Impact of Credit Facilities and Contemporary **Economic Environment on the Accessibility to Credit** of Customers - Case Study In Binh Duong, Vietnam

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ABSTRACT

Recently, accessibility to credit has become a global issue and need to be examined frequently that needs the attention of regulators and researchers. Thus, this study examines the credit facilities (the price of credit and reliability of credit sources) on the accessibility of customer credit at commercial banks in Binh Duong Province, Vietnam, in the context of the COVID-19COVID-19 pandemic. The study also examines the moderating role of the contemporary economic environment among the nexus of the price of credit, reliability of credit sources and accessibility of the credit of customers at commercial banks in Binh Duong Province. The findings suggested that the price of credit has negative while reliability of credit sources have a positive impact on the accessibility of the credit of customer at commercial banks. The results also revealed that the contemporary economic environment significantly moderates among the nexus of the price of credit, reliability of credit sources and accessibility of the credit of customers at commercial banks.

KEY WORDS:

COVID-19 pandemic, accessibility to credit, contemporary economic environment price of credit,

reliability of credit sources.

JEL Classification:

G41, G28, D31.

1. Introduction

Considering the need for the awareness of credit accessibility among government and general people for mitigation of adverse impacts of the CO-VID-19 pandemic, our study gives the analysis of how to improve customers' accessibility to credit. The aim of the study is to explore the influences of the price of the credit and the reliability of the source of credit on the customers' accessibility to credit. The aim of the study is also to propose the impact of contemporary economic environment price of the credit, reliability of the source of credit and the customers' accessibility to credit and the mutual association between price of the credit and reliability of the source of credit and the customers' accessibility to credit. Since early 2020, the COVID-19 pandemic has affected badly business activities of enterprises and the daily life of citizens influencing commerce, service and banking activities significantly over the world (Chinanuife et al., 2019; Chien et al., 2021a; Hussain et al., 2021; Kot et al., 2021; Ehsanullah et al., 2021; Hsu et al., 2021). There are many researchers who study the

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impact of the COVID-19 pandemic on the worldwide economy in the world, such as Chaudhary et al. (2020), Boettke and Powell (2021) and Goodell (2020). These studies pointed negative impacts of the COVID-19 pandemic on the economic development of countries over the world. Goodell (2020), emphasized significant economic influences and social impacts of COVID-19 on articles. Direct or indirect impacts of COVID-19 on the financial market and financial organizations are drafted briefly in the articles. Boettke and Powell (2021) and Hussain et al. (2021) indicated the negative impacts of COVID-19 on many fields. Particularly for the banking industry, Stubbs et al. (2021) conducted the bank stress test to determine the bank's solvency under the pandemic period. Rodin et al. (2020), assessed the role of banks in the context of the pandemic when banks are subjects to solve economic recession or COVID-19 in Germany. Moreover, Chaudhary et al. (2020), Xiang et al. (2021) and Hussain et al. (2020) concluded the effect of the pandemic on banking activities.

Current economic environments consider banks as financial institutions that helps and assists the people in different ways by deposits and by lending. Therefore, it is important to ascertain the economic condition that essentially forces the general public to avail the facilities of credit. While availing the credit facilities, the economic environment could not be eluded. There are numerous types of credit facilities at different rates by taking collateral securities as a mandatory requirement of financial institution. In fact, many financial institutions exist in the commercial market that lend credit facilities at various effective and realistic rates. It is the feasibility of economic environment and credit facilities of various financial institutions that admire the customers to avail the credit. Every person is striving for the better opportunity in market, but unfortunate and uncertain environment of the global economy is the major barrier. According to Gichuki et al. (2014) the key indicators of cost of credits are processing and negotiation fee, legal fees interest rates etc. Moreover, the access to microfinance credit facilities is not that easy as one must have organized and structured business to meet the standardized assessment and evaluation of financial institutions. Rise in unemployment, instability in businesses and low income especially forces people in availing the credit facilities. These credit facilities are correlated with the economic environment that impacts the accessible options of credit to customers (Chien et al., 2021c; Sadiq et al., 2021c; Xueying et al., 2021).

In the research, the comparative method, credit growth, consumer credit outstanding balance, banking profits and bad debts show negative changes due to the impacts of COVID-19. Therefore, the difficulties of banks in Vietnam confront requires necessary solutions to overcome. Binh Duong, which is the most developing industrial province Binh Duong ranks second for FDI inflow after Song et al. (2020); Sadiq et al., (2021a); Lin and Chang (2020) but the booming COVID-19 pandemic results in an adverse impact on it. To mitigate the difficulties of firms in the current situation, the credit institutions performed solutions such as re-structuring of debt repayment, exemption from/decrease in interest rate, new loans with preferential interest rates. Therefore, understanding credit accessibility helps the local government to implement a proposal of policies to increase capital accessibility to recover production and business activities in Binh Duong. The influences of reliability of the source of credit on the customer accessibility to credit have long been discussed and debated among researchers and scholars (Chien et al., 2021d; Nwosu & Orji, 2016; Rudnicki, 2021; Sadiq et al., 2021b; Sharma, 2020). But the role of the price of the credit in determining customer accessibility to credit has not been much discussed by scholars and investigators (Baloch et al., 2021; Bokhari, 2020; Castillo-Vergara et al., 2021).

This study contributes by exploration the impact of credit's price on the customers' accessibility to credit. Moreover, in the past, though the authors have discussed the influences of the price of the credit and reliability of the source of credit on the customers' accessibility to credit, they have analyzed the nexus among price of the credit and reliability of the source of credit and the customers' accessibility to credit in separate studies. The attempt to discuss the influences of the price of the credit and reliability of the source of credit on the

customers' accessibility to credit at the same time is an extension to the literature. Our study is also one of the initial attempts to address the impacts of the contemporary economic environment as a moderator between the price of the credit and reliability of the source of credit on the customers' accessibility to credit.

This paper is structured into several parts. The next part deals with the views of past authors or researchers about the influences of the price of the credit and reliability of the source of credit on the customers' accessibility to credit and the influences of the contemporary economic environment on the price of the credit and reliability of the source of credit and on the customers' accessibility to credit. The third part throws light on the process which has been applied to collect data about the understudy constructs and the way to analyze the data for results extraction. The fourth part supports the current study with the previous ones. Finally, the paper gives implications and conclusions of the study and presents some recommendations for future authors.

