ASEAN Journal on Science and Technology for Development

Volume 41
Number 1 *Business Innovation for the Sustainable Development Goals (SDGs) Part 1*

Article 16

2024

Thriving in Turbulent Times: The Dynamic Link Between Economic Condition and FinTech Business Lending Success

Nur 'Asyiqin Ramdhan
Faculty of Business and Management Universiti Teknologi MARA- Cawangan Puncak Alam, Selangor, Malaysia, asyiqin@uitm.edu.my

Imbarine Bujang
Faculty of Business and Management Universiti Teknologi MARA- Cawangan Sabah, Malaysia, imbar074@uitm.edu.my

Amirul Afif Muhamat
Faculty of Business and Management Universiti Teknologi MARA- Cawangan Puncak Alam, Selangor, Malaysia, amirulafif@uitm.edu.my

Ninuk Dewi Kesumaningrum
Faculty of Economics and Business, Universitas Lampung, Indonesia, ninukdewi@gmail.com

Follow this and additional works at: https://ajstd.ubd.edu.bn/journal

 Part of the Biotechnology Commons, Engineering Commons, and the Physical Sciences and Mathematics Commons

Recommended Citation

Ramdhan, Nur 'Asyiqin; Bujang, Imbarine; Muhamat, Amirul Afif; and Kesumaningrum, Ninuk Dewi (2024) "Thriving in Turbulent Times: The Dynamic Link Between Economic Condition and FinTech Business Lending Success," *ASEAN Journal on Science and Technology for Development*: Vol. 41: No. 1, Article 16.
DOI: https://doi.org/10.61931/2224-9028.1575
Available at: https://ajstd.ubd.edu.bn/journal/vol41/iss1/16

This Special Issue Article is brought to you for free and open access by ASEAN Journal on Science and Technology for Development. It has been accepted for inclusion in ASEAN Journal on Science and Technology for Development by an authorized editor of ASEAN Journal on Science and Technology for Development.

SPECIAL ISSUE ARTICLE

Thriving in Turbulent Times: The Dynamic Link Between Economic Condition and FinTech Business Lending Success

Nur'Asyiqin Ramdhan [a,*], Imbarine Bujang [b], Amirul A. Muhamat [a], Ninuk D. Kesumaningrum [c]

[a] Faculty of Business and Management, Universiti Teknologi MARA, Cawangan Puncak Alam, Selangor, Malaysia
[b] Faculty of Business and Management, Universiti Teknologi MARA, Cawangan Sabah, Malaysia
[c] Faculty of Economics and Business, Universitas Lampung, Indonesia

Abstract

This study aimed to understand how FinTech business lending was affected by the pandemic crisis, which caused small businesses to struggle with limited access to funds. During this crisis, demand for alternative financing, like peer-to-peer (P2P) lending, surged. However, P2P lending faces challenges related to information imbalances, especially during crises, when transparency and economic conditions impact investor decisions in Malaysia. We examined factors like platform interest rates, loan duration, investment size, bank lending rates (BLR), inflation, and the crisis using ARDL analysis. Our long-term analysis revealed a significant positive relationship between investment size and P2P lending, while economic conditions had no significant impact. In the short term, loan tenure played a vital role in determining loan success, and the crisis influenced investor decision-making. These findings suggest that Malaysian P2P lending platforms remained resilient and sustainable, even during unfavorable economic conditions. This resilience underscores the potential of P2P lending to provide a reliable source of financing for businesses, especially in challenging times.

Keywords: FinTech, P2P lending, Economic crisis, ARDL

1. Introduction

The rise of FinTech is becoming a prominent fixture in supporting Sustainable Development Goals (SDG) in the financial industry, representing a new standard characterized by networking, digitization, advanced technologies, and real-time information. With the global alternative financing market expected to grow by approximately USD 176.15 billion between 2020 and 2025, there is a rising demand for the P2P lending market in the Asia-Pacific region due to the increasing number of startups and small to medium-sized enterprises (SMEs) (Technavio, 2023). The primary challenge for SMEs during unfavorable economic conditions is to ensure business continuity, which heavily relies on liquidity. Most SMEs depend on credit resources for liquidity, and this is even more critical during financial crises. Given that small businesses often struggle to access credit, the

