

# Exploring Crowd funding as a Sustainable Financing Option Among MSME in Odisha: A Case Study in Khurda District

Sweeta Agrawal<sup>1</sup>, Dr. Jayashree Jethy<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Commerce, Rama Devi Women's University, Bhubaneswar, Odisha  
<sup>2</sup>Assistant Professor, Department of Commerce, Rama Devi Women's University, Bhubaneswar, Odisha

## Abstract

The Micro, Small, and Medium Enterprises (MSMEs) sector is an essential and dynamic part of the Indian economy. However, these small businesses often face challenges when it comes to raising funds. Crowd funding has become a revolutionary concept in the field of finance, transforming how people and organisations raise money for their endeavours. This study aims to assess the factors affecting crowd funding as a sustainable financing option among Micro, Small, and Medium Enterprises (MSMEs) in Odisha. It also focuses on understanding the level of awareness and knowledge about crowd funding as a new and innovative financial model among the Populace of Odisha. Based upon review of literature and further interviews with the managers of MSME the five key variables which affects the adoption of crowd funding was identified. The survey involved 385 MSMEs from various industrial clusters across Khurda district in Odisha and the samples were selected using the convenience sampling technique. The findings of the study revealed that there is a moderate level of awareness of crowd funding among MSMEs in Odisha. By understanding the current perceptions and attitudes of people of MSMEs in Odisha towards crowd funding, various stakeholders such as investors, regulators, and policymakers can make more informed decisions that can potentially empower the MSME sector and drive economic growth in the region.

**Keywords:** MSMEs, Crowdfunding, Financing, Sustainability, Odisha, Khurda District

## Introduction

Micro, Small, and Medium-Sized Enterprises (MSMEs) are essential for promoting economic development, job creation, and the eradication of poverty worldwide. However, one of the biggest problems MSMEs have is finding sufficient funding to support and grow their businesses (Rajamani, 2022). In particular for smaller enterprises, traditional funding solutions provided by banks and financial institutions can come with high collateral requirements, drawn-out application procedures, and restricted access. Innovative finance approaches have come to light in this context as viable remedies to the financing issues MSMEs face. Innovative financing methods include a variety of strategies that go beyond conventional bank loans, including venture capital, impact investing, supply chain finance, peer-to-peer lending, and crowd funding. These approaches give MSMEs access to more financial options, more flexibility, and different sources of cash (Mund,2020).Furthermore, by assisting companies who may otherwise find it difficult to obtain capital through traditional channels, these models can promote

entrepreneurship, innovation, and social impact. Crowd funding, peer-to-peer lending, impact investment, supply chain finance, venture capital, invoice financing, revenue-based financing, and many more well-known innovative financing models are some of the popular ones that MSMEs use.

Crowdfunding has been a disruptive force in recent years, reshaping the conventional landscape of finance and investing. With the help of this ground-breaking funding strategy, individuals and entrepreneurs can now use the power of the crowd to realise their ideas and ambitions. Crowdfunding has evolved into a global phenomenon, offering a compelling alternative to conventional sources of funding and investment (Mittal and Raman, 2021). The idea of crowdfunding is simple yet effective: it enables project creators to showcase their goals and visions on digital platforms, appealing to a wide range of possible backers to make modest or significant financial contributions to the venture (Choudhury, (2019). Crowdfunding's attractiveness comes from its capacity to facilitate finance and cut out the rigorous procedures involved in obtaining conventional investment from banks, venture capitalists, or angel investors (Biancone et al., 2019).. Additionally, it creates a clear and direct line of communication between client and its investors, promoting a sense of shared ownership.