2. Literature Review

For credit demand, the level of credit accessibility depends on three main elements, which include price, reliability and other services (Alobari et al. (2018); ELIJAH (2019); Nguyen et al. (2020); Obergassel et al. (2020); Silva et al. 2021)). Chen et al. (2020); Li et al. 2021; Dengov et al. (2020) stated that the interest rate is a big concern of banks because the nature of risk is the difference between maturity duration and payable debt. Experimental pieces of evidence from the study of Linh et al. (2019) on customers at Commercial Bank in Mexico showed that the elasticity between demand and interest rate increases significantly from time to time, minus 1.1 for the first 12 months and up to -2.9 for last six months of the loan. It implies that when other elements are unchanged, the increase in interest rate will decrease the credit demand significantly. In this study, the price is measured by two large elements as the interest rate and transaction cost. Kaplan et al. (2018), Chien et al. (2021b) and Markowicz and Baran (2020) suggested a relationship between commercial banks and customers, which has two elements, including the loan process and the professional level of bankers. Kibicho and Mungai (2019), Mohsin et al. (2021); Liu et al. (2021) focused on transaction lending, which is based on using a database, for example, information collected from the financial statement of the borrowers and the collateral assets. They also indicated another method of lending, which is based on relationships and plays an important role in banking activities, but the banks prefer transaction lending. Therefore, Kibicho and Mungai (2019) and Nawaz et al. (2021) claimed that the role of bankers is important to maintain the relationship with customers and the lending process. It implies that regular and effective contact with the bankers is the key to maintaining beneficial interaction with customers. Nguyen et al. (2020), Nawaz et al. (2021) and Albu and Albu (2021) expressed that the information for the bankers improves the customer's credit accessibility in Europe because the relationship between the banks and borrowers can reduce the asymmetric information. Similarly, Silva et al. (2021) illustrated that the focus of the financial intermediary is on reliability, and it influences the ability of banks and other intermediaries to maintain their financing models.

With the rise in credit rates, the customers are more confused in availing the credit facilities. Along with exceptional requirements of the financial institutions of taking collateral securities and various other options with higher rates are main issues for customers. The barriers and constraints of high price of credit has limited the option of credit accessibility for customers. Both sides of customer and financial institution could not be eliminated as a deem need for the customer and growth of financial institution. Therefore, the hike in price of credit is the major issue that describes its negative link with the accessible option for availing credit to customer.

Finally, the essential element influencing the relationship between commercial banks and customers is utilities attached to credit products measured by two main factors, which include attached products and the customer's requirements. Nganga and Atheru (2020) and Zinecker et al. (2021), implied that no bank could supply all products because

margin cost is higher than further service deployment. Thus, commercial banks should satisfy customers' demand which encourages them to use further banking products or services. Moreover, it helps to build loyalty by creating a deep and adequate relationship with customers. A study was conducted by Giang and Hang (2019) investigated the decision making of financial institutions, the price of the credits, and the customer's accessibility to credits. The data for this research were collected from the date set of the Vietnam Household Living Standard Survey (VHLSS) for the period from 2014 to 2016 to reduce the adverse impacts of the global economic crisis during 2008-to-2009 checking the estimated unsustainability. The study implies that the income of the bank clients who are willing to benefit from bank credit facilities and the price of the credits granted by the banks determine the power of the clients to access the credits to meet their needs. A research was conducted by Dang et al. (2019) to investigate the influence of the process of the issuance of credits, price of credit, and credit accessibility. The study analyzes the credit demand of farmers in Lam Dong, Vietnam. The study employed the multinomial logit (MNL) regression model and the random forest (RF) technique for analysis of credits issuance, price of credit, and clients' credit accessibility. The study highlights that the cost of credit is the additional amount, over and above the amount borrowed, that the clients must pay including arrangement fees, interest, and any other charges. The cost of the credit determines the ability of the clients to access the required credit. If the banks allow credits on small prices, the farmers can access the credits to meet their demands.

H1: Price of credit is in a negative association with customer credit accessibility.

The current situation of reliability source is also the major concern for the customer in availing the credit facility from financial institution. Most of the customers rely on prevailing news of the market that develop fear of hike in the risk of availing credit. While the other side where providing some positive depiction also rating pledge of security which raises the fear of their assets. Pledging assets of customer to the financial institution is also increasing due to uncertain situations of financial

institutions toward their customers that broke the trust factor. Therefore, the source reliability is main element that significantly links with accessibility of credit.

Kumar et al. (2020) in Sweden revealed that quality is a vital element and more important than traditional marketing activities. In particular, convenient location and better infrastructure influence the choice of the bank from customers who have demand on credit. Particularly, the survey that was conducted among 358 customers at private banks and national banks at Lahore City (Pakistan) found the most important variables influencing customers' choice are customer service, convenience and overall banking environment. The study of Pakurár, et al. (2019), uses service quality dimensions with the help of the SERVQUAL model for the measurement of the interrelationship between tangibles, responsiveness, empathy, assurance, reliability, access, financial aspect, and employee competences, credit accessibility, and customer satisfaction. The data for the study were collected from 825 customers in the Jordanian banking sector. The data were analyzed with exploratory factor analysis by the SPSS program for determining service quality, customer satisfaction, and credit accessibility. The study reveals that when the concerned institution has a good reputation for its reliability, like if there is no difference between what it exhibits and what it does, the customers feel easy to access with the credit service of this institution. Escamilla et al. (2021), presents their arguments on the role of reliability of the source of credit and the customers' accessibility to credit. This study focuses on the reliability of the source of credit in the words that if the financial institutions assure the reliability of their services by showing positive behavior towards the end of the credit agreement, and have good for its reliability, the customers feel satisfied and can easily access the credit. Thus, it can be hypothesized:

H2: Reliability of source is in a positive association with customer accessibility to credit.

The temporary economic environment is the modern economic world. In the temporary age, financial institutions are mostly performing their services through digital technology, which have

saved their money, time, effort, and improved reliability, convenience, and access to customers. The adaptability to a temporary economic environment has affected the policies and strategies of financial institutions like banks (Bahta et al., 2021; Gaines & Kasztelnik, 2021; Thi, 2018; Tirtayasa, 2020). It has facilitated their work of accountancy, decision making, service rendering, and interaction with the customers. The agility and accuracy save the costs of the institutions and enhance their profits with more productivity. Thus, the prices of their products which are in the form of financial services, can be kept minimum. When the customers see the price of credit which in in addition to the actual amount of credit, is less, they are satisfied with the bank services and can have a large amount of credit in order to meet their financial needs (Alobari et al., 2018; Chien et al., 2021e; Gebre Borojo & Yushi, 2020; Kurgat et al., 2017; Li et al., 2021). A literary work out of Quarshie and Djimatey (2020) suggests that the adaptability to the temporary economic environment assists the customers to have information about and benefit from the credits services of banks easily. This also reduces the costs of banks, price of credits in results and assures customer credit accessibility.

