ISSN 2090-3359 (Print) ISSN 2090-3367 (Online)



Advances in Decision Sciences

Volume 28 Issue 1 March 2024

Michael McAleer (Editor-in-Chief) Chia-Lin Chang (Senior Co-Editor-in-Chief) Alan Wing-Keung Wong (Senior Co-Editor-in-Chief and Managing Editor) Aviral Kumar Tiwari (Co-Editor-in-Chief) Montgomery Van Wart (Associate Editor-in-Chief) Vincent Shin-Hung Pan (Managing Editor)



Published by Asia University, Taiwan

The Impact of Market Liquidity on The Stock Returns During the Covid-19 Outbreak: New Evidence from Vietnam

Cuong Nguyen Thanh

Faculty of Accounting and Finance, Nha Trang University, Vietnam **Corresponding author* E-mail: <u>cuongnt@ntu.edu.vn</u>

Hai Phan Thanh

Faculty of Accounting, School of Business and Economics, Duy Tan University, Da Nang, Vietnam E-mail: <u>phanthanhhai@duytan.edu.vn</u>

Received: October 7, 2023; First Revision: January 8, 2024;

Last Revision: January 31, 2024; Accepted: March 16, 2024;

Published: April 30, 2024

Abstract

Research aims: This article scrutinizes the impact of market liquidity, as gauged by market tightness and depth, on the stock returns of non-financial companies listed on the Vietnam Stock Market during the COVID-19 outbreak.

Design/Methodology/Approach: Employing panel data regression models, this investigation scrutinizes a dataset comprising 647 non-financial listed companies in the Vietnamese stock market from January 30, 2020, to December 31, 2021.

Research findings: The results show a statistically significant negative relationship between market tightness and stock returns. Additionally, market depth demonstrates a noteworthy positive correlation with stock returns. These findings suggest that stocks with lower liquidity tended to yield higher profits during the COVID-19 pandemic. Notably, this phenomenon was accentuated during periods of lockdown. The study also disclosed a noteworthy divergence in the influence of market liquidity on stock returns among companies listed on the HOSE and HNX stock exchanges. Further analysis unveils a marked variance in the impact of market liquidity on stock returns when examined across different sectors and market capitalizations. Notably, the liquidity of the service and manufacturing sectors has the strongest influence on stock returns during COVID-19.

Theoretical contribution/Originality: No published studies have investigated the impact of market liquidity on the stock returns of companies listed in emerging markets, such as the Vietnamese stock market, during the COVID-19 outbreak. This study marks the initial investigation into the impact of market liquidity, evaluated through market tightness and depth, on the stock returns of non-financial firms listed on the Vietnam Stock Market during the COVID-19 outbreak. An analysis of market liquidity's influence on stock returns is undertaken, considering industry-specific nuances and distinctions in market capitalization.

Practitioner/Policy implications: Our study demonstrates the critical role of liquidity and the attractiveness of low-liquidity stocks during the COVID-19 outbreak in Vietnam. The research results provide new and significant evidence for the field of Decision Science. Through an indepth analysis of market fluctuations amid the pandemic, the article offers essential insights into the intricate interaction between market liquidity and stock returns, uncovering valuable implications for policy decisions and investment strategies for individual investors and organizations.

Research limitations: This study focuses on listed non-financial enterprises, so the results may not be generalizable to the whole market. Future studies may consider adding more financial firms to the sample.

Keywords: COVID-19, Stock returns, Market liquidity, Market depth, Market Tightness.

JEL Classification Codes: G10; G14; G15; C23.

