

Can the Socially Responsible Investing (SRI) Index Perform Better than Market Funds? Evidence from the Indian Stock Market

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Abstract

Purpose: This research aims to explore the scope of socially responsible investing (SRI). To study the scope of SRI, the performance of socially accountable establishments is compared against the performance of other companies.

Design/Methodology/Approach: The work is based on a secondary database extracted from trustworthy websites. To make a comparison, monthly log returns of socially responsible exchanges like S&P BSE CARBONEX, S&P BSE GREENEX, S&P BSE ESG Index, and S&P BSE 500 Shariah are compared with the performance of S&P BSE Sensex which is taken as a proxy of the market returns. The comparison data for monthly returns of the index are collected from January 2014 – July 2020.

Findings: The outcomes of the research work find that the Indian stock market is also gratifying socially responsible establishments over the time.

Originality: As per the findings, socially sensitive indices can be used as a better investment opportunity having decent returns with minimum risk. Therefore, it is worthwhile for all-purpose companies to absorb the essence of societal accountability and must begin considering ESG customs while making their strategies for investing.

Implications: Thus, it is suggested that Indian companies must also give due consideration to ESG norms. This will benefit the companies in the long term in the form of increased returns and lower risk.

Keywords: Sustainability, Social, Responsible, Investment, Return, Accountability.

Introduction:

Corporate sustainability is a novel and budding paradigm in corporate management. It encompasses that commercial development and profit maximization is significant but also laid due emphasis on incorporating the issue of sustainable development which comprises ecological safety, societal impartiality and fairness, and monetary progress. Corporate sustainability can be observed as a new-fangled term emerging out of the

continuing debate between business, social responsibility and the environment. It addresses the three main aspects of any business's social, environmental and economic performance (*Takala and Pallab, 2000*). It is based on the simple idea of giving back to the humanity that outstretched beyond sheermoney-makingactions (*Godfrey & Hatch, 2007*). The term “sustainable” became globally known in the year 1987 which providedanoutline of sustainable development in the report submitted by “Brundtland” and submitted by the United Nations World Commission (UNWC) on “Environment and Development”. Aligned with theirphilosophy, the term sustainable development calls for achieving the desires of the existingwithout compromising the ability of the next generationtomeet their demands. (*Brundtland, 1987*). Sustainability requires organizations aiming for financial success to acknowledge their responsibility to both society and a diverse range of stakeholders (*AON, 2007*).

Substantial changes have occurred over time which has led to the development of the theoretical outline of Corporate Responsibility which delivers an all-embracing style in the path of Governance, Corporate Social Accountability and Ecological Answerability. We assume that social accountability takes a diverse and optimistic outcome on the safety values in the capital market place. In current years, socially accountable investment is gaining utmost importance around the world.The concept or ideology of the word 'Socially Responsible Investment (SRI)'is defined by the Social Investment Forum in the year 2006. The forum has explained it as “an investment process wherein due consideration is given to the societal and ecological consequences of the funds, which includes both optimistic and undesirable, and also it must perform arduous monetary investigation”. *Sparkes (2002)* in his researchlinks the two ideas of CSR and SRI and states them to be the two sides of the same coin. Both these terms are centralized on the idea that each business must generate wealth or benefits for the society but at the same time they also must work within certain prescribed community and ecological frameworks. The vision of CSR is from the companies' point of view and that of SRI is from the lookout of stakeholders who are investing in those establishments. In general, SRI can be

considered as the development that recognizes as well as capitalizes one stablishments that follow the standards of CSR. Through this, SRI investments allow financiers to pool their economic aims and societal trepidations together. (*Sariannidis et al., 2010*)

Background

In today's world, investments that are ethically or socially responsible play a crucial role in financial investments. The concept of ethical investing requires that investments should be made as per the ethical code of conduct which also comprises values and faith. In a wider sense, it includes investment in companies that are meeting societal, moral and ecological criteria(*Tripathi& Bhandari, 2015; Cho, 2024; Min et al., 2024, Kumar et al., 2023; Abdellah et al., 2024*).

There is a tremendous upsurge in the quantum of market applicants who are socially aware and also wish that their fundsmust go to abusiness that fully recognizes the significance of ecological, societal, and governance (ESG) issues in undertaking business. Conventionally, market applicantsonly use traditional forms of accounts like balance sheets, reports on cash flow, revenue reports, and annualand interim reports in finding the long-term worth of companies. However, in recent years, stake holders have provided undue significance to ESG facets when analysing the prospects of the companies. Universally, ESG factors are also considered as a conventional asset approach, which admits the significance of ESG for long-standing value creation. Numerous market applicants thought that the long-lasting economic sustainability and wealth formation of concern are now reliant on how an establishment is managing its ESG facets in the elongated course.

According to the *WFE (2010)*, it is observed that stock exchanges are becoming active regarding sustainability-oriented issues worldwide. *Renneboog et al.(2008a)* stated that investors at large usually do pay for following an ethical code of conduct.