Every institution requires some prominent factor of credit facilities to the customers that helps to attain significant profits and rise in sales. This tend to be the highlighted one among the customer and financial institution which could not be neglected. Every financial institution provides credit facilities to customers on some rates which help in sustainability according to the economic situation (Banu, 2013; Nwosu et al., 2020; Huang et al., 2020; Othman et al., 2020). Mainly the economic environment is contemporary and major one that exist among customer accessibility to credit and price of credit (Huang et al., 2021a). To sustain the economic condition, the financial institution lending rates are main contributor for economic sustainability.

H3: Contemporary economic environment is a moderator between the price of credit and customer accessibility to credit.

Better policies of financial institutions are placing the factor of trust among customers that are availing the facility of credit. Even though, the realistic approach of financial institution is limelight channel among customers by uplifting the element of reliable source. These factors are when taken into consideration automatically highlights the stable economic environment for national and international customer. Contemporary economic environment is significant and dominant factor erasing the gap among reliability of source and accessibility of credit to customer.

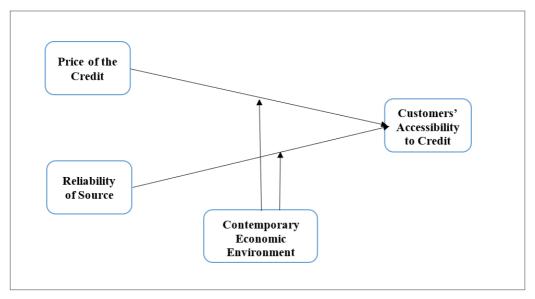
Business organizations need credits for several purposes, but their accessibility to credits is dependent on their satisfaction towards the service quality of customers. The adaptability to the temporary economic environment, like the use of up-to-date digital devices for different purposes like information, communication, receipt of deposits, withdrawal of money, transfer of money, and accountancy etc., have created convenience, accuracy, agility, and reliability in functioning and services of banks. The customers who are satisfied with the reliability of the banks can make a choice to have credit facilities (Chien et al., 2021b; Reddy & Cherukuri, 2019; Nwosu & Orji, 2017; Shair et al., 2021). In the temporary economic environment, financial institutions like banks use social media platforms to interact with customers across the country. On these plate-forms, they share the information about the variety of services they render, the process to apply for services, and the way to get the services. If this information is reliable, authentic, and leading, the customers can access the credits at the time of need (Herkenhoff et al., 2016; Sun et al., 2020; Wentz et al., 2019; Zhuang et al., 2021; Huang et al., 2021b). So,

H4: Contemporary economic environment is a moderator between the reliability of the source and customer accessibility to credit.

3. Methodology

Based on the above studies, this study provides an analytical framework of factors affecting the level of access to credit based on the credit demand approach, including three main factors: the price of the credit (PC), reliability of sources (RS) and contemporary economic environment (CEE). The Figure 1 shows the analytical framework in this study.

Figure 1 Analytical Framework



Among these three factors price of the credit and reliability have been used as the predictors while the contemporary economic environment is used as the moderator. In addition, the dependent variable in the study is the customer's accessibility to credit (CAC). In which, the study focuses on analyzing the impacts of each main factor on the dependent variable, which is the level of access to credit with four hypotheses from H1 to H4, respectively.

4. Theoretical Framework

The results indicated the convergent validity that shows the correlation between the items of the constructs. The figures indicated a high correlation between items because the factor loadings along with AVE values are bigger than 0.50. In addition, Alpha and CR values are larger than 0.70 and Table 1 shows these values.

5. Study Results

The results indicated the convergent validity that shows the correlation between the items of the constructs. The figures indicated a high correlation between items because the factor loadings along with AVE values are bigger than 0.50. In addition, Alpha and CR values are larger than 0.70 and Table 1 shows these values.

The results also indicated the discriminant validity that shows the correlation between the constructs. Firstly, cross-loadings and Fornell Larcker were used. The figures indicated a low correlation between variables because the values that indicated the nexus with construct itself are larger than the values that indicated the association with other constructs. Table 2 and Table 3 show these values.

The results also check the discriminant validity using Heterotrait Monotrait (HTMT) ratio. The figures indicated a low correlation between variables because the values of HTMT ratios are lower than 0.90. Table 4 show these values.

The path analysis has been mentioned the relationships between the constructs. As it can be seen in table 5 that coefficient of path value is positive and p-values is less 0.05 hence showing the positive association between reliability of credit sources and accessibility of customer credit at commercial

Table 1 Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Customer Accessibility to Credit	CAC1	0.580	0.920	0.934	0.588
	CAC10	0.783			
	CAC2	0.767			
	CAC3	0.842			
	CAC4	0.656			
	CAC5	0.814			
	CAC6	0.793			
	CAC7	0.782			
	CAC8	0.812			
	CAC9	0.799			
Contemporary Economic Environment	CEE1	0.831	0.935	0.946	0.663
	CEE10	0.577			
	CEE2	0.858			
	CEE3	0.849			
	CEE4	0.811			
	CEE6	0.865			
	CEE7	0.861			
	CEE8	0.854			
	CEE9	0.778			
Price of Credit	PC1	0.629	0.930	0.937	0.535
	PC11	0.713			
	PC13	0.735			
	PC14	0.678			
	PC15	0.818			
	PC2	0.791			
	PC3	0.790			
	PC4	0.729			
	PC5	0.801			
	PC6	0.719			
	PC7	0.529			
	PC8	0.732			
	PC9	0.794			
Reliability of Sources	RS1	0.921	0.978	0.981	0.865
•	RS2	0.930			
	RS3	0.931			
	RS4	0.940			
	RS5	0.926			
	RS6	0.927			
	RS7	0.943			
	RS8	0.924			