## LITERATURE REVIEW

For many years, MSMEs have predominantly acquired their capital through conventional financial channels. Traditional finance provides consistency, defined procedures, and a uniform method for determining creditworthiness. Collateral and credit history are frequently used by banks as influencing factors when approving loans (Mittal and Raman, 2021). The conventional financial system does, however, have drawbacks, such as stringent requirements, delayed approval procedures, and restricted access for MSMEs without sufficient collateral or credit history. These approaches use cutting-edge platforms and technology to link MSMEs with financiers, suppliers, and investors. Innovative financing models offer potential benefits to MSMEs by addressing the limitations of traditional finance (Rajamani, 2022). They offer alternate finance options, promote financial inclusion, and encourage the development of new businesses. Micro, Small, and Medium-Sized Enterprises (MSMEs) are essential for boosting entrepreneurship, economic growth, and job possibilities. However, many MSMEs continue to face major obstacles when trying to acquire financing, especially in developing nations. MSMEs find it challenging to obtain funding through traditional financing channels like bank loans because of their strict eligibility rules, high interest rates, and collateral requirements (Rahman et al., 2017). . Crowdfunding has become a viable alternative financing option for MSMEs in recent years, providing a more accessible and sustainable method of generating capital. Crowdfunding has been proven to provide a number of advantages, including better market awareness, access to a larger investor base, and a way to validate product or service concepts. Additionally, crowdfunding offers MSMEs a useful platform for connecting with potential stakeholders and developing an audience of devoted customers (Rajamani, 2022).. Despite the benefits, crowdfunding offers risks and hurdles for MSMEs. Studies have uncovered problems with campaign failure, fraud, infringement of intellectual property, and challenges with controlling backers' expectations. Additionally, some MSMEs can have trouble in effectively marketing their campaigns, which would make it harder for them to secure enough investment (Brancati, 2015).. The sustainability of modern business practises is essential. However crowdfunding supports social and environmental impact projects and is consistent with sustainable development goals.

While choosing innovative financing methods, MSMEs must take into account a number of criteria, including their particular financing requirements, risk tolerance, technology preparedness, and regulatory

frameworks (Rahman et.al, 2017). Innovative financing solutions connect MSMEs directly with investors, lenders, and suppliers by utilising technology and online platforms, avoiding the prolonged approval procedures and strict eligibility requirements associated with traditional lending. The practise of crowd funding has grown in popularity as a way for MSMEs to raise funds through numerous people or organisations. It provides a wider audience, variety of funding options, and the possibility of marketing and networking opportunities to MSMEs (Biancone et .al,2019).

## RESEARCH GAP

- The existing literature on crowdfunding has primarily focused on financial aspects, such as access to credit, loans, and grants through crowdfunding platforms.
- However, it is crucial to explore additional factors that might influence the adoption of innovative funding methods, specifically in the realm of crowdfunding. Factors like Regulatory Environment, Trust in Providers, Risk Perception, and Perceived Benefits could significantly impact the willingness of MSMEs to embrace crowdfunding as a viable financing option.
- Furthermore, while some studies have examined the overall impact of innovative financing models on MSMEs, there is a notable research gap regarding the effectiveness and sustainability of crowdfunding specifically in the context of Odisha, India.
- Thus, the primary objective of this research is to bridge this gap by conducting a study in Odisha to assess the awareness levels and factors influencing the adoption of crowdfunding among MSMEs in the region.

## OBJECTIVES

- To assess the level of awareness among MSMEs regarding crowdfunding as an innovative financing model.
- To investigate the factors influencing the adoption of crowdfunding by MSMEs.
- To propose recommendations and strategies to increase awareness and overcome barriers for MSMEs in adopting crowdfunding as a financing option.

## HYPOTHESIS

### Traditional financing sources

MSMEs have been compelled to search for other sources of funding for their operations and expansion due to the limited availability of loans and credit from traditional financial institutions. MSMEs who had trouble getting loans from banks and other traditional lending institutions are more likely to explore innovative financing methods including crowd funding, peer-to-peer lending, and revenue-based financing(Qamruzzaman et.al, 2021). These alternative financing options have provided MSMEs with a lifeline, enabling them to access the capital needed to expand their businesses and pursue their entrepreneurial ambitions. Because of this, the financial industry has inadvertently experienced a wave of innovation that has resulted in the adoption of new financing models that specifically target small businesses.

**Hypothesis 1:** Lack of access to traditional financing sources have a significant positive impact to the adoption of crowdfunding among MSMEs.

### **Regulatory Environment**

A common barrier that prevents MSMEs from accessing alternative funding choices that could support their growth and innovation is stringent regulations and cumbersome compliance procedures. MSMEs are burdened by challenging laws and complicated legal frameworks, which discourages them from exploring crowd funding based financing options. crowd funding have the ability to eliminate the funding gap faced by MSMEs, but legislative restrictions that limit its use and are impeding its adoption (Megersa, 2020). As a result, MSMEs are deprived of opportunities to diversify their funding sources and tap into novel financial mechanisms that could propel their development.

**Hypothesis 2:** Regulatory Environment have a significant negative impact to the adoption of crowd funding among MSMEs.

