-SMEs-A-Cross-Country-Analysis-49243

Gabriel, K. (2015). Factors influencing small and medium enterprises' access to funding in Kenya: A case study of Westlands Division. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2665041

Godke Veiga, M., & McCahery, J. A. (2019). The financing of small and medium-sized enterprises: An analysis of the financing gap in Brazil. *European Business Organization Law Review*, *20*(4), 633–664. https://doi.org/10.1007/s40804-019-00167-7

Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics*, *87*(5), 537–580. https://doi.org/10.1007/s11573-017-0852-x

Gutierrez, E., Klepikova, E., & Levitanskaya, K. (2019). Expanding access to financing for micro, small, and medium-size enterprises in Russia by leveraging innovative financial solutions. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/32405/Expanding-Access-to-Financing-for-Micro-Small-and-Medium-Size-Enterprises-in-Russia-by-Leveraging-Innovative-Financial-Solutions.pdf?sequence=1

Häckner, E., & Nilsson, A. (1999). Accounting information systems in SMEs. *Journal of Enterprising Culture*, *07*(01), 37–64. https://doi.org/10.1142/S0218495899000042

Hammerschlag, Z., Bick, G., & Luiz, J. M. (2020). The internationalization of African fintech firms: Marketing strategies for successful intra-Africa expansion. *International Marketing Review*, *37*(2), 299–317. https://doi.org/10.1108/IMR-05-2019-0130

Harel, R. (2021). The impact of COVID-19 on small businesses' performance and innovation. *Global Business Review*, 09721509211039145. https://doi.org/10.1177/09721509211039145

Hasan, M., Yajuan, L., & Khan, S. (2020). Promoting China's inclusive finance through digital financial services. *Global Business Review*, 097215091989534. https://doi.org/10.1177/0972150919895348

Hill, J. (2018). *Fintech and the Remaking of Financial Institutions*. London: Academic Press. Retrieved from https://www.ifc.org/wps/wcm/connect/Publications_EXT_Content/IFC_External_Publication_Site/Publications_Listing_Page/Crowdsourcing-the-Future-of-SME-Financing

IFC, I. F. (2020). Crowdsourcing the future of SME financing. International Finance Corporation, World Bank. Retrieved from

IFC, I. F. (2021). How firms are responding and adapting during COVID-19 and recovery: Opportunities for accelerated inclusion in emerging markets. International Finance Corporation, World Bank. Retrieved from http://hdl.handle.net/10986/36265

Iman, N. (2018). Is mobile payment still relevant in the fintech era? *Electronic Commerce Research and Applications*, *30*, 72–82.

IMF, I. M. F. (2019). *Financial inclusion of small and medium-sized enterprises in the Middle East and Central Asia*. Departmental Paper No.19/02, International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2019/02/11/Financial-Inclusion-of-Small-and-Medium-Sized-Enterprises-in-the-Middle-East-and-Central-Asia-46335

Jalil, M.F., Ali, A.B., & Ahmed, Z. (2022). Microfinance services and MSE growth in Pakistan: The mediating perspective of social and psychological capital. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 93-129. https://doi.org/10.7341/20221814.

Jha, P., & Kumar, S. (2020). *Scope for Alternative Financing Options to Promote Financial Access to SMEs: Evidence from India*. First PAN IIT International Management Conference. https://doi.org/10.2139/ssrn.3753046

Kandpal, V., & Mehrotra, R. (2019). Financial inclusion: The role of fintech and digital financial services in India. *Indian Journal of Economics & Business*, *19*(1), 85-93.