Table 2Fornell Larcker

	CAC	CEE	PC	RS	
CAC	0.767				
CEE	0.424	0.814			
PC	-0.170	-0.103	0.732		
RS	0.465	0.428	-0.120	0.930	

Table 3
Cross-loadings

	CAC	CEE	PC	RS
CAC1	0.580	0.201	-0.113	0.359
CAC10	0.783	0.346	-0.093	0.398
CAC2	0.767	0.368	-0.173	0.430
CAC3	0.842	0.364	-0.118	0.345
CAC4	0.656	0.237	-0.112	0.338
CAC5	0.814	0.342	-0.155	0.404
CAC6	0.793	0.316	-0.075	0.306
CAC7	0.782	0.356	-0.147	0.322
CAC8	0.812	0.358	-0.162	0.332
CAC9	0.799	0.324	-0.137	0.307
CEE1	0.345	0.831	-0.089	0.350
CEE10	0.259	0.577	-0.074	0.184
CEE2	0.348	0.858	-0.109	0.354
CEE3	0.332	0.849	-0.120	0.345
CEE4	0.302	0.811	-0.051	0.379
CEE6	0.319	0.865	-0.090	0.368
CEE7	0.380	0.861	-0.077	0.376
CEE8	0.424	0.854	-0.088	0.392
CEE9	0.361	0.778	-0.058	0.351
PC1	0.000	-0.080	0.629	-0.025
PC11	-0.133	-0.129	0.713	-0.158
PC13	-0.028	-0.047	0.735	-0.069
PC14	-0.076	-0.048	0.678	-0.050
PC15	-0.135	-0.029	0.818	-0.123
PC2	-0.166	-0.120	0.791	-0.106
PC3	-0.092	-0.068	0.790	-0.066
PC4	-0.044	-0.060	0.729	-0.087
PC5	-0.137	-0.024	0.801	-0.120
PC6	-0.120	-0.130	0.719	-0.084
PC7	-0.170	-0.059	0.529	0.000
PC8	-0.094	-0.069	0.732	-0.096
PC9	-0.098	-0.075	0.794	-0.074

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Table 3 Cross-loadings (Continued)

	CAC	CEE	PC	RS	
RS1	0.414	0.402	-0.148	0.921	
RS2	0.414	0.428	-0.103	0.930	
RS3	0.423	0.396	-0.143	0.931	
RS4	0.439	0.413	-0.098	0.940	
RS5	0.458	0.371	-0.079	0.926	
RS6	0.421	0.395	-0.142	0.927	
RS7	0.435	0.416	-0.106	0.943	
RS8	0.456	0.370	-0.082	0.924	

Table 4 Heterotrait Monotrait Ratio

	CAC	CEE	PC	RS	
CAC					
CEE	0.450				
PC	0.153	0.110			
RS	0.488	0.445	0.119		

Table 5 Path Analysis

Relationships	Beta	S.D.	T Statistics	P Values	L.L.	U.L.
CEE -> CAC	0.307	0.057	5.373	0.000	0.221	0.397
PC -> CAC	-0.103	0.041	2.514	0.007	-0.197	-0.056
PC*CEE -> CAC	0.093	0.048	1.927	0.028	0.007	0.169
RS -> CAC	0.361	0.066	5.446	0.000	0.240	0.466
RS*CEE -> CAC	0.189	0.053	3.573	0.000	0.070	0.267

Figure 2
Measurement Model Assessment

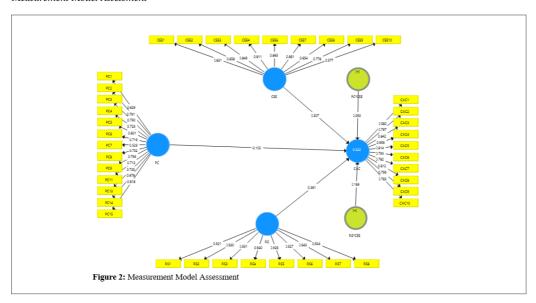
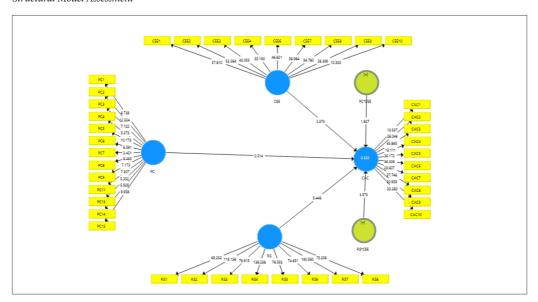


Figure 3
Structural Model Assessment



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Figure 4 PC*CAC

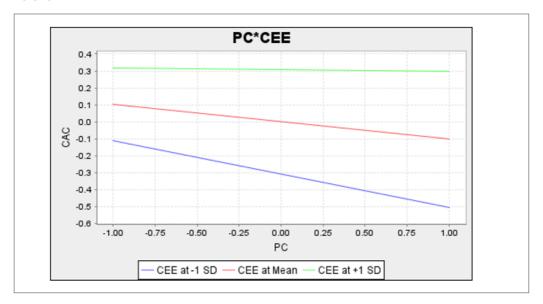
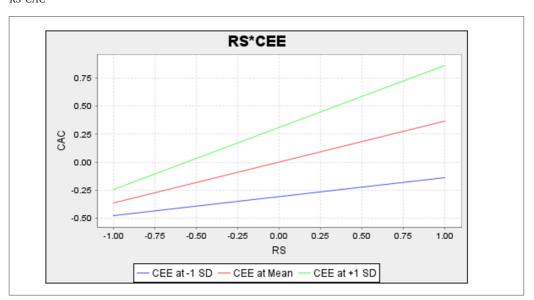


Figure 5 RS*CAC



banks. The -ve sign of beta coefficient shows the negative correlation among price of credit and access of customer credit at commercial banks. Hence the findings support the H1 and H2. The results also revealed that the contemporary economic environment significantly moderates among the nexus of the price of credit, reliability of credit sources and accessibility of the credit of customers at commercial banks and accept H3 and H4. Table 5 shows these relationships.

6. Discussions and Implications

The study results have indicated that the price of the credit has a positive relationship with customers' accessibility to credit. These results are supported by the previous study of Ogechi (2018), which states that if the financial institutions like banks deign their credit policies in such a way as to charge minimum additional cost on credits to customers, it can attract more number customers as the customers can afford more amount of credits for their economic purposes. These results are also supported by the previous study of Mogaji et al. (2021), according to which the individuals or commercial institution can have more opportunity avail credits in order to meet their financial needs if the price of credit is minimum. The study results have indicated that the reliability of sources has a positive relationship with customers' accessibility to credit. These results are in line with the previous study of Bamata and Fields (2018), which states that the reliability of the information which the financial institutions give about the variety of their services and the way to approach them is reliable, it is more likely for the customers to access credits whenever they need. These results are also in line with the previous study of Ayswarya et al., (2019), which shows that when the banks are reputed for their reliable and clean dealings with the clients, the person's interest in their products can be easily led through their marketing channels to access the credit services.