### **Trust in Providers**

In order for micro, small, and medium-sized companies (MSMEs) to implement crowd funding and achieve profitable outcomes, trust in providers is essential. When MSMEs believe that service providers are reliable, they are more inclined to use innovative forms of finance that can support their development. MSMEs' tendency to adhere innovative financing options is favourably influenced by providers' trustworthiness. Trust allows MSMEs to accept alternative opportunities for obtaining funds by overcoming their scepticism and concerns about unfamiliar financing approaches (Khurana,2021). In this situation, the development of solid, trust-based relationships between MSMEs and providers generates an atmosphere that is favourable for the adoption and success of crowd funding.

**Hypothesis 3:** Trust in Providers have a significant positive impact to the adoption of crowd funding among MSMEs.

### **Risk Perception**

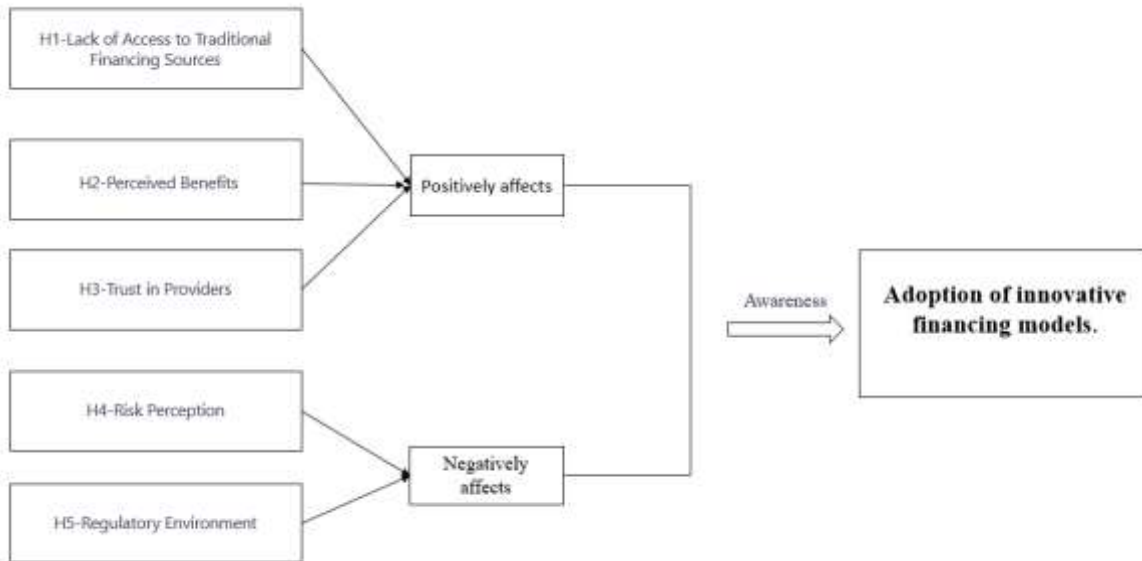
Risk perception is a key factor in determining whether micro, small, and medium-sized businesses (MSMEs) will adopt innovative financing strategies, and it has a major negative impact on their willingness to do so. MSMEs, being smaller in scale and more vulnerable to financial uncertainties, tend to exhibit a heightened sensitivity towards perceived risks associated with adopting new financing approaches(Rajamani,2022). MSMEs may be reluctant to embrace these models due to fear of potential losses ,hesitation due to unknown outcomes, and lack of familiarity with crowd funding.

**Hypothesis 4:** Risk Perception have a significant negative impact to the adoption of innovative financing models among MSMEs.

### **Perceived Benefits**

Perceived benefits are a key factor in persuading Micro, Small, and Medium-Sized Enterprises (MSMEs) to adopt crowd funding. These advantages significantly increases the willingness of MSME to accept crowd funding model as their source of finance(Fauzi,2022). MSMEs are more likely to adopt innovative financing strategies when they perceived the benefits, such as better access to capital, lower transaction costs, more flexible loan terms, and improved financial stability. These advantages give MSMEs the power to get beyond traditional funding barriers and adopt substitute strategies that better suit their particular demands and business models. MSMEs are inspired to adopt and use crowd funding as a result of realising the potential benefits, opening up new possibilities for growth and sustainability.

**Hypothesis 5:** Perceived Benefits have a significant positive impact to the adoption of innovative financing models among MSMEs.