Karim, M., Tanisa, T., & Sakib, K. M. (2020). Associating MFIs with SMEs to assist post pandemic economic resilience in Bangladesh. Retrieved from http://dx.doi.org/10.2139/ssrn.3659434

Khan, S. U. (2022). Financing constraints and firm-level responses to the COVID-19 pandemic: International evidence. *Research in International Business and Finance*, *59*, 101545. https://doi.org/10.1016/j.ribaf.2021.101545

Khin, E. W. S., Yee, C. M., & Ismail, K. (2014). Conceptual model of budgetary activity on firms performance: Malaysian SMEs case study. *Asian Journal of Accounting Perspectives*, *7*(1), 13–27. https://doi.org/10.22452/AJAP.vol7no1.2

Kijkasiwat, P. (2021). The influence of behavioral factors on SMES'owners intention to adopt private finance. *Journal of Behavioral and Experimental Finance*, *30*, 100476. https://doi.org/10.1016/J.JBEF.2021.100476

Konhäusner, P., Semmerau, S.-M., & Grunert, M. (2021). Microtransactions in games – an analysis of a crowdfunding perspective. *Forum Scientiae Oeconomia*, *9*(4), 31-58. https://doi.org/10.23762/FSO_VOL9_NO4_2

Kryeziu, L., Bağiş, M., Kurutkan, M.N., Krasniqi, B.A., & Haziri, A. (2022). COVID-19 impact and firm reactions towards crisis: Evidence from a transition economy. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 169-196. https://doi.org/10.7341/20221816.

Kucii, M. (2018). The impact of microfinance on the development of SMEs: Kosovo – an integrated review. *Współczesna Gospodarka*, *9*(4 (31)), 13–25. https://doi.org/10.26881/wg.2018.4.02

Kumar, S., & Rao, P. (2015). A conceptual framework for identifying financing preferences of SMEs. *Small Enterprise Research*, *22*(1), 99–112. https://doi.org/10.1080/13215906.2015.1036504

Kuntchev, V., Ramalho, R., Rodríguez-Meza, J., & Yang, J. S. (2013). What have we learned from the enterprise surveys regarding access to credit by SMEs? *World Bank Policy Research Working Paper*, *6670*.

Lai, K. P. (2020). FinTech: The dis/re-intermediation of finance? In *The Routledge Handbook of Financial Geography* (pp. 440–457). New York: Routledge.

Langley, P., & Leyshon, A. (2021). The platform political economy of fintech: Reintermediation, consolidation and capitalisation. *New Political Economy*, *26*(3), 376–388.

Łasak, P., & Gancarczyk, M. (2021a). Systemizing the impact of fintechs on the efficiency and inclusive growth of banks' services: A literature review. In A. Marszk, E. Lechman (Eds.), *The Digitalization of Financial Markets. The Socioeconomic Impact of Financial Technologies* (pp. 123–142). New York: Routledge.

Łasak, P., & Gancarczyk, M. (2021b). Transforming the scope of the bank through fintechs: Toward a modularized network governance. *Journal of Organizational Change Management, 35*(1), 186-208. https://doi.org/10.1108/JOCM-05-2021-0147

Le, H. T. D., Bui, M. T., & Nguyen, G. T. C. (2021). Factors affecting electronic tax compliance of small and medium enterprises in Vietnam. *The Journal of Asian Finance, Economics and Business*, *8*(1), 823–832. https://doi.org/10.13106/jafeb.2021.vol8.no1.823

Loo, M. K. L. (2019). Enhancing financial inclusion in ASEAN: Identifying the best growth markets for fintech. *Journal of Risk and Financial Management*, *12*(4), 181. https://doi.org/10.3390/jrfm12040181

Lu, Z., Wu, J., & Liu, J. (2020). Bank concentration and SME financing availability: The impact of promotion of financial inclusion in China. *International Journal of Bank Marketing*, *38*(6), 1329–1349. https://doi.org/10.1108/IJBM-01-2020-0007

Lu, Z., Wu, J., Li, H., & Nguyen, D. K. (2021). Local bank, digital financial inclusion and SME financing constraints: Empirical evidence from China. *Emerging Markets Finance and Trade*, 1–14. https://doi.org/10.1080/1540496X.2021.1923477

Lukonga, I. (2021). Fintech and the real economy: Lessons from the Middle East, North Africa, Afghanistan, and Pakistan (MENAP) region. In *The Palgrave Handbook of FinTech and Blockchain* (pp. 187–214). Cham: Springer.