The study results have also revealed that a temporary economic environment is a moderator between the price of credit and customers' access to credit. These results agree with the past study of Mariyono (2019), which states that the adaptability to the temporary economic environment through

the adoption of up-to-date ways of performing financial functions and the adoption of innovative marketing channels reduces the costs of credits and makes it convenient for the customers to access the banking services like credits. The study results have also indicated that the temporary economic environment is a moderator between the reliability of the source and customers' access to credit. These results are supported by the previous study of Candraningrat, Abundanti et al. (2021), according to which in the temporary economic world, the financial institutions carry their functions with the help of up-to-date technology and carry digital marketing channels. This improves the accuracy and reliability of the banking services and makes it easy for the customers to have high credit accessibility.

The current study has both theoretical and empirical implications. This study has great theoretical significance because of its remarkable contribution to the literature on the financial development of the country. This study analyzes the influences of two important factors, price of credit and reliability of source, on customers' accessibility to credit. Though many studies have individually discussed the influences of the price of credit and reliability of source on customers' accessibility to credit, our study first time assembled the price and reliability (quality) of financial services like credit to determine the customers' accessibility to credit. This study also has an empirical significance. This study is a leading one for the individual clients, economists, and management of financial institutions as it guides them on how to assist customers' accessibility to credit. The study suggests that by minimizing the price of credit and improving the reliability of source, customers' accessibility to credit can be increased.

7. Conclusion

The findings prove that the borrowers at Commercial Banks in Binh Duong province are interested in interest rate, lending process, and the ability to meet of the bank more than other factors as transaction costs, Profession of staff and attached products in all research stages for before the pandemic 2015-2019 and the pandemic from 2020. The paper point outs interest rate in the opposite direction while the lending process has a positive impact with the number and value of the loans as the expecta-

tions. Furthermore, the elasticity of interest rate variable in the pandemic time is higher than normal situations, which show a higher level of expectation of customers about the possibility of receiving support from Commercial Banks due to an economic shock.

For Commercial Banks' lending process, the result disclosed that this factor is interesting in customers, which impact the level of access to credit of customers. In addition, the factor "Ability to meet" is closely related to the level of access to credit in the pre-pandemic model, which is in line with customers' expectations. However, in the pandemic situation, this factor no longer plays an important role, and they focus on the pricing of borrowing.

8. Limitations and Future Directions

Despite the theoretical and empirical significance, the current study has some limitations too. These limitations must be removed by the authors when they are willing to replicate this study. This study has analyzed the influences of only two factors like the price of credit and reliability of source on customers' accessibility to credit. This has confined the scope of the study to just two factors. At the same time, there are many other organizational, managerial, or equity factors that can determine the customers' accessibility to credit. The authors in future must also focus on other factors to present more reliable results. This study analyzes the influences of the price of credit and reliability of source on customers' accessibility to credit in Binh Duong, a province of Vietnam. Financial or economic conditions may be different in other regions of Vietnam or other countries. So, the study lacks generalizability. For the sake of a general study, the authors must analyze the impact of the price of credit and the reliability of sources on customers' accessibility to credit in other provinces of Vietnam and other countries as well.

References

- Albu, A.-C., & Albu, L.-L. (2021). Public debt and economic growth in Euro area countries. A wavelet approach. Technological and Economic Development of Economy, 27(3), 602-625. https:// doi.org/10.3846/tede.2021.14241
- Alobari, C., Naenwi, M., Zukbee, S., & Miebaka, G. (2018). Impact of credit management on bank performance in Nigeria. Equatorial Journal of Finance and Management Sciences, 3(1), 17-23. https://ssrn.com/abstract=3165764

- Asiyanbi, H., & Ishola, A. (2018). E-banking services impact and customer satisfaction in selected bank branches in Ibadan metropolis, Oyo state, Nigeria. Accounting, 4(4), 153-160. http://dx.doi. org/10.5267/j.ac.2018.3.001
- Ayswarya, R., Sarala, D., Muralidharan, P., & Ilankadhir, M. (2019). Service quality of mobile banking services in ICICI Bank Limited. Journal of Service Science and Management, 12(05), 649-657. https://doi.org/10.4236/jssm.2019.125045
- Bahta, D., Yun, J., Islam, M. R., & Bikanyi, K. J. (2021). How does CSR enhance the financial performance of SMEs? The mediating role of firm reputation. Economic Research-Ekonomska 34(1), 1428-1451. https://doi.org/10.1080/133167 7X.2020.1828130
- Baloch, Z. A., Tan, Q., Kamran, H. W., Nawaz, M. A., Albashar, G., & Hameed, J. (2021). A multiperspective assessment approach of renewable energy production: policy perspective analysis. Environment, Development and Sustainability, 1-29. https://doi.org/10.1007/s10668-021-01524-
- Bamata, N., & Fields, Z. (2018). The determinants of start-up awareness to improve access to bank financing for start-up entrepreneurs. Journal of Contemporary Management, 15(Special Edition1), https://hdl.handle.net/10520/EJC-192-217. 1444cec216
- Banu, I. M. (2013). The impact of credit on economic growth in the global crisis context. Procedia Economics and Finance, 6, 25-30. https://doi. org/10.1016/S2212-5671(13)00109-3
- Boettke, P., & Powell, B. (2021). The political economy of the COVID-19 pandemic. Southern Economic Journal, 87(4), 1090-1106. https://doi. org/10.1002/soej.12488
- Bokhari, A. A. (2020). The twinning of inflation and unemployment phenomena in Saudi Arabia: Phillips curve perspective. Contemporary Economics, 254-272. https://doi. 14(2),org/10.5709/ce.1897-9254.403
- Candraningrat, I., Abundanti, N., Mujiati, N., & Erlangga, R. (2021). The role of financial technology on development of MSMEs. Accounting, 7(1), 225-230. http://dx.doi. org/10.5267/j.ac.2020.9.014
- Castillo-Vergara, M., Quispe-Fuentes, I., & Poblete, J. (2021). Technological innovation in the food industry: A bibliometric analysis. Engineering Economics, 32(3), 197-209. https://doi. org/10.5755/j01.ee.32.3.26000

