

An Empirical Study of Small Retail Investors in India on Investors' Perception of Investing in the Stock Market

Harikumar Pallathadka¹, Laxmi Kirana Pallathadka², Takhelchangbam Brajeshwari Devi³, Shoraisam Kiranbhala Devi⁴ and Shoraisam Kiran Singh⁵

¹Manipur International University, Imphal, Manipur, INDIA.

²Manipur International University, Imphal, Manipur, INDIA.

³Manipur International University, Imphal, Manipur, INDIA.

⁴Manipur International University, Imphal, Manipur, INDIA.

⁵Manipur International University, Imphal, Manipur, INDIA.

¹Corresponding Author: harikumar@miu.edu.in



www.ijrah.com || Vol. 2 No. 5 (2022): September Issue

Date of Submission: 03-10-2022

Date of Acceptance: 23-10-2022

Date of Publication: 27-10-2022

ABSTRACT

The perception of investors depends on the different behavioral traits. The stock market seems to be an exciting and exciting platform for investors to perform their investment activities (frydrych et al., 2014). The market has continuously grown over time in these years. However, investors are sometimes skeptical about investing because of the uncertainties and risks associated with the stock market. After going through many hurdles, the money earned over a long time is meant to be safe and risk-free. Therefore, the investors feel the risk in the stock market is high and fear investing in platforms like these. Awareness of the stock market is also essential for investing in suitable firms. There must be a fair understanding of the return on investments (roi) before investing a large sum of money into the firms (farris et al., 2015). As this is a hot topic among businesses, the study of the behavior of small investors concerning the stock market must be carried out to understand their perspective. Financial behavior is an important concept to understand if one wishes to analyze the perception of individual investors. It has been observed that some of the investors are dependent on self-made decisions while investing, whereas some are made aware by the different financial seminars or workshops. Therefore, this paper deals with empirical findings to establish a more profound understanding of the behavior of investors following the stock market. A sample of 117 small retail investors was surveyed through a structured questionnaire to know their perception of investing in the stock market and its impact on the investment process in India. The study concludes that there is a significant impact on investors' perception of investing in the stock market.

Keywords- stock market, finance, investment, small investors, behavior, ROI.

I. INTRODUCTION

The stock market is an avenue giving investors opportunities to trade different kinds of derivatives and securities. Companies' most significant advantage from the stock market is raising enormous resources for their work through public trading investment. It allows investors to buy shares, debentures, bonds, et cetera. and sell them simultaneously (Yadav, 2017). The external, as well as the internal environment affects the perception of the investors. The process by which they understand the share market by interpreting and analyzing the situations

accounts for their behavior. The internal factors of investors could vary, starting from income generated through various means, their occupation, and their education level. These are the significant factors that shape their decisions in trading. A stock market is a place that is a bit unpredictable and riskier at the same time. It is unpredictable in the market statistics in the post-covid 19 scenarios, wherein the market was expected to go into recession, and it was much more likely that the stock prices would also fluctuate depending on the situation (Zhang et al., 2021).

However, the scenario is quite different. The

growth numbers have been continuously increasing since the lockdown got over. The major stakeholders in the operations of a business are the investors. The stock market is a platform providing an opportunity for wealth creation. The reason behind unpredictability is that the market is volatile and goes through many changes in due time. The brokers or financial experts are constantly studying the patterns because they are the ones who help the public to invest in the firms. To obtain correct information, small investors research the market and select their best portfolio. Financial institutions play a critical and vital role in economic development. They labor with extremely restricted resources, converting hoarders to debtors and accelerating the nation's investment activities. "Traditional finance theory" accepts the rule that financial investors process all the accessible data and make informed decisions (*Chiapello, 2015*). Studies have also demonstrated that financial investors behave differently by settling on precise mistakes during emotional decision-making.