Mavilia, R., & Pisani, R. (2020). Blockchain and catching-up in developing countries: The case of financial inclusion in Africa. *African Journal of*

Science, Technology, Innovation and Development, *12*(2), 151–163. https://doi.org/10.1080/20421338.2019.1624009

Mehrotra, A. (2019). Financial inclusion through fintech – a case of lost focus. *2019 International Conference on Automation, Computational and Technology Management, ICACTM* (pp. 103–107). https://doi.org/10.1109/ICACTM.2019.8776857

Meric, E., & Gercil, M. (2018). Usability of time driven activity based costing methods in the budgeting process of SMEs. *Business and Economics Research Journal*, *9*(4), 961–978. https://doi.org/10.20409/berj.2018.134

Moussa, F. (2020). Impact of microfinance loans on the performance of SMEs: The case of Lebanon. *Business: Theory and Practice*, *21*(2), 769–779. https://doi.org/10.3846/btp.2020.11110

Mutinda Kitukutha, N., Vasa, L., & Oláh, J. (2021). The Impact of COVID-19 on the economy and sustainable e-commerce. *Forum Scientiae Oeconomia*, *9*(2), 47-72. https://doi.org/10.23762/FSO_VOL9_NO2_3

Nemoto, N., & Yoshino, N. (2019). *Fintech for Asian SMEs*. Tokyo: Asian Development Bank Institute.

Nso, M. A. (2020). Fundraising and budgeting practices for SMEs. *Asian Journal of Interdisciplinary Research*, *3*(1), 151–161.

Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, *18*(4), 329–340. https://doi.org/10.1016/j.bir.2017.12.003

Palmié, M., Wincent, J., Parida, V., & Caglar, U. (2020). The evolution of the financial technology ecosystem: An introduction and agenda for future research on disruptive innovations in ecosystems. *Technological Forecasting and Social Change*, *151*, 119779. https://doi.org/10.1016/j.techfore.2019.119779

Pinkow, F. (2022). The impact of common success factors on overfunding in reward-based crowdfunding: An explorative study and avenues for future research. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 131-167. https://doi.org/10.7341/20221815.

Pizzi, S., Corbo, L., & Caputo, A. (2021). Fintech and SMEs sustainable business models: Reflections and considerations for a circular economy. *Journal of Cleaner Production*, *281*, 125217. https://doi.org/10.1016/j.jclepro.2020.125217

Pompella, M., & Matousek, R. (2021). *The Palgrave Handbook of FinTech and Blockchain*. Cham: Springer.

Safitri, T. A. (2020). The development of fintech in Indonesia. 1st Borobudur International Symposium on Humanities, Economics and Social Sciences, Advances in Social Science, Education and Humanities Research. https://doi.org/10.2991/assehr.k.200529.139

Schmidt, J., Drews, P., & Schirmer, I. (2018). *Charting the emerging financial services ecosystem of fintechs and banks: Six types of data-driven business models in the fintech sector*. Proceedings of the 51st Hawaii

International Conference on System Sciences. https://doi.org/10.24251/HICSS.2018.625

Schubert, H., & Kirsten, S. M. (2021). Effect of budgeting control on the financial performance of SMEs in Germany. *Journal of Finance and Accounting*, *5*(2), 1–9. Retrieved from https://stratfordjournals.org/journals/index.php/journal-of-accounting/article/view/812

Setianto, R. H., Sipayung, R. S., & Azman-Saini, W. (2022). Working capital financing and corporate profitability in the ASEAN region: The role of financial development. *Entrepreneurial Business and Economics Review, 10*(1), 51-64. https://doi.org/10.15678/EBER.2022.100104