- Chaudhary, M., Sodani, P., & Das, S. (2020). Effect of COVID-19 on economy in India: Some reflections for policy and programme. *Journal of Health Management*, 22(2), 169-180. https://doi. org/10.1177%2F0972063420935541
- Chen, J., Wang, Y., & Liu, J. (2020). Capacity choice and government regulation in a vertical industry. Engineering Economics, 31(5), 513-524. https:// doi.org/10.5755/j01.ee.31.5.25302
- Chien, F., Hsu, C.-C., Zhang, Y., Vu, H. M., & Nawaz, M. A. (2021a). Unlocking the role of energy poverty and its impacts on financial growth of household: Is there any economic concern. *Environmental Science and Pollution Research*, 1-14. https://doi. org/10.1007/s11356-021-16649-6
- Chien, F., Sadiq, M., Nawaz, M. A., Hussain, M. S., Tran, T. D., & Le Thanh, T. (2021b). A step toward reducing air pollution in top Asian economies: The role of green energy, eco-innovation, and environmental taxes. *Journal of Environmental Management*, 297. https://doi.org/10.1016/j. jenvman.2021.113420
- Chien, F., Zhang, Y., Sadiq, M., Hsu, C.C. (2021c). Financing for energy efficiency solutions to mitigate opportunity cost of coal consumption: An empirical analysis of Chinese industries, Environmental Science and Pollution Research. https://doi.org/10.1007/s11356-021-15701-9
- Chien, F., Ananzeh, M., Mirza, F., Bakar, A., Vu, H. M., & Ngo, T. Q. (2021d). The effects of green growth, environmental-related tax, and ecoinnovation towards carbon neutrality target in the US economy. Journal of Environmental Management, https://doi.org/10.1016/j.jenvman.2021.113633.
- Chien, F., Sadiq, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., & Raza, M. (2021e). Comovement of energy prices and stock market return: environmental wavelet nexus of COVID-19 pandemic from the USA, Europe, and China. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-021-12938-2
- Chinanuife, E., Madueme, S. I., Orji, A., & Anthony-Orji, O. I. (2019). Empirical Determination of the Causal Link between Private Sector Credit and Manufacturing Output in Nigeria. *Journal of Advanced Research in Management*, 10(1 (19)), 44-50. https://doi.org/10.14505//jarm.v10.1(19).05
- Dang, H. D., Dam, A. H. T., Pham, T. T., & Nguyen, T. M. T. (2019). Determinants of credit demand of farmers in Lam Dong, Vietnam: A comparison

- of machine learning and multinomial logit. *Agricultural Finance Review, 80*(2), 255-274. https://doi.org/10.1108/AFR-06-2019-0061
- Dengov, V., Tulyakova, I., Gregova, E., & Sviridov, G. (2020). Price strategies of mobile operators in Russia in the conditions of the global economic recession. *Oeconomia Copernicana*, 11(2), 347-370. https://doi.org/10.24136/oc.2020.015
- Ehsanullah, S., Tran, Q. H., Sadiq, M., Bashir, S., Mohsin, M., & Iram, R. (2021). How energy insecurity leads to energy poverty? Do environmental consideration and climate change concerns matters. Environmental Science and Pollution Research, https://doi.org/10.1007/ s11356-021-14415-2.
- ELIJAH, S. (2019). An empirical analysis of the impact of bank credit on the manufacturing sector output in Nigeria (1986-2016). *Journal of Economics Library*, *5*(4), 371-382. http://dx.doi.org/10.1453/jel.v5i4.1771
- Escamilla, R., Fransoo, J. C., & Tang, C. S. (2021).

 Improving agility, adaptability, alignment, accessibility, and affordability in nanostore supply chains. *Production and Operations Management,* 30(3), 676-688. https://doi.org/10.1111/poms.13309
- Gaines, V. W., & Kasztelnik, K. (2021). Personnel Factors of Corporate Internal Auditing on the Contemporary Microeconomics Environment in the United States. Contemporary Economics, 15(2). 10.5709/ce.1897-9254.440
- Gebre Borojo, D., & Yushi, J. (2020). The impacts of institutional quality and business environment on Chinese foreign direct investment flow to African countries. *Economic Research-Ekonomska Istraživanja*, 33(1), 26-45. https://doi.org/10.1080/ 1331677X.2019.1696691
- Giang, T. L., & Hang, H. T. T. (2019). Factors Affecting the Bank Credit Accessibility of Rural Households in Vietnam. Asian Journal of Economics and Empirical Research, 6(1), 59-69. 10.20448/ journal.501.2019.61.59.69
- Gichuki, J. A. W., Njeru, A., & Tirimba, O. I. (2014). Challenges facing micro and small enterprises in accessing credit facilities in Kangemi Harambee market in Nairobi City County, Kenya. *International Journal of Scientific and Research Publications*, 4(12), 1-25. http://www. ijsrp.org/research-paper-1214.php?rp=P363434
- Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. Finance research letters, 35, 101-132. https://doi.org/10.1016/j.frl.2020.101512

- Herkenhoff, K., Phillips, G., & Cohen-Cole, E. (2016). The impact of consumer credit access on employment, earnings and entrepreneurship (No. w22846). National Bureau of Economic Research. https://EconPapers.repec.org/ RePEc:nbr:nberwo:22846
- Hsu, C. C., Quang-Thanh, N., Chien, F., Li, L., & Mohsin, M. (2021). Evaluating green innovation and performance of financial development: mediating concerns of environmental regulation. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-021-14499-w
- Huang, S. Z., Chau, K. Y., Chien, F., & Shen, H. (2020). The Impact of Startups' Dual Green on Their Innovation Capability: The Effects of Business Executives' Environmental Awareness and Environmental Regulations. Sustainability, 12(16), 1-17. http:// dx.doi.org/10.3390/su12166526
- Huang, S. Z., Sadiq, M., & Chien, F. (2021a). The impact of natural resource rent, financial development, and urbanization on carbon emission. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-021-16818-7.
- Huang, SZ., Sadiq, M. & Chien, F. (2021b). Dynamic nexus between transportation, urbanization, economic growth and environmental pollution in ASEAN countries: does environmental regulations matter?. Environ Sci Pollut Res. https://doi.org/10.1007/s11356-021-17533-z
- Hussain, H. I., Kamarudin, F., Mohamad Anwar, N. A., Nassir, A. M., Sufian, F., & Tan, K. M. (2020). Impact of Country's Governance Dimensions on Bank Revenue Efficiency: Overview on Middle East, Southeast Asia, and South Asia Countries. Transformations in Business & Economics, 19(1), 191-228. https://oarep.usim.edu.my/jspui/ handle/123456789/5656
- Hussain, H. I., Kot, S., Kamarudin, F., & Yee, L. H. (2021). Impact of rule of law and government size to the microfinance efficiency. Economic Research-Ekonomska Istraživanja, 34(1), 1870-1895. https:// doi.org/10.1080/1331677X.2020.1858921
- Hussain, H. I., Szczepańska-Woszczyna, Kamarudin, F., Anwar, N. A. M., & Saudi, M. H. M. (2021). Unboxing the black box on the dimensions of social globalisation and the efficiency of microfinance institutions in Asia. Oeconomia Copernicana, 12(3), 557-592. https:// doi.org/10.24136/oc.2021.019