Behavioral finance is another field that has come up over the most recent 25 years that concentrates on how money is impacted by how the brain functions. It consolidates behavior and the theory related to cognitive psychology with traditional financial aspects and economy to clarify group behavior in monetary settings and their choices related to financial aspects. Numerous people view financial trading and investments as captivating because they can take an interest in the dynamic interaction and decision-making and check for the consequences of their decisions (*Hart, 2016*). Not all financial investments will be productive, as a small investor will not generally settle on the right investment choices over the years. Investment is certifiably not a game yet a genuine subject that can significantly affect financial investors' future prosperity. Essentially everybody makes different forms of investments. Regardless of whether the individuals select explicit resources, for instance, stock, ventures are yet made through investment in an annuity plan and worker reserve funds program or through the acquisition of life coverage insurances, gold, home, silver, securities, reserve funds in post offices or land (*Aasaiyan, 2020*).

Every one of the investments has ordinary qualities like expected return and the associated risk. The future has many uncertainties and is dubious, and one should decide how much risk one shall bear since better yield is related to tolerating more trouble in the investments (*Fernandez, 2015*). An effort is made to collect pertinent data that would produce a practical analysis of financial investors and their perception of the stock market considering the above premise. The investment alludes to the acquisition of monetary resources. At the same time, investment goods are those merchandise utilized to further produce more value or money in the process (*Lee & Lee, 2015*). Financial investment is a conscious demonstration of an individual or any substance that includes the improvement of cash in

the properties or securities given by any monetary foundations with the target of exceptional yields within a specific timeframe.

India's stock market depends on small retail investors (*Kannadhasan, 2015*). Individual investors constitute a large part of the stock market, and their behavior impacts the whole system. Their income is also dependent on the stock market to a great extent. Therefore, the behavior of individual investors is not something to be ignored, and it can present a lot of valuable data for organizations (*Ngoc, 2014*). Since individual investors are the stock market regulators, it is imperative to understand the factors that affect their behavior. The study is initiated to cover all the facets that directly or indirectly impact the attitude and behavior of retail or small investors. The main agenda is to predict the decision-making of investors and their perspective towards investment activities in the stock market. The actual aim of small retail investors is to expand their income source and simultaneously reduce the expenses incurred on unimportant activities (*Lee et al., 2014*).

The investors view that they must decide whether to spend their income or keep them as savings. However, rather than saving the lumpsum amount, they invest the money to get more significant returns. The profit and loss scenario makes the decision-making quite cumbersome, and the risk is what they fear before investing bulks of money. Behavior, personality, and attitude account for the essential factors that affect investors' decision-making. In this VUCA world, everything is volatile, and investors' behavior also changes with time. The behavior of investors can be predicted by understanding the concept of behavioral finance. It is a newly emerging domain in the study of finance. The policymakers intend to learn the behavior of investors. The regulators and the MII, also known as market infrastructure institutions, are also interested in analyzing retail investors' behavior in the stock market.

II. LITERATURE REVIEW

The liberalization of the economy in financial and economic terms in the 1990s has dramatically increased the stock market potential. Earlier in the 1990s, the mark remained around 5000 in Sensex, which has risen so high in the current scenario (*Rout et al., 2017*). Due to the market's capitalization, capitalization and massive growth in the stock market are genuine because of the financial investors, mainly foreign and domestic, and corporate and individual small retail investors. The transactions have rapidly gone up, and so has the market index. The regulatory authority SEBI (Securities and Exchange Board of India) has made up new rules to protect investors by expanding transparency in the transactional processes. SEBI is also constantly monitoring the trading activities and evaluating the process so that there is no manipulation in the market and the trading happens smoothly (*Juman & Irshad, 2015*).

A stock market or a share market offer is either given or exchanged. A financial exchange platform is just like a share market. The fundamental contrast here is that a securities exchange assists one with trading monetary instruments, such as debentures, securities, shared assets, or mutual funds, along with other subsidiaries, just as valuable assets of any organization. A stock market just permits exchanging of funds between investors and organizations. The critical component is the stock trade in its fundamental stage. It produces all the features used to exchange organization stocks and other securities that an organization releases in bonds or debentures. A stock might be purchased or sold if recorded on a trade. Along these lines, it is the gathering point of the stock purchasers and dealers. India's chief stock trades are the "Bombay Stock Exchange" and the "National Stock Exchange." There are two main kinds of markets where such activities occur: primary and secondary markets.