Sjamsudin, S. H. (2019). The impact of the development of fintech on the existing financial services in Indonesia. *International Journal of Advanced Research in Technology and Innovation*, *1*(1), 14–23. Retrieved from https://myjms.mohe.gov.my/index.php/ijarti/article/view/5995

Song, H., Yang, Y., & Tao, Z. (2020). How different types of financial service providers support small-and medium-enterprises under the impact of COVID-19 pandemic: From the perspective of expectancy theory. *Frontiers of Business Research in China*, *14*(1), 1–27. https://doi.org/10.1186/s11782-020-00095-1

Stickney, C. (2016). *Emerging SMEs—Secrets to Growth from Micro to Small Enterprise*. Center for Financial Inclusion ACCION. Retrieved from https://www.centerforfinancialinclusion.org/emerging-smes-1

Taxation of SMEs in OECD and G20 Countries. (2015). Retrieved from https://www.oecd.org/publications/taxation-of-smes-in-oecd-and-g20-countries-9789264243507-en.htm

Thanh, V., Cuong, T. T., Dung, B., & Chieu, T. (2011). Small and medium enterprises access to finance in Vietnam. In Ch. Harvie, S. Oum, & D. A. Narjoko (Eds.), *Small and Medium Enterprises (SMEs) Access to Finance in Selected East Asian Economies* (pp. 51-192). ERIA Research Project Report.

Tuan, V.K., & Rajagopal, P. (2022). The mediating effect of the budget process on the performance of small- and medium-sized enterprises in Ho Chi Minh City, Vietnam. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 65-92. https://doi.org/10.7341/20221813.

Vuong, K. T., & Rajagopal, P. (2020). A review of the management process with the mediating role of the budget process on the performance of Vietnamese SMEs. *Management Dynamics in the Knowledge Economy*, *8*(3), 277–296. https://doi.org/10.2478/mdke-2020-0018

Wahjono, S. I., Marina, A., Fam, S.-F., & Rasulong, I. (2021). Crowdfunding as a business innovation to finance SMEs for sustainable development goals to anticipating the impact of corona virus pandemic disease (Covid-19) in Indonesia. Retrieved from https://www.atlantis-press.com/article/125951496.pdf

Walker, T., & Morris, L. (2021). *The Handbook of Banking Technology*. Chennai: John Wiley & Sons.

Xiang, D., Zhang, Y., & Worthington, A. C. (2018). Determinants of the use of fintech finance among Chinese small and medium-sized enterprises. *31st Australasian Finance and Banking Conference*. Retrieved from https://research-repository.griffith.edu.au/bitstream/handle/10072/408723/Worthington511772-Accepted.pdf?sequence=2

Yazdipour, R. (2011). A behavioral finance approach to decision making in entrepreneurial finance. In R. Yazdipour (Ed.), *Advances in Entrepreneurial Finance: With Applications from Behavioral Finance and Economics* (pp. 11–29). New York: Springer.

Zavolokina, L., Dolata, M., & Schwabe, G. (2017). FinTech transformation: How IT-enabled innovations shape the financial sector. In S. Feuerriegel & D. Neumann (Eds.), *Enterprise Applications, Markets and Services in the Finance Industry* (pp. 75–88). Cham: Springer.

Zhang-Zhang, Y., Rohlfer, S., & Rajasekera, J. (2020). An eco-systematic view of cross-sector fintech: The case of Alibaba and Tencent. *Sustainability*, *12*(21), 8907. https://doi.org/10.3390/su12218907