- Kibicho, N. K., & Mungai, J. (2019). Mobile Banking Adoption and Financial Credit Accessibility in Wote Sub-County, Makueni County, Kenya. International Journal of Current Aspects, 3(IV), 65-79. https://doi.org/10.35942/ijcab.v3iIV.47
- Kot, S., Hussain, H. I., Bilan, S., Haseeb, M., & Mihardjo, L. W. (2021). The role of artificial intelligence recruitment and quality to explain the phenomenon of employer reputation. Journal of Business Economics and Management, 22(4), 867-883. https://doi.org/10.3846/jbem.2021.14606
- Kumar, G., Saha, R., Buchanan, W. J., Geetha, G., Thomas, R., Rai, M. K., . . . Alazab, M. (2020). Decentralized accessibility of e-commerce products through blockchain technology. Sustainable cities and society, 62, 23-42. https:// doi.org/10.1016/j.scs.2020.102361
- Kurgat, F., Owembi, K. O., & Omwono, G. A. (2017). Impact of access to credit facilities on youth economic development: A case of Mwanzo youths in Uasin Gishu County, Kenya. International Journal of Research in Business Studies and Management, 4(1), 24-36. https://doi. org/10.22259/ijrbsm.0401004
- Li, W., Chien, F., Hsu, C.-C., Zhang, Y., Nawaz, M. A., Iqbal, S., & Mohsin, M. (2021). Nexus between energy poverty and energy efficiency: Estimating the long-run dynamics. Resources Policy, 72. https://doi.org/10.1016/j.resourpol.2021.102063
- Li, W., Chien, F., Kamran, H. W., Aldeehani, T. M., Sadiq, M., Nguyen, V. C., & Taghizadeh-Hesary, F. (2022). The nexus between COVID-19 fear and stock market volatility. Economic Research-Ekonomska Istraživanja, 35(1), 1765-1785. https://doi.org/10.1080/1331677X.2021.1914125
- Liu, Z., Tang, Y. M., Chau, K. Y., Chien, F., Iqbal, W., & Sadiq, M. (2021). Incorporating strategic petroleum reserve and welfare losses: A way forward for the policy development of crude oil resources in South Asia. Resources Policy, 74, 102309. https://doi.org/10.1016/j. resourpol.2021.102309
- Lin, S.-Y., & Chang, H.-I. (2020). Does open-plan office environment support creativity? The mediating role of activated positive mood. Creativity studies, 13(1), 1-20. https://doi. org/10.3846/cs.2020.10332
- Linh, T. N., Long, H. T., Chi, L. V., Tam, L. T., & Lebailly, P. (2019). Access to rural credit markets in developing countries, the case of Vietnam: A literature review. Sustainability, 11(5), 146-158. https://doi.org/10.3390/su11051468

- Mariyono, J. (2019). Micro-credit as catalyst for improving rural livelihoods through agribusiness sector in Indonesia. *Journal of Entrepreneurship in Emerging Economies*, 11(1), 98-121. https://doi.org/10.1108/JEEE-06-2017-0046
- Markowicz, I., & Baran, P. (2020). A new method for calculating mirror data asymmetry in international trade. *Oeconomia Copernicana*, 11(4), 637-656. https://doi.org/10.24136/oc.2020.026
- Mogaji, E., Adeola, O., Hinson, R. E., Nguyen, N. P., Nwoba, A. C., & Soetan, T. O. (2021). Marketing bank services to financially vulnerable customers: evidence from an emerging economy. *International Journal of Bank Marketing*, 39(3), 402-428. https://doi.org/10.1108/IJBM-07-2020-0379
- Mohsin, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., & Dahri, A. S. (2021). Assessing the impact of transition from nonrenewable to renewable energy consumption on economic growth-environmental nexus from developing Asian economies. *Journal of Environmental Management*, 284. https://doi.org/10.1016/j.jenyman.2021.111999
- Nawaz, M. A., Hussain, M. S., Kamran, H. W., Ehsanullah, S., Maheen, R., & Shair, F. (2021). Trilemma association of energy consumption, carbon emission, and economic growth of BRICS and OECD regions: quantile regression estimation. *Environmental Science and Pollution Research*, 28(13), 16014-16028. https://doi. org/10.1007/s11356-020-11823-8
- Nawaz, M. A., Seshadri, U., Kumar, P., Aqdas, R., Patwary, A. K., & Riaz, M. (2021). Nexus between green finance and climate change mitigation in N-11 and BRICS countries: empirical estimation through difference in differences (DID) approach. *Environmental Science and Pollution Research*, 28(6), 6504-6519. https://doi.org/10.1007/ s11356-020-10920-y
- Nganga, J., & Atheru, G. (2020). Interest rates capping and performance of selected small and medium restaurants in Nairobi West, Nairobi City County, Kenya. International Journal of Business Management, Entrepreneurship and Innovation, 2(3), 61-73. https://doi.org/10.35942/jbmed. v2i3.135
- Nguyen, P. A., Uong, T. A. T., & Nguyen, Q. D. (2020). How small-and medium-sized enterprise innovation affects credit accessibility: The case of Vietnam. Sustainability, 12(22), 95-116. https:// doi.org/10.3390/su12229559
- Nwosu, E. O., & Orji, A. (2016). Access to formal credit