Among its particular undertakings is the quest to expand the participation of small financial investors by offering new choices for reserve funds in monetary resources and a method for activating little financial capital for investment. However, the predominant discernment has been that individual retail financial investments have been less significant on the lookout. The meaning of retail financial investment in India has changed over the years. SEBI up to the year 2003, in the guidelines of "Disclosure and Investor Protection" (2000), a retail investor was characterized as a singular financial backer applying for a term of 10 or lesser parts which are marketable and in an ethical issue or up to 1000 units in a book assembled issue (Gusai, 2019). Since the costs of offer qualities in IPOs from various firms can fluctuate, the meaning of this sort is dependent on several offers applied for does not consider the volume of investments made in a specific IPO by the retail financial investor associated with the investments. However, that is a significant element in recognizing the behavior of various financial investors.

The retail financial investor was re-imagined to assess venture size, mirroring their decision to pull up stocks concerning the value. In August 2003, the pre-existing definition was corrected to incorporate all the individual financial investors employed for the securities or debentures worth Rs. 50,000 or even lesser, which had been revised subsequently to around a worth of Rs. 1,00,000 in 2005 and was later formulated in "Issue of Capital and Disclosure Requirements" Regulations, in 2009" in SEBI and 2010 to Rs. 2,00,000 in November (Viswanathan et al., 2014). The increments were incomplete to adapt to the expansion or inflation in the subsequent year. The definitions of financial trading have been utilized to focus on the concessions related to retail financial investors. Investigating the behavior or conduct of financial investors portrayed based on these definitions is quite cumbersome since the help of data on retail financial investors recognized here is challenging to comprehend.

Small investors' exposure to the financial market, whether through direct initiatives or the consistent intermediates supplied by pension funds or mutual funds developing faster in the market, would provide a few grounds to regulators evaluating small investors. In some nations, the real trouble is not the shortfall of the retail or small individual investors but because of these individual investors' clueless and primarily antagonist and silly conduct. Furthermore, the market impact as exerted and market control concerning the frauds done by specifically huge and predominant financial investors are found to excessively and antagonistically influence the security of the reserve funds and the profits procured by the small investors (Gotoh & Sinclair, 2017). It would suggest that even as India observes the expanded presence of retail financial investors in debt and equity markets, mediation to impact their conduct and ensure their inclinations, both according to their perspective and from that of the market's security, could also become significant.

In any case, even the presence cannot be underestimated in India. At some random point of disparity, livelihoods and overflows in possession of those in the middle and upper-middle classes. The distribution of income existing in these sectors will account for the pay circulation from where retail financial investors can be expected to be present; small financial investors' presence is likely to grow at a faster rate in terms of per capita pay as the nation rises (Frost et al., 2019). In any case, this relationship does not appear to be consistent across different settings and periods. Some of the countries where the pay is moderate now reflect a much more significant presence of retail financial investors than the current scenario did when they were at a similar stage of development (Kremer & Schilbach, 2019). Along these lines, if small investors' presence is considered significant, it might be essential to induce intervention at some point.

The literature review made for this paper on the behavior and the perception of financial investors towards different investments done in the stock market shows that the significant effect depends on the decision-making of the individual investors. Many papers have been assessed to legitimize the need for the present review. A few authors have expressed that tax reduction at the end of the year impacted the income-generating and corporate groups to put their money into stocks and mutual funds. An author had also recommended that the "public provident fund" is such an important asset. It is considered a most valuable investment for all kinds of salaried people and individuals coming under the salaried class, independent owners of businesses, and people who have retired, just as for those who are paying tax and non-taxpayers (Velmurugan et al., 2015).