Abstrakt

CEL: *Tradycyjne źródła finansowania (kredyty bankowe) nie mogą być traktowane jako podstawowe źródło finansowania MŚP w krajach rozwijających się. Z tego powodu wskazana grupa podmiotów korzysta z wielu alternatywnych źródeł, od bootstrappingu, po mikrofinansowanie i crowdfunding. W ciągu ostatniej dekady znaczący wkład w tym obszarze ma technologia finansowa. Cel artykułu można sprowadzić do trzech aspektów: 1) przedstawienia roli technologii finansowych w finansowaniu MŚP, 2) zbadania roli podmiotów opartych na technologii finansowej w finansowaniu MŚP w krajach rozwijających się 3) analizy innych pozabankowych aspektów finansowania MŚP, prowadzących do poprawy sytuacji finansowej tych podmiotów. Dogłębna analiza praktyk stosowanych w ramach finansów przedsiębiorczych zostanie rozwinięta w kolejnych artykułach prezentowanych w tym numerze.* ***METODYKA:*** *Niniejsze badanie wykorzystuje podejście teoretyczne oparte na narracyjnym przeglądzie literatury. Główna uwaga skupia się na zastosowaniu technologii finansowej jako stymulatora finansowania MŚP w krajach rozwijających się.* ***WYNIKI:*** *W konsekwencji występowania luki w finansowaniu MŚP w ramach tradycyjnego systemu finansowego, podmioty te korzystają z finansowania pozabankowego, opartego na technologii finansowej. Badania potwierdzają, że technologia finansowa odgrywa kluczową rolę w poprawie sytuacji finansowej MŚP w krajach rozwijających się i zapewnia inkluzję finansową tych podmiotów. Zarówno technologia finansowa, jak i przedsiębiorstwa oparte na tej technologii w znaczący sposób przyczyniają się do poprawy efektywności finansowania MŚP w badanej grupie krajów. Umożliwiają one również świadczenie szerszego zakresu usług, niż oferował tradycyjny sektor finansowy. W odniesieniu do innych aspektów finansowania MŚP, konieczne jest wdrożenie w jak najszerszym zakresie mikrofinansowania i finansowania społecznościowego. Mechanizmy te, wraz z procesem budżetowym oraz dostosowaniem do elektronicznego systemu podatkowego są ważnymi determinantami współczesnego finansowania MŚP.* ***IMPLIKACJE:*** *Artykuł*

opisuje finansowanie MŚP w krajach rozwijających się. Zapewnia wgląd w obecną sytuację finansową MŚP w tych krajach oraz podkreśla istotne znaczenie rozwoju technologicznego, zapewniającego wsparcie finansowania. Artykuł wskazuje również na przesłanki do kształtowania post-pandemicznej polityki w zakresie finansowania MŚP.
ORYGINALNOŚĆ/ WARTOŚĆ: *Mimo dużego wzrostu teoretycznej i empirycznej literatury dotyczącej przedsiębiorczości finansowej (entrepreneurial finance), niniejsze badanie również ma na celu wniesienie wkładu w ten obszar badawczy. Wpływ technologii finansowych na MŚP w krajach rozwijających się i oddziaływanie podmiotów działających w oparciu o technologie fintech na tę grupę przedsiębiorstw jest nadal słabo zbadany. Ponadto badanie zawiera krótki przegląd innych źródeł finansowania MŚP w krajach rozwijających się oraz ich uwarunkowań.*
Słowa kluczowe*: technologia finansowa, fintech, małe i średnie przedsiębiorstwa, MŚP, kraje rozwijające się*

Biographical note

Piotr Łasak (Ph.D., Hab.), Associate Professor at the Institute of Economics, Finance and Management, Jagiellonian University in Krakow, Poland. His research, publication and teaching activities focus on banking, corporate finance, and international finance. Among the main research topics are financial market development, regulation and supervision, mechanisms of financial and currency crises, and shadow banking system development. Among his particular research interests is the development of the Chinese financial market. The current, main research area is concerned with financial technology (fintech) and the banking sector transformation as the consequence of the processes of digitalization and the influence of financial technologies. He is author of several publications on this subject.

Conflicts of interest

The author declares no conflict of interest.

Citation (APA Style)

Łasak, P. (2022). The role of financial technology and entrepreneurial finance practices in funding small and medium-sized enterprises. *Journal of Entrepreneurship, Management, and Innovation, 18*(1), 7-34. https://doi.org/10.7341/20221811.