## SCOPE OF THE STUDY

The present study focuses on examining the factors influencing the adoption of Crowd funding among Micro, Small, and Medium Enterprises (MSMEs) in the Khordha district, which is known to have the highest number of registered MSMEs in the Odisha. This research aims to provide insights into the key variables that significantly impact the adoption of Crowd funding among MSMEs in Odisha. The findings of this study will contribute to the existing literature on innovative financing, offering valuable knowledge to policymakers, financial institutions, and MSMEs themselves. This information will enable stakeholders to make informed decisions and develop effective strategies to foster the adoption of Crowd funding in the region.

## LIMITATIONS OF THE STUDY

1. The study has focused exclusively on registered MSMEs and has not included non-registered entities. This exclusion may limit the generalizability of the findings to the entire MSME population
2. The study's scope is confined to a single district in Odisha, chosen based on its high concentration of MSMEs. This limited geographical coverage may restrict the applicability of the findings to other districts or regions.

## RESEARCH METHODOLOGY

A purposive sampling technique was employed to select a sample of Micro, Small, and Medium Enterprises (MSMEs) operating in various sectors of Khordha district, Odisha, India. The primary data was collected through a questionnaire designed using a Likert scale Google questionnaire. The study primarily relied on the primary data collected through the survey. A structured questionnaire was administered to the owners/managers of MSMEs through interviews, predominantly conducted in person but also through online and telephone methods, in the Khordha district of Odisha.

The reliability of the questionnaire was assessed using the Cronbach Alpha test. The hypotheses formulated for the study were tested using a regression model with the assistance of the SPSS version 20.0 software package

### **Population**

The study encompasses all MSMEs registered in Odisha that have financial interactions involving borrowing from various types of banks, including public, private, co-operative, and regional rural banks within the state. The sample for this study has been chosen from Khordha district in Odisha, based on the highest count of registered MSMEs as of March 31st, 2023 i.e. 47,188 units, as evidenced on [udyamregistration.gov.in](http://udyamregistration.gov.in).

### **Sample Size**

In order to obtain a representative sample, the study considers all MSMEs that have registered with [udyamregistration.gov.in](http://udyamregistration.gov.in), which is a government portal for MSME registration.

The sample size has been calculated using the following formula. This formula is considered appropriate for the research as it is commonly used to calculate the sample size for research when dealing with a finite population.

$$n = \frac{(NZ^2pq)}{((N - 1)e^2 + Z^2pq)}$$

$$n = (47188 * 1.96^2 * 0.5 * 0.5) / ((47188 - 1) * 0.05^2 + 1.96^2 * 0.5 * 0.5)$$

$$N \approx 385$$

Where: n = Sample size N = Total population size, Z = Z-score corresponding to the desired confidence level, p = Estimated proportion of the population with a certain characteristic (use 0.5 for a conservative estimate), q = 1 - P, e = Margin of error (desired level of precision)

Taking the total number of registered MSMEs in Khordha district i.e. 47,188 units as the population, with a confidence level of 95% (Z = 1.96) and a margin of error of 5% (e = 0.05), the sample size for registered MSME units works out to 385 units.

### **SAMPLING TECHNIQUE**

During data collection, it was noticed that a significant number of registered MSMEs were either untraceable, had ceased operations, or declined to take part in the survey. To achieve a total of 385 units for analysis, purposive sampling method was used excluding the MSMEs from whom data could not be obtained.

**DATA ANALYSIS**

**Table-1 demographic profile of the respondents**

Demographic variable	Frequency	Percentage	
Gender	Female	139	36%
	Male	246	64%
Business age	>1 year	81	21%
	1-3 years	135	35%
	3-6 years	107	28%
	>6 years	62	16%
Enterprise sector	Manufacturing enterprises	258	67%
	Enterprises rendering services	127	33%
Annual turnover	<1 crore	65	17%
	1-5 crores	158	41%
	5-50 crores	139	36%
	>50 crores	23	12%
Employees working	1-5	108	28%
	5-15	81	21%
	15-30	139	36%
	>30	58	15%

Table-1 shows the demographic profile the sample MSMEs. In terms of gender, the majority of MSMEs are owned by males, accounting for 64% of the businesses. However, female-owned enterprises also make up a significant proportion, representing 36% of the total. When considering the age of the businesses, a considerable number of MSMEs have been operating for 1-3 years, constituting 35% of the sample. The manufacturing sector dominates the MSME landscape in Odisha, with 67% of the businesses engaged in manufacturing enterprises, while 33% are involved in service-oriented ventures. In terms of annual turnover, a significant portion falls within the range of 1-5 crores, with 41% of the MSMEs falling in this category. 36% of the businesses have an annual turnover between 5-50 crores and majority of the MSMEs employ 15-30 individuals, accounting for 36% of the sample, followed by those employing 1-5 employees at 28%.