References

- Akram, N. (2014). The effect of liquidity on stock returns: An evidence from Pakistan. *IOSR Journal of Business Management*, *16*(2), 66-69. https://doi.org/10.9790/487X-16216669
- Alam, M. M., Wei, H., & Wahid, A. N. (2021). COVID-19 outbreak and sectoral performance of the Australian stock market: An event study analysis. *Australian economic papers*, 60(3), 482-495. https://doi.org/10.1111/1467-8454.12215
- Al-Awadhi, A. M., Alsaifi, K., Al-Awadhi, A., & Alhammadi, S. (2020). Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns. *Journal of behavioral and experimental finance*, 27, 100326. https://doi.org/10.1016/j.jbef.2020.100326
- Amihud, Y. (2002). Illiquidity and stock returns: cross-section and time-series effects\$. *Journal of Financial Markets*, *5*, 31-56. https://doi.org/10.1016/S1386-4181(01)00024-6
- Amihud, Y., & Mendelson, H. (1986). Asset pricing and the bid-ask spread. *Journal of financial economics*, *17*(2), 223-249. https://doi.org/10.1016/0304-405X(86)90065-6
- Amihud, Y., & Mendelson, H. (1989). The effects of beta, bid-ask spread, residual risk, and size on stock returns. *The Journal of Finance*, 44(2), 479-486. https://doi.org/10.1111/j.1540-6261.1989.tb05067.x
- Anh, D. L. T., & Gan, C. (2021). The impact of the COVID-19 lockdown on stock market performance: evidence from Vietnam. *Journal of Economic Studies*, 48(4), 836-851. https://doi.org/10.1108/JES-06-2020-0312
- Ashraf, B. N. (2020). Stock markets' reaction to COVID-19: Cases or fatalities? *Research in International Business and Finance, 54, 101249.* https://doi.org/10.1016/j.ribaf.2020.101249
- Baig, A. S., Butt, H. A., Haroon, O., & Rizvi, S. A. R. (2021). Deaths, panic, lockdowns and US equity markets: The case of COVID-19 pandemic. *Finance Research Letters*, 38, 101701. https://doi.org/10.1016/j.frl.2020.101701
- Batten, J., & Vo, X. (2011). An empirical investigation of liquidity and stock returns relationship in Vietnam's stock markets during the financial crisis. *MPRA Paper No.* 29862. *University Library of Munich, Germany.* https://mpra.ub.uni-muenchen.de/id/eprint/29862
- Brennan, M. J., & Subrahmanyam, A. (1996). Market microstructure and asset pricing: On the compensation for illiquidity in stock returns. *Journal of financial economics*, 41(3), 441-464. https://doi.org/10.1016/0304-405X(95)00870-K
- Chang, Y. Y., Faff, R., & Hwang, C.-Y. (2010). Liquidity and stock returns in Japan: New evidence. *Pacific-Basin Finance Journal*, *18*(1), 90-115. https://doi.org/10.1016/j.pacfin.2009.09.001
- Chebbi, K., Ammer, M. A., & Hameed, A. (2021). The COVID-19 pandemic and stock liquidity: Evidence from S&P 500. *The Quarterly Review of Economics Finance*, 81, 134-142. https://doi.org/10.1016/j.qref.2021.05.008
- Chiang, T. C., & Zheng, D. (2015). Liquidity and stock returns: Evidence from international markets. *Global Finance Journal*, 27, 73-97. https://doi.org/10.1016/j.gfj.2015.04.005
- Chikore, R., Gachira, W., & Nkomo, D. (2014). Stock liquidity and returns: Evidence from the Zimbabwe stock exchange. *Interdisplinary Journal of Contemporary Research in Business*, *6*(3), 20-35. https://www.researchgate.net/publication/366530519

- Chordia, T., Subrahmanyam, A., & Anshuman, V. R. (2001). Trading activity and expected stock returns. *Journal of Financial Economics*, 59(1), 3-32. https://doi.org/10.1016/S0304-405X(00)00080-5
- Chung, K. H., & Zhang, H. (2014). A simple approximation of intraday spreads using daily data. *Journal of Financial Markets, 17*, 94-120. https://doi.org/10.1016/j.finmar.2013.02.004
- Darsono, S. N. A. C., Wong, W.-K., Nguyen, T. T. H., Jati, H. F., & Dewanti, D. S. (2022). Good governance and sustainable investment: The effects of governance indicators on stock market returns. *Advances in Decision Sciences*, 26(1), 69-101. https://doi.org/10.47654/v26y2022i1p69-101
- Datar, V. T., Naik, N. Y., & Radcliffe, R. (1998). Liquidity and stock returns: An alternative test. *Journal of Financial Markets*, 1(2), 203-219. https://doi.org/10.1016/S1386-4181(97)00004-9
- Easley, D., & O'hara, M. (1987). Price, trade size, and information in securities markets. *Journal of financial economics*, 19(1), 69-90. https://doi.org/10.1016/0304-405X(87)90029-8
- Ellahi, N., & Ahmad, N. (2021). Investigating the impact of covid 19 outbreak on stock market returns: Evidence from Pakistan. *International Journal of Innovation, Creativity and Change*, *15*(5), 1-9. https://www.ijicc.net/index.php/ijicc-editions/2021/220-vol-15-iss-5
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal* of *Political Economy*, 81(3), 607-636. https://doi.org/10.1086/260061
- Garman, M. B., & Klass, M. (1980). On the estimation of security price volatilities from historical data. *Journal of Business*, 67-78. https://www.jstor.org/stable/2352358
- Hartian, K. R., & Sitorus, R. E. (2015). Liquidity and returns: Evidences from stock indexes around the world. *Asian Economic and Financial Review*, 5(1), 33-45. https://doi.org/10.18488/journal.aefr/2015.5.1/102.1.33.45
- He, Q., Liu, J., Wang, S., & Yu, J. (2020). The impact of COVID-19 on stock markets. *Economic Political Studies*, 8(3), 275-288. https://doi.org/10.1080/20954816.2020.1757570
- Herwany, A., Febrian, E., Anwar, M., & Gunardi, A. (2021). The influence of the COVID-19 pandemic on stock market returns in Indonesia stock exchange. *The Journal of Asian Finance, Economics Business*, 8(3), 39-47. https://doi.org/10.13106/jafeb.2021.vol8.no3.0039
- Hicks, J. R. (1975). Value and Capital, 2nd ed. London: Oxford University Press.
- Hung, D. V., Hue, N. T. M., & Duong, V. T. (2021). The impact of COVID-19 on stock market returns in Vietnam. *Journal of Risk Financial Management*, 14(9), 441. https://doi.org/10.3390/jrfm14090441
- Jun, S.-G., Marathe, A., & Shawky, H. A. (2003). Liquidity and stock returns in emerging equity markets. *Emerging Markets Review*, 4(1), 1-24. https://doi.org/10.1016/S1566-0141(02)00060-2
- Just, M., & Echaust, K. (2020). Stock market returns, volatility, correlation and liquidity during the COVID-19 crisis: Evidence from the Markov switching approach. *Finance Research Letters*, 37, 101775. https://doi.org/10.1016/j.frl.2020.101775
- Kokila, K., & Shaik, S. (2023). Linkages Between Festivals and Stock Market Returns: A Study of Indian Stock Market. Advances in Decision Sciences, 27(1), 115-142. https://doi.org/10.47654/v27y2023i1p115-142