An author communicated that financial investors are apprehensive about the well-being and least return for the lumpsum amount they have invested into mutual fund schemes. Variables like tax rebates listed under section

80C of the IT Act and past statistics in terms of the organization's performance will likewise be thought about by financial investors before making any investments. A paper gave the view of an author who contended that the best investment option is vacant land and the second inclination to the standard asset plans followed by gold and different metals for most small investors. It was also analyzed in a study that the choices of investments done by most retail investors depended on the suggestions or recommendations given by the experts and monetary guides.

It was inferred that the variables strongly influence investment patterns into the mutual fund schemes is because of the tax reduction. Few papers have focused on the point that individuals need regular money after retirement. So, they invest in pension fund schemes, and these investors liked to put their money into mutual funds just as they thought this would not be required in the future and pension schemes would serve their purpose. An eminent author expressed that in the service class, homemakers, experts, business class, and students like to put their money into valuable mutual funds or equity funds, bonds and debenture, land, derivatives, or post office schemes for deposits and other subsidiaries or derivatives separately. IIM Data work in the year 2007 found that there is a relationship between training level and the financial decision-making of the financial investors (Sharma et al., 2014). Regardless of the bank's education deposits, it is also famous among all financial investors. Demographics such as age, the individual's qualifications, marital status, and family income pay shall significantly impact a financial investor's investment activities.

Another research has bought out specific facts about the prior reservations of the retail investors towards the stock market: unpredictability, value control or manipulation of the prices, the lousy demeanor of merchants or wrong attitude of brokers towards the investors, the errors due to mismanagement managers or corporate chiefs. An author mentioned that payback followed by adaptability, reasonableness, transparency, and liquidity are the compelling variables to make interest in mutual fund assets by retail financial investors (Blake et al., 2019). An individual in a particular paper called for attention to the premise that minor investors' qualifications or educational background, work, income, and knowledge for news identifying with investments and ventures are firmly connected with the choice or decision-making, especially in the stock market-related platforms of investments. The elements that affect the financial investors to put resources into value shares are liquidity,

low venture, and capital appreciation. It was also contended that the different investment channels should keep the financial backer refreshed through print and electronic media. The bank employees accepted that the most important avenue for investment is insurance compared to other tracks where risk is prevalent in all the platforms, especially the stock market. An article expressed that the financial investors liked to put their resources into gold, followed by the bank to protect their investments. For security reasons, small investors are confident in choosing secure avenues for their money protection. In 2011 an author also mentioned that the information on the investments and investors regarding the different avenues for investments is low. More studies should be done on the same front (Glänzel & Scheuerle, 2016).

The literature above gives an insight into the significant contributions made by small financial investors towards the different investment pathways. It is also evident from the above writing that a more substantial part of the economic investors favors the well-being of their money and risk-free platforms to invest in and security for the venture. Besides, they are highly intrigued to get the most extreme advantages for all their investments (World Health Organization, 2015). The current review endeavors to distinguish the issues from the perspective of financial investors towards the different platforms, especially the stock market in India, considering the above writing.

III. THE OBJECTIVE OF THE STUDY

1. To know the Investors' perception of investing in India's Stock Market.
2. To know the impact of Investors' perception on investing in the Stock Market in India.

IV. RESEARCH METHODOLOGY

A sample of 117 small retail investors was surveyed through a structured questionnaire to know their perception of investing in the stock market and its impact on the investment process in India. The nature of the study is empirical, and the data collection process used is random sampling through which primary data was collected. A statistical tool like multiple regressions was applied to reach results.

Findings of the study

Multiple Regression analysis

Table 1: Investor's perception of investing in the stock market

Sl. No.	Investors' perception
1.	Small retail investor feels that the risk in the stock market is high.
2.	Think that a stock market is a place that is a bit unpredictable
3.	Think that the stocks prices fluctuate depending on the situation

4.	Study the market and choose the best portfolio to get accurate information
5.	Investment in the stock market depends on small retail investors' income, occupation, and education.
6.	Process all the accessible data and make informed decisions
7.	Small retail investors invest in the stock market to expand their income sources.
8.	Consider return as the motivating factor that influences investment decisions.
DV	Investing in the stock market

Table 2: “Model Summary”