Received 23 October 2023; revised 2 January 2024; accepted 28 February 2024.
Available online 29 May 2024

* Corresponding author.
E-mail addresses: asyiqin@uitm.edu.my (N. Ramdhan), imbar074@uitm.edu.my (I. Bujang), amirulafif@uitm.edu.my (A.A. Muhamat), ninukdewi@gmail.com (N.D. Kesumaningrum).

https://doi.org/10.29037/2224-9028.1575
2224-9028/© 2024 The Authors. Published by Universiti Brunei Darussalam in cooperation with the ASEAN Committee on Science and Technology (COST). This is an open access article under the Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA) license.

importance of alternative financing sources like P2P platforms has significantly increased during the economic crisis (Ofir, Tzang, & Radzyner, 2022). Business lending application during turbulent times has opened a gap in addressing the pervasive issues of information asymmetry, platform collapse, and decentralized systems in P2P lending. The dynamics of the information provided on the platform for credit approval in assessing the resilience of FinTech credit processes for business purposes throughout an entire economic and credit cycle is not definitively known or established. To secure the competitiveness of P2P lending platforms, a sustainable model that informs prudent loan decisions is essential. This paper seeks to achieve the goals of gaining business lending fundraised through a P2P platform with the influence of economic conditions in mitigating information asymmetry issues for the P2P lending market players.

2. Literature review

The global and regional economies suffered a significant hit from the pandemic, where financial sectors are not excluded (Ramdhan, Mohammad, Yousop, Ahmad, Sipon, & Abdullah, 2021). The progress and trends in entrepreneurial finance from economic crisis such pandemic COVID-19 have lightened the reflection of P2P lending contribution as a new financing alternative and drivers of financing options (Rao, Kumar, & Verma, 2023). Theoretically, previous research has categorized the funding difficulties of SMEs according to several main reasons. First, most SMEs have unique challenges when it comes to managing their finances due to their size (Ang, 1992). Second, resulting from the informational transparency depending on a company's capacity to offer collateral improves as it ages and builds a history of success in a certain development stage (Berger & Udell, 1998). As the firm's credibility improves, it can tap into more external loan and equity resources. Additionally, loan origination practices could be restricted to SMEs (Abraham & Schmukler, 2017). A comprehensive analysis that centers on the fiscal and commercial consequences of COVID-19, encompassing both micro and macro perspectives has determined that the pandemic has caused a worldwide economic catastrophe that is expected to persist well beyond the conclusion of the pandemic (Goodell, 2020). Pandemic COVID-19 pandemic's bearing on the economy has resulted in a decrease in the flexibility of banks, rendering it more challenging for them to meet the loan demand and impeding their capability of providing the requisite liquidity and funding (Rees & Ahmad, 2020). As a result, financial institutions have been adjusting their lending practices and prioritizing safer assets and investments. During times of crisis and economic uncertainty, this sort of scenario is par for the course for banks (Najaf, Subramaniam, & Atayah, 2021). A positive impact on the P2P funding success campaigns was reported in a recent study that addresses a funding gap by analyzing the successful campaigns before and during the pandemic (Gama, Emanuel-Correia, Duarte, & Augusto, 2023). Amidst periods of economic uncertainty and market volatility, investors tend to proactively pursue diversification strategies, diverting their capital away from conventional and well-established investment alternatives (Milne & Parboteeah, 2016; Nemoto, Huang, & Storey, 2019).