- Kyle, A. S. (1985). Continuous auctions and insider trading. *Econometrica: Journal of the Econometric Society*, 1315-1335. https://doi.org/10.2307/1913210
- Liu, H., Manzoor, A., Wang, C., Zhang, L., & Manzoor, Z. (2020). The COVID-19 outbreak and affected countries stock markets response. *International Journal of Environmental Research and Public Health*, 17(8), 2800. https://doi.org/10.3390/ijerph17082800
- Mdaghri, A. A., Raghibi, A., Thanh, C. N., & Oubdi, L. (2020). Stock market liquidity, the great lockdown and the COVID-19 global pandemic nexus in MENA countries. *Review of Behavioral Finance*, *13*(1), 51-68. https://doi.org/10.1108/RBF-06-2020-0132
- Nguyen, C. T., Hai, P. T., & Nguyen, H. K. (2021). Stock market returns and liquidity during the COVID-19 outbreak: evidence from the financial services sector in Vietnam. Asian Journal of Economics and Banking, 5(3), 324-342. https://doi.org/10.1108/AJEB-06-2021-0070
- Pástor, Ľ., & Stambaugh, R. F. (2003). Liquidity risk and expected stock returns. *Journal of Political Economy*, 111(3), 642-685. https://doi.org/10.1086/374184
- Phuong, L. C. M. (2021). How COVID-19 impacts Vietnam's banking stocks: Event study method. *Banks and Bank Systems, 16*(1), 92-102. http://dx.doi.org/10.21511/bbs.16(1).2021.09
- Rakshit, B., & Neog, Y. (2022). Effects of the COVID-19 pandemic on stock market returns and volatilities: evidence from selected emerging economies. *Studies in Economics Finance*, 39(4), 549-571. https://doi.org/10.1108/SEF-09-2020-0389
- Sohrabi, C., Alsafi, Z., O'Neill, N., Khan, M., Kerwan, A., Al-Jabir, A., . . . Agha, R. (2020).
 World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International journal of surgery*, 76, 71-76. https://doi.org/10.1016/j.ijsu.2020.02.034
- Tahat, Y., & Ahmed, A. H. (2020). Stock Market Returns, liquidity and COVID-19 Outbreak: Evidence from the UK. Date of access, 2020, 12-08. Available at: https://www.researchgate.net/profile/Ahmed_Ahmed219/publication/340926380
- Vinh, V. X., & Nguyet, N. M. (2017). The correlation between liquidity, earnings volatility and stock return – A study from Vietnam stock market. *Ho Chi Minh City Open University Journal of Science - Economics and Business Administration*, 12(2), 3-14. https://doi.org/10.46223/HCMCOUJS.econ.vi.12.2
- WHO. (2020). Coronavirus disease 2019 (COVID-19), available at: https://covid19.who.int/ (accessed 21 September 2020).
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, *36*, 101528. https://doi.org/10.1016/j.frl.2020.101528