**Table-2, Overall Cronbach Alpha Reliability Test**

Cronbach's Alpha	N of items
.763	20

Table-2 displays the findings of the overall Cronbach's Alpha reliability test. The obtained Cronbach's Alpha coefficient for this test is .733, indicating a reasonable level of relationship among the items and their ability to measure the same construct. A Cronbach's alpha value above .7 is generally considered acceptable as a measure of reliability. Therefore, based on this criterion, the variables can be deemed reliable for further analysis.

**Table-3, Individual variable Cronbach Alpha Reliability Test**

Construct	Cronbach's Alpha
Traditional financing sources	.755
Regulatory environment	.654
Trust in providers	.797
Risk perception	.621
Perceived benefits	.789
Crowd funding	.734

The internal consistency and reliability of the variables in this study were assessed using Cronbach's alpha coefficient, yielding values ranging from .621 to .797. These results indicate a strong internal consistency among the variables. The variable "Trust in providers" exhibited the highest Cronbach's alpha value of .797, indicating a high level of internal consistency and reliability whereas the variable "Risk perception" demonstrated the lowest Cronbach's alpha value of .621.

**Awareness and adoption of innovative financing models**

	Frequency	percentage
Aware of innovative financing models	219	57%
Adopted	46	21%
Not adopted	173	79%
Not aware of innovative financing models	166	43%

The above table provides insights into the level of awareness and adoption of crowd funding among MSMEs in Odisha. It states that while a significant portion of MSMEs are aware of these models (57%), the adoption rate is relatively lower (21%). Additionally, a considerable number of MSMEs (79%) who are aware, have not yet adopted these models.

**Results of Regression Analysis(Model Summary)**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880 <sup>a</sup>	.774	.727	.667

The analysis demonstrates that this model effectively captures 77% of the impact generated by the independent variables - traditional financing sources, regulatory environment, trust in providers, risk perception, and perceived benefits - on the dependent variable, financing through crowd funding. This conclusion is supported by an Adjusted R square value of 0.727. The findings highlight a substantial correlation between financing through crowd funding and the independent variables: traditional financing sources, regulatory environment, trust in providers, risk perception, and perceived benefits. This assertion is reinforced by an R coefficient of 88% within the regression model.

**Results of Regression Analysis (ANOVA)**

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.976	4	7.244	16.288	.000 <sup>b</sup>
	Residual	8.450	19	.445		
	Total	37.426	23			



The ANOVA results indicate a highly significant probability value of .000b, affirming the significance of the regression model. This suggests that the model is appropriate for predicting the association between the independent variables (traditional financing sources, regulatory environment, trust in providers, risk perception, and perceived benefits) and the dependent variable (financing through crowd funding). The p-value |t|, at a 95% confidence level, is below 0.05, further supporting the significance of the relationship.

### HYPOTHESIS TESTING

Hypothesis	Unstd. Beta	Std. Beta	Std. Error	t-value	Decision
H1 Traditional financing sources → Crowd funding	0.580	0.668	0.370	8.524	Supported
H2 regulatory environment → Crowd funding	0.695	0.723	.070	9.915	Supported
H3 trust in providers → Crowd funding	0.490	0.195	0.101	7.437	Supported
H4 risk perception → Crowd funding	0.868	0.585	0.127	6.848	Supported
H5 Perceived benefits → Crowd funding	0.283	0.293	0.499	7.087	Supported

### RECOMMENDATION

- Workshops, webinars, and training sessions should be conducted to increase public understanding of the advantages, risks and outcomes associated to financing through crowd funding.
- MSMEs should be provided with special assistance in understanding and implementing crowd funding by creating a special helpline or counselling centre where business owners can get advice on the application procedure, prerequisites for eligibility, and documentation needed.
- Develop user-friendly websites and mobile applications that offer information, resources, and tools on crowd funding for MSMEs.
- Crowd funding platforms that cater specifically to the needs and preferences of the Odia community should be developed. This could involve showcasing local projects, featuring local success stories, and incorporating traditional payment methods.
- By implementing favourable regulations and incentives, governments can play a significant role in fostering innovative funding structures. Incentives such as tax breaks, grants, subsidies, and loan guarantees can be provided to MSMEs who use innovative financing strategies.