In addition, empirical literature during an economic downturn evidently caused banking institutions to tighten their lending criteria and open the door to alternative financing such as P2P lending as a source of funding (Klein, Shtudiner, & Zwilling, 2023). With the benefits of technological usage, Fintech serves as a means to augment capital availability and enhance accessibility to financing for expanding the market share of MSMEs while addressing issues related to loan capital, financial reporting, funding, marketing, financial transactions, and improving financial literacy (Hakim & Sadarrudin, 2023). Online lending, proved to be significantly more dependable, prompt, and resilient than bank consumer financing during the COVID-19 crisis, proving that P2P financing is a leading predictor of bank consumer funding. While the momentum for FinTech in the Malaysian market has only grown stronger during COVID-19, it is projected to continue as the number of investors and investments in FinTech platforms has climbed dramatically (Yee, 2021). Moreover, numerous P2P lending providers, such as Funding Fundaztic and Societies Malaysia, saw stable growth in 2020 (Kok, 2021). Further evidence in Indonesia's FinTech business has proven to be rather robust (Sugandi, 2021). The resilient effects of the pandemic condition have been supported by Fu and Mishra (2020), who found that the COVID-19 pandemic had a big effect on how digital banking and FinTech were used and adopted in 71 countries. The scholars highlighted established incumbent banks had more customers using their digital products than "Big Tech" companies and new FinTech suppliers. Researchers also discovered that enterprises possessing an existing digital payment framework exhibited a greater capacity to allay the adverse repercussions of the pandemic on the economy. Consistently,

Benni (2021) examined digital finance extensively during the COVID-19 pandemic. The scholar found that the COVID-19 pandemic has caused an increase in the usage of digital transactions and transfer services while decreasing the dependence on cash-based transactions. On the other side, digitizing governments and public transfers can help provide a safety net for the public. Businesses that are impacted by a pandemic may find it simpler to obtain short-term loans if they can apply for them digitally. Finally, Al Nawayseh (2020) conducted a study to examine the factors that motivated Jordanian individuals to adopt FinTech applications as a means of enhancing their resilience in response to the COVID-19 pandemic.

3. Data and methodology

This study utilized monthly data from January 2017 to September 2022, a period during which the Malaysian P2P industry was fully operational since its inception in 2017. The dataset comprises a total of 69 months of observations, primarily sourced from the Securities Commissions of Malaysia, the Central Bank, and the P2P platform providers. The event of pandemic COVID-19 (utilizing dummy variable-before COVID-19 = 0, during COVID-19 = 1) was taken due to it resembled the first crisis experienced in Malaysia's P2P lending market since its establishment in 2017. Hence, fitting to the restricted sample size available, the Autoregressive Distributed Lag (ARDL) technique was utilized in the present study. ARDL bound test model is a statistical tool for assessing the long-term impact of various variables while retaining crucial long-term information, as recommended by (Pesaran, Shin, & Smith, 2001).

4. Findings

The preliminary data has been analysed prior to being inserted into the ARDL model. The time series data undergo the stationarity checking implied that all variables stationed at different levels ranging from *I(0)* and *I(1)*, then the time series data were proceed into the next process which is to find the optimum lag for the equation. Before attempting to estimate the ARDL bound test, the current study determined the suitable number of lags for the estimation model output of lag selection criteria on VAR estimates. Hence, specifying an appropriate number of maximum lags for this model has concluded that lag 3 was used in the ARDL model.

The analysis proving for cointegration of the variables resulted in Table 1. The findings exhibited cointegration exists among the variables where the computed F-stat is higher than the lower and upper bound value. Hence, the null hypothesis rejected implies there is an existent of long-run relationship among the variables.

Table 1. The results of the F-bound test for cointegration relationship.

Computed F-statistic	90%		95%		99%	
	I(0)	I(1)	I(0)	I(1)	I(0)	I(1)
6.8283	2.538	3.560	2.946	4.065	3.870	5.171

Notes: Adapted from Narayan (2005).

According to Table 2, the result depicts that the success of P2P lending fundraising was not influenced by the economic condition of the crisis in the long term, but significantly influenced by the investment size. In the short-run (see Table 3), the ECT (−1) value reported in this study is −0.8178, suggesting a rapid adjustment to equilibrium following a crisis. This shows that any deviation from the long-term equilibrium level of successful P2P lending fundraising in a given month is corrected by approximately 81.78% in the subsequent month. Hence, the analysis indicates that the estimation equation displays an inconsequential dummy effect, upholding the null hypothesis as EC is deemed insignificant.

Diagnostic tests were utilized in Table 4. The Jarque-Bera normality test confirms that the model is normal, with no errors violating normality, indicating no serial correlation issue up to three lags, as

Table 2. The results of long-run estimation coefficient.

