

## Herd Behavior in Indian Stock Market : Upshots of COVID-19 Pandemic

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### Abstract

The study assesses the herd behavior in extreme market conditions induced by the pandemic by using dummy variable OLS regression. Empirical evidences from daily returns of S&P BSE 500 indicate significant herd behavior during the pandemic while anti-herding in Pre-Covid situation. The analysis posits the evident association of “Covid-19 outbreak” event and the existence of herd behavior in Indian stock market. The pandemic has triggered economic uncertainties that in turn lead to herding among investors and traders. Further the study indicates significant herding in extreme up/down market returns, high volatility condition in Covid-19 outbreak as compare to Pre-Covid situation. Results also depicts reverse herding in case of low volatility during the pandemic. While trading volume and herding is unrelated to each other in both Pre-Covid and during Covid situation.

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**Keywords :** Herd behavior; Covid-19; Market Conditions; Trading; Volume; Volatility; Returns; Stock Market; BSE; India

### I. Introduction

COVID-19 IS A transmissible disease that originally started in the city of Wuhan, China (Al-Awadhi, AlSaifi, Al-Awadhi and Alhammali, 2020). It has shaken the economy of almost all the countries including India. In India, total confirmed cases of COVID-19 are 32,512,366 with 4,35,758 deaths as on 25 August 2021 (WHO). Various studies have looked into the impact of pandemic outbreak on capital markets and concluded that the devastating pandemic has led to extreme uncertainty as well as skyrocketed investors anxiety. Studies depicted that stock returns have become negative and highly volatile due to

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### References

- Agarwal, J.D. and Aman Agarwal, (2004), "Literature in Finance Vol IV : Financial Systems and Markets" IIF Publications, Delhi
- Al-Awadhi, A. M., K. Alsaifi, A. Al-Awadhi and S. Alhammadi, (2020), "Death and contagious infectious diseases: Impact of the COVID-19 virus on stock market returns.", *Journal of Behavioral and Experimental Finance*, Vol. 27, pp. 100-326.
- Alhaj-Yaseen, Y. S. and X. Rao, (2019), "Does Asymmetric Information Drive Herding? An Empirical Analysis." *Journal of Behavioral Finance*, Vol. 20, No. 4, pp. 451-470.
- Ali, M., N. Alam and S.A.R. Rizvi, (2020), "Coronavirus (COVID-19) – An epidemic or pandemic for financial markets.", *Journal of Behavioral and Experimental Finance*, Vol. 27, pp. 100-341.
- Andrews, M. A., B. Areekal, K.R. Rajesh, J. Krishnan, R. Suryakala, B. Krishnan, C.P. Muraly and P.V. Santhosh, (2020), "First confirmed case of COVID-19 infection in India: A case report." *The Indian Journal of Medical Research*, Vol. 151, No. 5, p.490.
- Ashraf, B. N. (2020). Stock markets' reaction to COVID-19: Cases or fatalities? *Research in International Business and Finance*, Vol. 54.
- Avery, C. and P. Zemsky, (1998), "Multidimensional Uncertainty and Herd Behavior in Financial Markets." *American Economic Review*, Vol. 88, No. 4, pp.724-748.
- Balcilar, M., and R. Demirer, (2015), "Effect of global shocks and volatility on herd behavior in an emerging market: Evidence from Borsa Istanbul." *Emerging Markets Finance and Trade*, Vol. 51, No. 1, pp.140-159.
- Banerjee, A. V., (1992), "A Simple Model of Herd Behavior." *The Quarterly Journal of Economics*, Vol. 107, No. 3, pp.797-817.
- Bekiros, S., M. Jlassi, B. Lucey, K. Naoui and G.S. Uddin, (2017), "Herding behavior," market sentiment and volatility: Will the bubble resume? *The North American Journal of Economics and Finance*, Vol. 42, pp.107-131.
- Bharti, and A. Kumar, (2021), "Exploring Herding Behaviour in Indian Equity Market during COVID-19 Pandemic: Impact of Volatility and Government Response.", *Millennial Asia*, Vol. 12, 2021.
- Bhattacharjee, A., and J. Das, (2020), "COVID-19 and the Indian Stock Market Mayhem", SSRN Network Code 3614632.
- Bikhchandani, S., D. Hirshleifer and I. Welch, (1992), "A Theory of Fads, Fashion, Custom, and Cultural Change as Informational Cascades." *Journal of Political Economy*, Vol. 100, No. 5, pp. 992-1026.
- Bikhchandani, S., and S. Sharma, (2000), "Herd Behavior in Financial Markets.", *IMF Staff Papers*, Vol. 47, No. 3, pp.279-310.
- Bora, D., and D. Basistha, (2021), "The outbreak of COVID-19 pandemic and its impact on stock market volatility: Evidence from a worst-affected economy." *Journal of Public Affairs*, Vol. 21, No. 4, pp.26-23.
- Bouri, E., R. Demirer, R. Gupta and J. Nel, (2021), "COVID-19 Pandemic and Investor Herding in International Stock Markets", *Risks*, Vol. 9, No. 9, pp. 168.

Burch, T. R., D.R. Emery and M.E. Fuerst, (2016), "Who Moves Markets in a Sudden Marketwide Crisis? Evidence from 9/11.", *Journal of Financial and Quantitative Analysis*, Vol. 51, No. 2, pp. 463–487.

Chang, E. C., J.W. Cheng and A. Khorana, (2000), "An examination of herd behavior in equity markets: An international perspective." *Journal of Banking and Finance*, Vol. 24, No. 10, pp. 1651–1679.

Chauhan, Y., N. Ahmad, V. Aggarwal and A. Chandra, (2020), "Herd behaviour and asset pricing in the Indian stock market." *IIMB Management Review*, Vol. 32, No. 2, pp. 143–152.