“Model”	“R	“R Square”	“Adjusted R Square”	“Std. The error of the Estimate.”
1	.927 ^a	.860	.849	.31974

a. Predictors: (Constant), Small retail investors feel that the stock market risk is high. I think that the stock market is a bit unpredictable place. I believe that stock prices fluctuate depending on the situation. I study the market and choose the best portfolio for myself to get accurate information; investment in the stock market depends on a small retail investor’s income, occupation and education; I process all the accessible data and make informed decisions; small retail investors invest in the stock market to expand their income source, I consider a return as the motivating factor that influences my investment decision

In this study, to measure the impact of investors’ perception of “Investing in the stock market,” multiple

regressions were applied. The model explained 86% of the variance (R Square = .849).

Table 3: “ANOVA”

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	67.745	8	8.468	82.832	.000 ^b
	Residual	11.041	108	.102		
	Total	78.786	116			

DV: Investing in the stock market

Predictors: (Constant), Small retail investor feels that the risk in the stock market is high; I think that a stock market is a place that is a bit unpredictable; I believe that the stocks prices fluctuate depending on the situation, I study the market and choose the best portfolio for myself to get accurate information, investment in the stock market depends on small retail investor's income, occupation and education, I process all the accessible data and take informed decisions, Small retail investors invest in the stock market to expand their income source, I consider a return as the motivating factor that influences my investment decision.

Table 3 (ANOVA) shows whether the IDVs significantly impact the DVs. The significance value is

less than 0.05 (0.000), reflecting that one or more IDVs greatly influence the DV.

Table 4: “Coefficients”

“Model”	“Unstandardized Coefficients”		“Standardized Coefficients”	“t”	“Sig.”
	B	Std. Error	Beta		
(Constant)	-.040	.187		-.212	.833
Small retail investor feels that the risk in the stock market is high	.154	.055	.159	2.801	.006
I think that a stock market is a place that is a bit unpredictable	-.064	.030	-.086	-2.148	.034
I think that the stocks prices fluctuate depending on the situation	-.197	.061	-.176	-3.254	.002
I study the market and choose the best portfolio for myself to get accurate information	.148	.076	.153	1.937	.055
Investment in the stock market depends on small retail investor’s income, occupation, and education	.628	.080	.604	7.901	.000

I process all the accessible data and make informed decisions	.166	.061	.165	2.736	.007
Small retail investors invest in the stock market to expand their income source	.060	.039	.062	1.535	.128
I consider a return as the motivating factor that influences my investment decision	.118	.030	.155	3.941	.000
DV: Investing in the stock market					

Table 4 shows that all seven statements regarding investors’ perceptions, except Small retail investors investing in the stock market to expand their income source, have a significant impact on investing in the stock market as the value in the considerable column is below 0.05.

V. CONCLUSION

The study has uncovered some important facts that the priority-wise list of investment avenues is somewhat similar except for investments in post office schemes and gold or other metals. Investment decision-making is the same across similar income groups. The preference order towards land and insurance schemes is the same across the one kind of age group; however, it differs concerning securities exchange, gold, bank reserve funds, and post office investment schemes (Fernández-Villaverde et al., 2021). In the literature review formulated above, the impression of the request to venture towards the post office is diversified among the different income levels generated by the individuals.

The study infers all kinds of investments done in different platforms, especially in the stock market, with the notion of capital appreciation and different income types of short term and long term. In this review, the essential thought behind the investments of all the sectors, such as administration, private, independently employed, and retiree is to use the excess money for investments in good plans to get favorable outcomes or return on investment. When ordinary people view investments differently, they will never have any hazardous plans. The gold and share markets are exceptionally dubious and uncertain, so financial investments should scrutinize the market cautiously and settle on personalized investment choices. It is proposed that the review has reflected the investors’ behavior towards the stock market and in several other platforms like securities exchange, bank stores, gold, and post office schemes to several income groups in India. Further, an attempt can likewise be made to concentrate on the risk factors implied in investment choices on the stock market to get a broader perspective on the decision-making of small investors.