Variables	Coefficient	Std. Error	T-stat	Prob
lnPir	−12.1527	12.7695	−0.9517	0.3466
lnLt	0.2304	0.4815	0.4785	0.6347
lnIsz	1.3217	0.4636	2.8513	0.0067**
lnBLR	1.4181	2.8273	0.5016	0.6185
lnInf	−0.1385	0.2065	−0.6706	0.5061
EC	−0.9887	0.6254	−1.5810	0.1212
@Trend	0.1439	0.0205	7.0290	0.0000***

Notes: (**) Significance level at 5%, (***) Significance level at 1%.

Table 3. The results of short-run estimation coefficient.

Variables	Coefficient	Std. Error	T-stat	Prob
C	−0.2017	0.0868	−2.3236	0.0249**
Δ (lnPir)	−9.9382	10.5268	−0.9441	0.3504
Δ (lnLt)	0.4478	0.2074	2.1594	0.0364**
Δ (lnIsz)	−0.2286	0.2418	−0.9451	0.3499
Δ (lnBLR)	1.1597	2.3005	0.5041	0.6168
Δ (lnInf)	−0.1132	0.1696	−0.6678	0.5079
Δ (EC)	−0.8085	0.5156	−1.5681	0.1242
ECT (−1) *	−0.8178	0.1026	−7.9699	0.0000***
R^2 = 0.6110, F-stat = 26.1763***, Durbin Watson = 1.7624				

Notes: (**) Significance level at 5%, (***) Significance level at 1%.

Table 4. The results of diagnostic tests.

Test	X^2 Normal	X^2 Serial $LM_{(2)}$	X^2 Serial $LM_{(3)}$	X^2 $ARCH_{(1)}$	X^2 $RAMSEY_{(1)}$
F-statistic	2.3698	2.8106	7.6024	0.0820	1.0434
Prob.	0.3058	0.2453	0.0550	0.7747	0.3027

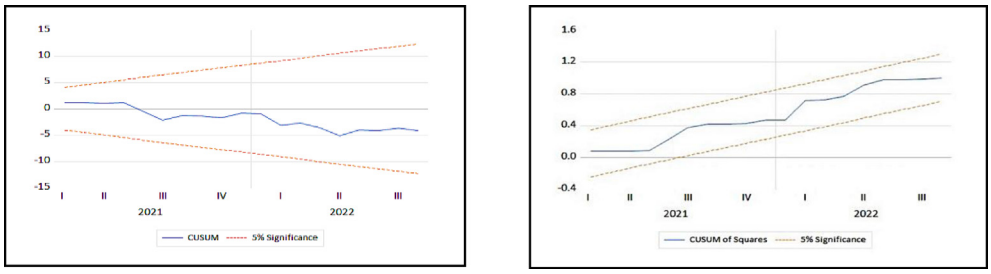


Fig. 1. Results of the stability test on the cumulative sum (CUSUM) and CUSUM square.

suggested by AIC for optimal lags, indicates no serial correlation problem.

Finally, the CUSUM and CUSUMQ graphs generated in Figure 1 specifically imply the robustness and stability of the model coefficients. Results exhibited by the statistics are within the critical boundaries in this figure, suggesting that the parameter model of the determinants is stable.