Sariannidis et al. (2010) studied the effect of numerous macroeconomic parameters on the indices like “Dow Jones Sustainability” and “Dow Jones Wilshire 5000” and concluded that financial indicators affect the DJSI also but

with a month delay. *de Souza Cunha & Samanez (2013)* researched the Brazilian stock exchange and concluded that sustainable investments do have a low diversifiable risk when compared to market performance but the overall performance did not exceed the market performance. *Murthy et al. (2014)* examined the fact that whether socially accountable businesses performed well compared to the general companies by analysing their price discovery and returns generated in the stock markets. The outcomes of the research specified that the process of price discovery was healthy and more efficient in the ESG index than the NIFTY index. Also, the returns generated by the ESG index, was greater than the Nifty Index. This suggests that publicly accountable concerns were outperforming general corporations. *Nofsinger & Varma (2014)* equated the performance of publicly accountable mutual funds with conventional funds and stated that SRI attributes, especially ESG, drive an unequal return pattern in which SRI funds outperformed conventional funds in the marketplace throughout the catastrophe periods but usually disappoint during the non-crisis periods. *Tsai (2015)* in their study investigated whether the different socially accountable investment indices of different cities like the United States, Canada, the Eurozone and the United Kingdom deliver some downside safeguard during the period of marketplace catastrophe as equated to their market indices. The findings indicated that in most of the time of crises, SRI indices perform worse as compared to the market indices and do not provide any support or downside protection in North America and Europe. *Ang (2015)* conducted research in Korea and examined the performance of publicly accountable investment options available in Korea. The period covered for the study ranges from January 2006 to April 2014. The outcomes of the research work presented that the rank of the Dow Jones Sustainability Index Korea is higher than numerous of the conventional indices of Korea. They also established in their investigation that there was no substantial influence of the worldwide crises that occurred in 2008 on sustainable asset return and instability. *Tripathi & Bhandari (2015)* examined the performance of abundant publicly accountable stock portfolios in contradiction of the

performance of overall shares/bonds assortments and marketplace portfolio employing return and several risk-adjusted methods over the era ranging from January 1996 to December 2013. The findings of the study indicated that socially responsible portfolios have greater risk as equated with general stock portfolios but they also generate higher returns when compared to the return generated by the general stock portfolios. They also pointed out that irrespective of prevailing economic condition, companies which are socially responsible performed fabulously in the Indian capital market by generating unusual returns that was statistically significant concluding that the circumstance that SRI across India must be recognised as a viable investment option (*Tripathi & Bhandari, 2016*). *Nakai et al. (2016)* in their study of SRI and Conventional funds operating in the Japanese market, focusing particularly on the worldwide financial crisis of 2008 revealed that SRI funds demonstrated a higher resilience to the global crisis stemming from the bankruptcy of Lehman Brothers when compared to conventional funds. *Lesser et al. (2016)* investigated a vast section of globally capitalizing socially responsible funds covering the period from the year 2000 to the year 2012 and provided evidence that publicly answerable funds beat conventional funds during the crisis period specifically. *Paul (2017)* studied the influence of business cycle, marketplace return and impetus on the monetary performance of SRI mutual and concluded that SRI inclines to reserve value throughout financial contraction more than it enhances worth amid fiscal expansion. *Riedl and Smeets (2017)* found that socially responsible investors are willing to accept lower returns in SRI mutual funds to align with societal values, despite the potential for higher returns in conventional funds. *Chiappini & Vento (2018)* in their research tried to investigate the performance of SRI against conventional investments. The paper analysed the reaction of SRI prices to the Brexit referendum and Lehman Brothers bankruptcy and found that SRI reacted more negatively towards the Brexit referendum but better in the case of Lehman Brothers bankruptcy. Thus, a mixed reaction was observed in the study of *Irfan & Tanwar (2018)* highlighted through their study the interaction between Shariah and Non-

Shariah indices. The results highlighted the integration of Islamic Indices with the conventional indices operating in the Indian stock market.

Initially, ESG disclosure by Indian companies was poor when compared with their global peers. But in recent years, when global market participants started pulling out their investments from Indian companies citing that Indian companies did not comply with international ESG, the focus was shifted to bringing ESG norms into consideration. According to the *IFC (2011)*, companies who score high on ESG performances can provide added value to their investors because of their abridged charges and jeopardies, by solidification of their brands, and by enlightening their growth aspects.

Now, India has started aligning itself with the new international inclination and the Indian corporations and market participants have started incorporating ESG facets. It is believed that the ESG investing pattern in India will evolve and will also bring into line with global market trends over the coming years.

The present study aims at analysing the significance of ESG disclosures made by the companies on their performance. The paper will analyse whether there is any substantial influence of following ESG norms on the long-term sustainable profitability of the companies. The following indexes were used in the study.

S&PBSE Greenex

Bombay Stock Exchange set up a novel index which is known as 'BSE-GREENEX'. The index is designed to quantify the performance of diverse companies in terms of their Carbon Emissions. GREENEX is constituted of 20 corporations that were part of the BSE 100 index meeting energy efficiency standards. This index gives a chance to investors to track the socially accountable companies that invest in energy-efficient practices. The GREENEX will also permit asset executives to produce products to aid investors in putting their money in only green enterprises.