- and enterprise performance in Nigeria: A gender perspective. *Argumenta Oeconomica*, *36*(1), 191-224. https://doi.org/10.15611/aoe.2016.1.08
- Nwosu, E. O., & Orji, A. (2017). Addressing poverty and gender inequality through access to formal credit and enhanced enterprise performance in Nigeria: An empirical investigation. *African Development Review*, 29(S1), 56-72. https://doi.org/10.1111/1467-8268.12233
- Nwosu, E. O., Orji, A., Urama, N. E., Emecheta, C., Chukwuma, Q. O., & Chukwuma, J. N. (2020, October). Social capital, credit access and household nonfarm enterprises in Nigeria: A new empirical evidence. In *Forum for Social Economics* (pp. 1-21). Routledge. https://doi.org/ 10.1080/07360932.2020.1825983
- Obergassel, W., Hermwille, L., & Oberthür, S. (2020). Harnessing international climate governance to drive a sustainable recovery from the COVID-19 pandemic. *Climate Policy*, 6, 1-9. https://doi.org/1 0.1080/14693062.2020.1835603
- Ogechi, B. (2018). Financial deepening and deposit mobilization of commercial banks in Nigeria: A time variant model. *Indian Journal of Finance and Banking*, 2(2), 1-14. https://doi.org/10.46281/ijfb. v2i2.94
- Orji, A., Gbuabor, J. E., Ugwu, C. E., & Anthony-Orji, O. I. (2019). Cash reserve requirement and credit to smes in Nigeria: An ardl bounds test aproach. *Journal of Asian Business Strategy*, 9(1), 10-28. https://doi.org/10.18488/journal.1006.2019.91.10.28
- Othman, Z., Nordin, M. F. F., & Sadiq, M. (2020). GST fraud prevention to ensure business sustainability: A Malaysian case study. Journal of Asian Business and Economic Studies, 27(3), 245-265. https://doi. org/10.1108/JABES-11-2019-0113
- Pakurár, M., Haddad, H., Nagy, J., Popp, J., & Oláh, J. (2019). The service quality dimensions that affect customer satisfaction in the Jordanian banking sector. Sustainability, 11(4), 11-24. https://doi. org/10.3390/su11041113
- Quarshie, M., & Djimatey, R. (2020). Financial performance and liquidity trends of banks in an emerging economy: Evidence from Ghana. *Asian Journal of Social Sciences and Management Studies*, 7(2), 135-142. https://doi.org/10.20448/journal.500.2020.72.135.142
- Reddy, M. S., & Cherukuri, J. (2019). Customer relationship management practices and their impact over customer purchase decisions: A study on the selected private sector banks

- housing finance schemes. Asian Journal of Multidimensional Research (AJMR), 8(2), 132-144. http://dx.doi.org/10.5958/2278-4853.2019.00041.7
- Rodin, G., Zimmermann, C., Rodin, D., Al-Awamer, A., Sullivan, R., & Chamberlain, C. (2020). COVID-19, palliative care and public health. European Journal of Cancer, 136, 95-98. https://doi.org/10.1016/j. ejca.2020.05.023
- Rudnicki, S. (2021). What are ideas made of? On the sociomateriality of creative processes. Creativity studies, 14(1), 187-196. https://doi.org/10.3846/cs.2021.13259
- Sadiq, M., Hsu, CC., Zhang, Y., Chien, FS. (2021a). COVID-19 fear and volatility index movements: empirical insights from ASEAN stock markets. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-021-15064-
- Sadiq, M., Hsu, C. C., Zhang, Y., & Chien, F. (2021b). COVID-19 fear and volatility index movements: empirical insights from ASEAN stock markets. Environmental Science and Pollution Research, 28(47), 67167-67184. https://doi.org/10.1108/CFRI-02-2021-
- Sadiq, M., Alajlani, S., Hussain, M. S., Ahmad, R., Bashir, F., & Chupradit, S. (2021c). Impact of credit, liquidity, and systematic risk on financial structure: investigation from sustainable Comparative production. Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-021-17276-x.
- Shair, F., Shaorong, S., Kamran, H. W., Hussain, M. S., & Nawaz, M. A. (2021). Assessing the efficiency and total factor productivity growth of the banking industry: do environmental concerns matters? Environmental Science and Pollution Research, 28(16), 20822-20838. https://doi.org/10.1007/s11356-020-11938-y
- Sharma, S. K. (2020). Financial development and economic growth in selected Asian economies: A dynamic panel ARDL test. Contemporary Economics, 14(2), 201-219. https://doi.org/10.5709/ ce.1897-9254.400
- Silva, T. C., Tabak, B. M., & Laiz, M. T. (2021). The finance-growth nexus: The role of banks. Economic Systems, 45(1), 17-28. https://doi.org/10.1016/j. ecosys.2020.100762
- Song, H., Yang, Y., & Tao, Z. (2020). How different types of financial service providers support smalland 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

- Stubbs, T., Kring, W., Laskaridis, C., Kentikelenis, A., & Gallagher, K. (2021). Whatever it takes? The global financial safety net, COVID-19, and developing countries. World Development, 137, 151-172. https://doi.org/10.1016/j.worlddev.2020.105171
- Sun, H., Awan, R. U., Nawaz, M. A., Mohsin, M., Rasheed, A. K., & Iqbal, N. (2020). Assessing the socio-economic viability of solar commercialization and electrification in south Asian countries. Environment, Development and Sustainability, 1-23. https://doi.org/10.1007/ s10668-020-01038-9
- Thi, H. N. N. (2018). The factors affecting accessibility to credit capital of small and medium enterprises in Vietnam. Statistics and Economics, 15(6), 15-25. https://doi.org/10.21686/2500-3925-2018-6-15-
- Tirtayasa, Y. (2020). Canvas business strategy in the application of local credits in bank BCA. Dinasti International Journal of Management Science, 1(6), 854-862. https://doi.org/10.31933/dijms.v1i6.394
- Wentz, B., Pham, D., Feaser, E., Smith, D., Smith, J., & Wilson, A. (2019). Documenting the accessibility of 100 US bank and finance websites. Universal Access in the Information Society, 18(4), 871-880. https://doi.org/10.1007/s10209-018-0616-6
- Xiang, H., Ch, P., Nawaz, M. A., Chupradit, S., Fatima, A., & Sadiq, M. (2021). Integration and economic viability of fueling the future with green hydrogen: An integration of its determinants from renewable economics. International Journal of Hydrogen Energy, 46(77), 38145-38162. https:// doi.org/10.1016/j.ijhydene.2021.09.067
- Xueying, W., Sadiq, M., Chien, F., Ngo, T. Q., & Nguyen, A. T. (2021). Testing role of green financing on climate change mitigation: Evidences from G7 and E7 countries, https://doi.org/10.1007/s11356-
- Zhuang, Y., Yang, S., Chupradit, S., Nawaz, M. A., Xiong, R., & Koksal, C. (2021). A nexus between macroeconomic dynamics and trade openness: moderating role of institutional quality. Business Process Management Journal. https://doi. org/10.1108/BPMJ-12-2020-0594
- Zinecker, M., Doubravský, K., Balcerzak, A. P., Pietrzak, M. B., & Dohnal, M. (2021). The COVID-19 disease and policy response to mitigate the economic impact in the EU. Technological and Economic Development of Economy, 27(3), 742-762. https://doi.org/10.3846/tede.2021.14585