5. Discussions

The findings reveal differences in the dynamics between the business lending success through P2P platforms with the long and short runs. Despite the consistent effects of investment size and loan tenure, the introduction of the economic condition dummy variable suggests that the Malaysian P2P market remains stable and highly sensitive during unfavorable economic conditions. Remarkably, the volume of the business lending success did not deteriorate significantly due to the crisis, both in the short and long run which is in line with prior empirical research (Al Nawayseh, 2020; Sugandi, 2021; Klein et al., 2023). Several factors contribute to the resilience of business lending in the P2P market during the COVID-19 crisis. Firstly, business lending in P2P lending platforms serves a diverse range of borrowers across various characteristics that lead to lending success. This diversity helps mitigate the impact of information asymmetry and economic crises, as different industries may exhibit varying levels of resilience during the pandemic (Cumming, Martinez-Salgueiro, Reardon, & Sewaid, 2021; Ramdhan et al., 2021). While some sectors may suffer, others remain relatively stable or even experience growth. This diversified borrower pool spreads the risk across industries, providing stability to the P2P lending market. Secondly, traditional lending institutions tightened their lending criteria during the economic crisis, reducing lending activities. This created a gap in the market, increasing the demand for alternative financing options (Rees & Ahmad, 2020; Sugandi, 2021). Furthermore, the P2P lending market exhibits flexibility and agility in addressing information asymmetry and financial instability theory. While P2P lending responses may lag, they adapt more swiftly to changing market conditions compared to traditional institutions. Additionally, P2P lending platforms actively implement risk management practices and high accessibility to assess borrower creditworthiness and mitigate default risk through their benefits usage of platforms technology and accessibility (Hakim & Sadarrudin, 2023). This aligns with Najaf et al. (2021) assertion that FinTech lending through P2P platforms has emerged as a viable alternative credit source for borrowers during the COVID-19 pandemic. Finally, from the lender's perspective, there is a demand for diversification to mitigate risk and enhance the P2P market. During economic uncertainty, investors seek diversification away from traditional investment options (Milne & Parboteeah, 2016; Nemoto et al., 2019). P2P lending offers an attractive alternative investment avenue that is not directly tied to traditional financial markets. Consequently, investor demand for P2P lending remains robust during economic crises, ensuring a stable flow of funds for borrowers on the platforms.

6. Conclusion and recommendations

In conclusion, this study finds that the unfavourable economic condition did not accelerate the successfulness of the FinTech P2P lending markets in Malaysia, both in the short and long term. Results indicate that FinTech lending for businesses is

thriving even in turbulent times due to its diverse funding sources, accessibility, and speed. This underscores the importance of the balance between supply and demand for investments in sustaining FinTech lending operations specifically for small businesses. The Malaysian FinTech sector has demonstrated resilience in the face of the pandemic, driven by increased demand for FinTech lending. This demand has overshadowed factors like platform interest rates, loan tenure, BLR, and inflation, which became highly responsive post-crisis. Highlighting the resilience of P2P lending could encourage sustainable investment practices by demonstrating the ability of these platforms to sustain lending operations without being heavily swayed by short-term economic trends, aligning with responsible consumption and production (SDG 12). Despite on economic fluctuations, it has emphasizes the importance of diversifying funding sources for businesses. This supports industry, innovation, and infrastructure (SDG 9) by demonstrating alternative means for businesses to access capital during economic volatility. Moving forward, understanding the limited influence of economic conditions on P2P lending success can guide the government in adopting a supportive, adaptive regulatory approach and fostering an environment conducive to the growth of alternative financing options. Moving forward, emphasizing the importance of integrating credit scoring information to be added in the model would highlight more comprehensive analysis in suggesting the credit risk assessment in P2P lending successfulness. Hence, it could broaden access to loans and enhance the overall P2P lending landscape in Malaysia.

Acknowledgments

This research was supported by a scholarship provided by the Ministry of Higher Education (MoHE) of Malaysia under Skim Latihan Akademik Bumiputera (SLAB). The data analyzed in the study were provided by the Securities Commission of Malaysia. It is also supported by the Faculty of Business and Administration (FBM) in Shah Alam, Selangor, Malaysia.

References

Abraham, F., & Schmukler, S. L. (2017). *Addressing the SME Finance Problem*. https://ssrn.com/abstract=3249560.

Al Nawayseh, M. K. (2020). FinTech in COVID-19 and beyond: What factors are affecting customers' choice of FinTech applications? *Journal of Open Innovation: Technology, Market, and Complexity, 6*(4), 153. https://doi.org/10.3390/joitmc6040153

Ang, J. S. (1992). On the Theory of Finance for Privately Held Firms. *The Journal of Entrepreneurial Finance, 1*(3), 185–203. https://doi.org/10.57229/2373-1761.1121

Benni, N. (2021). *Digital finance and inclusion in the time of COVID-19*. FAO. https://doi.org/10.4060/cb2109en

Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance, 22*(6–8), 613–673. https://doi.org/10.1016/S0378-4266(98)00038-7