Chiang, T. C., and D. Zheng, (2010), "An empirical analysis of herd behavior in global stock markets", *Journal of Banking and Finance*, Vol. 34, No. 8, pp. 1911–1921.

Choi, K. H., and S.M. Yoon, (2020), "Investor sentiment and herding behavior in the Korean stock market", *International Journal of Financial Studies*, Vol. 8, No. 2, pp.1–14.

Christie, W. G., and R.D. Huang, (1995), "Following the Pied Piper: Do Individual Returns Herd around the Market?" *Financial Analysts Journal*, Vol. 51, No. 4, pp.31–37.

Dhall, R., and B. Singh, (2020), "The COVID-19 Pandemic and Herding Behaviour: Evidence from India's Stock Market", *Millennial Asia*, Vol. 11, No. 3, pp. 366–390.

Espinosa-Méndez, C. and J. Arias, (2021a), "COVID-19 effect on herding behaviour in European capital markets", *Finance Research Letters*, Vol. 38, No. 10, pp.17–87.

Espinosa-Méndez, C. and J. Arias, (2021b), "Herding Behaviour in Australian stock market: Evidence on COVID-19 effect", *Applied Economics Letters*, Vol. 28, No. 21, pp. 1898–1901.

Garg, A., and R. Gulati, (2013), "Do investors herd in Indian market.", *Decision*, Vol. 40, No. 3, pp. 181–196.

Gleason, K. C., I. Mathur and M.A. Peterson, (2004), "Analysis of intraday herding behavior among the sector ETFs." *Journal of Empirical Finance*, Vol. 11, No. 5, pp. 681–694.

Goodell, J. W., (2020), "COVID-19 and finance: Agendas for future research.", *Finance Research Letters*, Vol. 35, No. 10, pp. 1512.

Gupta, P., and B. Kohli, (2021), "Herding Behavior in the Indian Stock Market/ : An Empirical Study", *Indian Journal of Finance*, Vol. 15, No. 5–7, pp.86–99.

Guru, B. K., and A. Das, (2021), "COVID-19 and uncertainty spillovers in Indian stock market" *MethodsX*, Vol. 8, No. 10, pp. 11–99.

He, Q., J. Liu, S. Wang and J. Yu, (2020), "The impact of COVID-19 on stock markets", *Economic and Political Studies*, No. 8, No. 3, pp. 275–288.

Hong, H., Z. Bian and C.C. Lee, (2021), "COVID-19 and instability of stock market performance: evidence from the U.S", *Financial Innovation*, Vol. 7, No. 1, pp. 1–18.

Hott, C., (2009), "Herding behavior in asset markets", *Journal of Financial Stability*, Vol. 5, No. 1, pp. 35-56.

Jiang, R., C. Wen, R. Zhang and Y. Cui, (2022), "Investor's herding behavior in Asian equity markets during COVID-19 period", *Pacific-Basin Finance Journal*, Vol. 73, No. 10, pp. 17-71.

Kanojia, S., D. Singh and A. Goswami, (2022), "Impact of herding on the returns in the Indian stock market: an empirical study", *Review of Behavioral Finance*, Vol. 14, No. 1, pp.115-129.

Lakshman, M. V., S. Basu and R. Vaidyanathan, (2013), "Market-wide Herding and the Impact of Institutional Investors in the Indian Capital Market", *Journal of Emerging Market Finance*, Vol. 12, No. 2, pp. 197-237.

Lao, P., and H. Singh, (2011), "Herding behaviour in the Chinese and Indian stock markets", *Journal of Asian Economics*, Vol. 22, No. 6, pp. 495-506.

Li, Y., J. Liu, H. Wang and P. Wang, (2021), "Stock market liberalization, foreign institutional investors, and informational efficiency of stock prices: Evidence from an emerging market", *International Journal of Finance and Economics*, Vol. 26, No. 4, pp. 5451-5471.

Liu, H., A. Manzoor, C. Wang, L. Zhang and Z. Manzoor, (2020), "The COVID-19 Outbreak and Affected Countries Stock Markets Response", *International Journal of Environmental Research and Public Health*, Vol. 17, No. 8, pp. 2800.

Okorie, D. I., and B. Lin, (2021), "Adaptive market hypothesis: The story of the stock markets and COVID-19 pandemic", *The North American Journal of Economics and Finance*, Vol. 57, No. 10, pp. 1397.

Piotroski, J. D., and T.J. Wong, (2012), "Institutions and Information Environment of Chinese Listed Firms", University of Chicago Press, Chicago, pp. 201-242.

Scharfstein, D. S., and J.C. Stein, (1990), "Herd behavior and investment.", *American Economic Review*, Vol. 80, No. 3, pp. 465-479.

Tan, L., T.C. Chiang, J.R. Mason and E. Nelling, (2008), "Herding behavior in Chinese stock markets: An examination of A and B shares." *Pacific Basin Finance Journal*, Vol. 16, No. 1-2, pp. 61-77

Wu, G., B. Yang and N. Zhao, (2020), "Herding Behavior in Chinese Stock Markets during COVID-19." *Emerging Markets Finance and Trade*, Vol. 56, No. 15, pp. 3578-3587

Yarovaya, L., R. Matkovskyy and A. Jalan, (2021), "The effects of a "black swan" event (COVID-19) on herding behavior in cryptocurrency markets." *Journal of International Financial Markets, Institutions and Money*, Vol. 75, No. 10, pp.1321.

Yaseer, K. M., (2013), "Dynamics of herding behavior in Indian Stock market", Unpublished Doctoral Dissertation, Pondicherry University, India.