The study suggests that small retail investors view the stock market as a place where prices change based on the scenario, analyzing all available data and making educated decisions, and return as the motivating factor that drives an investment decision in the retail market. It is also found that there is a significant impact on investors’ perception of investing in the stock market.

DISCLOSURE

This research paper has been presented as a full-length paper at the International Conference on Humanities, Sciences & Technical Education (IC-HSTE-2022) organized on 25th and 26th February 2022 at Thakur College of Engineering and Technology situated at Kandivali (E), Mumbai, Maharashtra, India.

REFERENCES

- [1] Asaiyan, S. (2020). A Study on Dynamic Investors Behavior of Individual Investors – An Empirical Study with Special Reference to Namakkal District. *Journal Of Critical Reviews*, 7(10), 1945-1949.
- [2] Blake, D., Cairns, A. J., Dowd, K., & Kessler, A. R. (2019). Still Living with Mortality: The Longevity Risk Transfer Market After One Decade. *British Actuarial Journal*, p. 24.
- [3] Chiapello, E. (2015). Financialisation Of Valuation. *Human Studies*, 38(1), 13-35.
- [4] Farris, P. W., Hanssens, D. M., Lenskold, J. D., & Reibstein, D. J. (2015). Marketing Return on Investment: Seeking Clarity for Concept and Measurement. *Applied Marketing Analytics*, 1(3), 267-282.
- [5] Fernandez, P. (2015). CAPM: An Absurd Model. *Business Valuation Review*, 34(1), 4-23.
- [6] Fernández-Villaverde, J., Sanches, D., Schilling, L., & Uhlig, H. (2021). Central Bank Digital Currency: Central Banking for All? *Review Of Economic Dynamics*, 41, 225-242.
- [7] Frost, J., Gambacorta, L., Huang, Y., Shin, H. S., & Zbinden, P. (2019). Big tech And the Changing Structure of Financial Intermediation. *Economic Policy*, 34(100), 761-799.
- [8] Frydrych, D., Bock, A. J., Kinder, T., & Koeck, B. (2014). Exploring Entrepreneurial Legitimacy in Reward-Based Crowdfunding. *Venture Capital*, 16(3), 247-269.
- [9] Glänzel, G., & Scheuerle, T. (2016). Social Impact Investing in Germany: Current Impediments from Investors’ and Social Entrepreneurs’ Perspectives. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 27(4), 1638-1668.
- [10] Gotoh, F., & Sinclair, T. J. (2017). Social Norms Strike Back: Why American Financial Practices Failed in Japan. *Review Of International Political Economy*, 24(6), 1030-1051.
- [11] Gusai, O. P. (2019). Robot Human Interaction: Role

of Artificial Intelligence in Accounting and Auditing. *Indian Journal of Accounting*, 51(1), 59–62.

[12] Hart, C. S. (2016). How Do Aspirations Matter? *Journal Of Human Development and Capabilities*, 17(3), 324–341.

[13] Juman, B. M., & Irshad, M. K. (2015). An Overview of India Capital Markets. *Bonfring International Journal of Industrial Engineering and Management Science*, 5(2), 17.

[14] Kannadhasan, M. (2015). Retail Investors' Financial Risk Tolerance and Their Risk-Taking Behaviour: The Role of Demographics as Differentiating and Classifying Factors. *IIMB Management Review*, 27(3), 175-184.

[15] Kremer, M., Rao, G., & Schilbach, F. (2019). Behavioral Development Economics. In *Handbook of Behavioral Economics: Applications and Foundations 1* (Vol. 2, pp. 345–458).

[16] Lee, C. C., Yang, S. J., & Chang, C. H. (2014). Non-Interest Income, Profitability, And Risk in Banking Industry: A Cross-Country Analysis. *The North American Journal of Economics and Finance*, 27, 48-67.

[17] Lee, I., & Lee, K. (2015). The Internet of Things (IoT): Applications, Investments, And Challenges for Enterprises. *Business Horizons*, 58(4), 431-440.

[18] Ngoc, L. T. B. (2014). Behavior Pattern of Individual Investors in Stock Market. *International Journal of Business and Management*, 9(1), 1.