Cumming, D. J., Martinez-Salgueiro, A., Reardon, R. S., & Sewaid, A. (2021). COVID-19 bust, policy response, and rebound: equity crowdfunding and P2P versus banks. *The Journal of Technology Transfer, 0123456789*. https://doi.org/10.1007/s10961-021-09899-6

Fu, J., & Mishra, M. (2020). The global impact of COVID-19 on fintech adoption. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3588453

Gama, A. P. M., Emanuel-Correia, R., Duarte, F. D., & Augusto, M. (2023). The COVID-19 impact on crowdfunding performance: evidence from a peer to-peer lending platform. *Applied Economics Letters*, 1–5. https://doi.org/10.1080/13504851.2023.2178616

Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters, 35*, Article 101512. https://doi.org/10.1016/j.frl.2020.101512

Hakim, P. Y., & Sadarrudin, M. A. P. A. (2023). Financial technology as a strategy for MSME development to increase capital and consumers. *Jurnal Ekonomi, 12*(1), 2023. http://ejournal.seaninstitute.or.id/index.php/Ekonomi.

Klein, G., Shtudiner, Z., & Zwilling, M. (2023). Why do peer-to-peer (P2P) lending platforms fail? The gap between P2P lenders' preferences and the platforms' intentions. *Electronic Commerce Research, 23*(2), 709–738. https://doi.org/10.1007/s10660-021-09489-6

Kok, C. (2021). Asset quality of P2P players remain intact. *The Star*. https://www.thestar.com.my/business/business-news/2021/05/22/asset-quality-of-p2p-players-remain-intact.

Milne, A., & Parboteeah, P. (2016). The business models and economics of peer-to-peer lending. *SSRN Electronic Journal, May*. https://doi.org/10.2139/ssrn.2763682

Najaf, K., Subramaniam, R. K., & Atayah, O. F. (2021). Understanding the implications of FinTech Peer-to-Peer (P2P) lending during the COVID-19 pandemic. *Journal of Sustainable Finance and Investment, 0*(0), 1–16. https://doi.org/10.1080/20430795.2021.1917225

Narayan, P. K. (2005). The saving and investment nexus for China: Evidence from cointegration tests. *Applied Economics, 37*(17), 1979–1990. https://doi.org/10.1080/00036840500278103

Nemoto, N., Huang, B., & Storey, D. J. (2019). Optimal regulation of P2P lending for small and medium-sized enterprises. *SSRN Electronic Journal, 912*. https://doi.org/10.2139/ssrn.3313999

Ofir, M., Tzang, I., & Radzyner, H. (2022). *An empirical view of peer-to-peer (P2P) lending platforms*. https://doi.org/10.15779/Z38V11VM4D

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics, 16*(3), 289–326. https://doi.org/10.1002/jae.616

Ramdhan, N., Mohammad, N., Yousop, N. L. M., Ahmad, Z., Sipon, Z., & Abdullah, N. M. H. (2021). The Covid-19 dashboard sector specific impact: malaysia financial, consumer products and health care services. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 11*(1). https://doi.org/10.6007/IJARAFMS/v11-i1/9244

Rao, P., Kumar, S., & Verma, S. (2023). Evolution and trends in entrepreneurial finance: reflections and insights from COVID-19. *Venture Capital, 1–36*. https://doi.org/10.1080/13691066.2023.2210757

Rees, J., & Ahmad, R. (2020). *UK banks' COVID-19 loan losses likely to be under £80B, says BoE*. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/uk-banks-covid-19-loan-losses-likely-to-be-under-163-80b-says-boe-59800108.

Sugandi, E. A. (2021). *ADBI working paper series the Covid-19 pandemic and indonesia's fintech markets asian development bank institute*. https://www.adb.org/publications/covid-19-pandemic-indonesia-fintech-markets.

Technavio. (2023). *Alternative finance market 2023–2027*. https://www.technavio.com/thankyou?report=IRTNTR44221&type=Request%20Free%20Sample&rfs=epd&src=report&pdfversion=2&freedemo=834276.

Yee, T. J. (2021). *Fintech momentum has only grown during Covid-19 and is set to accelerate*. Digital News Asia. https://www.digitalnewsasia.com/business/fintech-momentum-has-only-grown-during-covid-19-and-set-accelerate.