### CONCLUSION

The Micro, Small, and Medium Enterprises (MSMEs) sector is an essential and dynamic part of the Indian economy. However, these small businesses often face challenges when it comes to raising funds. Promoting crowd funding among MSMEs (Micro, Small, and Medium Enterprises) is crucial for their growth and sustainability. MSMEs should start using innovative finance techniques as feasible alternatives to get over these barriers. Crowd funding provide greater accessibility, flexibility, community engagement, and cost savings to MSMEs and will allows them to access a greater choice of funding sources, accelerate the loan approval process, and take advantage of flexible repayment alternatives. However, MSMEs in Odisha currently have a limited awareness and grasp of crowd funding. By conducting this research, the study seeks to shed light on the variables that play a significant role in the

adoption of crowd funding among MSMEs in Odisha. The findings of the study revealed that there is a moderate level of awareness of crowd funding among MSMEs in Odisha. By understanding the current perceptions and attitudes of people of MSMEs in Odisha towards crowd funding, various stakeholders such as investors, regulators, and policymakers can make more informed decisions that can potentially empower the MSME sector and drive economic growth in the region.

## REFERENCES

1. Mittal, V., & Raman, T. V. (2021). Financing woes: estimating the impact of MSME financing gap on financial structure practices of firm owners. *South Asian Journal of Business Studies*, 11(3), 316-340.
2. Biancone, P. P., Secinaro, S., & Kamal, M. (2019). Crowdfunding and Fintech: business model sharia compliant. *European Journal of Islamic Finance*, (12).
3. Rahman, A., Rahman, M. T., & Belas, J. (2017). Determinants of SME finance: evidence from three central European countries. *Review of economic perspectives*.
4. Pu, G., Qamruzzaman, M. D., Mehta, A. M., Naqvi, F. N., & Karim, S. (2021). Innovative finance, technological adaptation and SMEs sustainability: the mediating role of government support during COVID-19 pandemic. *Sustainability*, 13(16), 9218.
5. Megersa, K. (2020). Improving SMEs' access to finance through capital markets and innovative financing instruments: some evidence from developing countries.
6. Khurana, S., Haleem, A., Luthra, S., & Mannan, B. (2021). Evaluating critical factors to implement sustainable oriented innovation practices: An analysis of micro, small, and medium manufacturing enterprises. *Journal of Cleaner Production*, 285, 125377.
7. Rizos, V., Behrens, A., Van der Gaast, W., Hofman, E., Ioannou, A., Kafyeke, T., & Topi, C. (2016). Implementation of circular economy business models by small and medium-sized enterprises (SMEs): Barriers and enablers. *Sustainability*, 8(11), 1212.
8. Rajamani, K., Jan, N. A., Subramani, A. K., & Raj, A. N. (2022). Access to finance: challenges faced by micro, small, and medium enterprises in India. *Engineering Economics*, 33(1), 73-85.
9. Vásquez, J., Aguirre, S., Puertas, E., Bruno, G., Priarone, P. C., & Settineri, L. (2021). A sustainability maturity model for micro, small and medium-sized enterprises (MSMEs) based on a data analytics evaluation approach. *Journal of Cleaner Production*, 311, 127692.
10. Brancati, E. (2015). Innovation financing and the role of relationship lending for SMEs. *Small Business Economics*, 44(2), 449-473.
11. Kijkasiwat, P., & Phuensane, P. (2020). Innovation and firm performance: The moderating and mediating roles of firm size and small and medium enterprise finance. *Journal of Risk and Financial Management*, 13(5), 97.
12. Toxopeus, H., Achterberg, E., & Polzin, F. (2021). How can firms access bank finance for circular business model innovation?. *Business Strategy and the Environment*, 30(6), 2773-2795.
13. Fauzi, A. A., & Sheng, M. L. (2022). The digitalization of micro, small, and medium-sized enterprises (MSMEs): An institutional theory perspective. *Journal of Small Business Management*, 60(6), 1288-1313.
14. Harvie, C. (2019). Micro-, small-and medium-sized enterprises (MSMEs): challenges, opportunities and sustainability in East Asia. *Trade logistics in landlocked and resource cursed Asian countries*, 155-174.

15. Mund, C. S. (2020). Problems of MSME Finance in India and Role of Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE). *IOSR Journal of Economics and Finance*, 11(4), 1-6.
16. Choudhury, M., & Goswami, C. (2019). MSME financing gaps–review of literature for the period 2005 to 2016. *Journal of small business and entrepreneurship development*, 7(2), 50-60.
17. Biswas, A. (2014). Financing constraints for MSME sector. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 1(5), 60-68.