[19] Rout, B., Mohanty, A., & Kacharia, A. K. (2017). Bull Vs. Bear Market – An Investment Game Analysis using Moving Average Method. *International Journal of Research-GRANTHAALAYAH*, 5(11), 425-443.

[20] Sharma, R., Mithas, S., & Kankanhalli, A. (2014). Transforming Decision-Making Processes: A Research Agenda for Understanding the Impact of Business Analytics on Organisations. *European Journal of Information Systems*, 23(4), 433-441.

[21] Velmurugan, G., Selvam, V., & Nazar, N. A. (2015). An Empirical Analysis on Perception of Investors' Towards Various Investment Avenues. *Mediterranean Journal of Social Sciences*, 6(4), 427–427.

[22] Viswanathan, M., Echambadi, R., Venugopal, S., & Sridharan, S. (2014). Subsistence Entrepreneurship, Value Creation, And Community Exchange Systems: A Social Capital Explanation. *Journal Of Macromarketing*, 34(2), 213-226.

[23] World Health Organization. (2015). *Investing To Overcome the Global Impact of Neglected Tropical Diseases: Third WHO Report on Neglected Tropical*

Diseases 2015 (Vol. 3).

[24] Yadav, S. (2017). Stock Market Volatility-A Study of Indian Stock Market. *Global Journal for Research Analysis*, 6(4), 629–632.

[25] Zhang, H., Chen, J., & Shao, L. (2021). Dynamic Spillovers Between Energy and Stock Markets and Their Implications in The Context Of COVID-19. *International Review of Financial Analysis*, p. 77, 101828.

[26] Kumar Tiwari, B., Pallathadka, H., Kumari, D., & Agrawal, O. P. (2021). “COVID-19 Pandemic leads Stock Market Volatility”: Empirical Evidence Using GARCH Model. *Empirical Economics Letters*, Oct 2021(2 Special Issue), pp. 422–439.

[27] Pallathadka, H., & Kirana Pallathadka, L. (2022). A Quantitative Investigation and Critical Analysis of Fintech as a Change Agent in the Financial Markets. *Journal of Contemporary Issues in Business and Government*, 28(2), 223–235. <https://doi.org/10.47750/cibg.2022.28.02.016>

[28] Pallathadka, H., & Pallathadka, L. K. (2022). Critical Analysis of Fintech as a Change Agent in the Financial Markets : A Quantitative Investigation. *Journal of Applied Science and Research*, 10(1), 72–81. <http://www.scientiaresearchlibrary.com/arhcive.php>

[29] Setiawan, R., Cavaliere, L. P. L., Halder, S., Koti, K., Sarsengaliy, B., Ashok, K., Pallathadka, H., & Rajan, R. (2021). The Concept of the Cryptocurrency and the Downfall of the Banking Sector in Reflecting on the Financial Market. *RentgenologiyaiRadiologiya*, 60(S1), 17–33.

[30] Pallathadka, H. (2020). Impact Of Fundamental Factors On The Share Price Movement Of Indian It Stocks. *European Journal of Molecular & Clinical Medicine*, 07(06), 3213–3221.

[31] Pallathadka, H., & Pallathadka, L. K. (2020). The impact of social responsibility on business performance. *European Journal of Molecular & Clinical Medicine*, 7(11), 8288–8304. <https://doi.org/10.1108/02686900210424312>

[32] Pallathadka, H., Hari Leela, V., Patil, S., Rashmi, B. H., Jain, V., & Ray, S. (2021). Attrition in software companies: Reason and measures. *Materials Today: Proceedings*, XXXX. <https://doi.org/10.1016/j.matpr.2021.05.596>

[33] Pallathadka, H., Mustafa, M., Sanchez, D. T., Sekhar Sajja, G., Gour, S., & Naved, M. (2021). Impact of Machine Learning on Management, Healthcare and Agriculture. *Materials Today: Proceedings*, xxx. <https://doi.org/10.1016/j.matpr.2021.07.042>