S&PBSE CARBONEX

BSE CARBONEX is the first Carbon Indexing Project which was launched by BSE in 2012. This exchange holds a

deliberate view of the structural commitment of the establishments to climate change mitigation. Only those companies who are good at managing their risks and at the same time are generating opportunities induced by climate change and simultaneously disclosing data on the same aspect to CDP will be eligible for indexing at BSE CARBONEX. The index is very useful as it provides crucial information to the investors for analysing the associated risks and opportunities with any change in climatic conditions. In this way, investors are in a position to monitor the carbon emissions of those companies in which they are holding some stake.

S&PSHARIAH 500

The "S&P BSE 500 Shariah Index" is a stock market index which was started in 2010 with the BSE platform. Islamic index was launched with a motive to fascinate new investors from their home country India and also from other countries overseas. It is one of the ethical indexes which comply with different norms of investing as per Islamic rules. It is the first index which was launched under the partnership.

S&PBSE ESG Index

The "S&P BSE 100 ESG Index" was launched in the year 2017 and is intended to quantify the exposure to securities that are meeting sustainable investing criteria along with keeping the segments of risk and performance similar to the S&PBSE 100.

S&PBSE Index

The BSE SENSEX also popular by the name S&P Bombay Stock Exchange Sensitive Index or the SENSEX is a free-float market-weighted stock market index which constitutes 30 well-established and economically all-encompassing establishments listed on Bombay Stock Exchange. The 30 constituent companies which are part of the index are representative of various industrial sectors of the Indian economy as they are some of the largest and most actively traded stocks or companies. It was launched on 1 January 1986. Since that time, it has been regarded as the pulse of the domestic stock markets in India. The base value of the SENSEX was taken as 100 on 1 April 1979 and the year 1978-79 is taken as its base year.

Research Objectives:

1. To assess the performance of socially sustainable stock indices operating in India using log returns.
2. To equate the performance of diverse publically sustainable stock indices with the general stock index using average log return.
3. To study the variability in the returns using traditional measures of risk evaluation.

With these objectives in mind, this paper aims to estimate the performance of the selected indices and market indices using traditional measures of performance evaluation.

To achieve this the hypothesis tested is

H1: There is a substantial difference between the return generated by socially accountable investing and general investing.

Research Methodology

Research Design: The research design of the study is exploratory, and grounded on a secondary database. The objective of the study is obtained by comparing log returns.

To meet the objectives of the study historical data of closing prices for different indices like “The S&P BSE Sensex”, “S&P BSE ESG Index”, “S&P BSE 500 Shariah”, “S&P BSE GREENEX” and “S&P BSE CARBONEX” was gathered. The performance of major socially responsible and sustainable indices of India was compared with the one Market Index. Stock Indices namely S&P BSE ESG Index, S&P BSE 500 Shariah, S&P BSE GREENEX, and S&P BSE CARBONEX have been taken as a proxy for socially sustainable companies while S&P BSE Sensex is considered as the market index for the study.

Data used for the research work included a monthly database extending from January 2017 to July 2023. The period is chosen keeping in mind the availability of index data.

Stock Exchange	Average Log Return	Standard Deviation	Variance
S&P BSE CARBONEX	0.003405	0.022765	0.000512
S&P BSE GREENEX	0.002826	0.022111	0.000481
S&P BSE ESG Index	0.001425	0.029362	0.000837
S&P BSE 500 Shariah	0.00434	0.019246	0.000365
S&P BSE Sensex	0.003394935	0.02216499	0.000487325

*Researcher's Output

The following measures have been used for the comparison:

1. Log Returns: After the collection of monthly values of performance of the different indices, log returns for the period is calculated using:

Log Return = $\text{Log}(\text{Price at } t \text{ period}) / (\text{Price at } t-1 \text{ time period})$

After the calculation of log returns for the said period, the average log return for different indices was calculated.

2. Standard Deviation: This measure of performance is used to measure absolute risk associated with the fluctuations in price and return for the given index. Variation in returns is the most critical factor for evaluating the risk of the asset.

$$\text{Standard Deviation} = \sqrt{\frac{\sum (x_i - \mu)^2}{n}}$$

3. Variance: This measure of performance is used to measure absolute risk associated with the fluctuations in price and return for the given index. Variation in returns is the most critical factor for evaluating the risk of the asset.

Results and Analysis:

Table 1 provides a summary of the test results used in the study. In the above table, average log returns, standard deviation of the log return and variance of the return have been presented. The average log returns are 0.003405 for S&P BSE CARBONEX), 0.002826 for S&P BSE GREENEX), 0.001425 for S&P BSE ESG Index, 0.00434 for S&P BSE 500 Shariah and 0.003394935 for S&P BSE Sensex. The risk measured in terms of variance and (standard deviation) were 0.000512 (0.022765), 0.000481 (0.022111), 0.000837 (0.029362), 0.000365 (0.019246), 0.000487325 (0.02216499) for S&P BSE CARBONEX, S&P BSE GREENEX, S&P BSE ESG Index, S&P BSE 500 Shariah and S&P BSE Sensex, respectively.

It was observed that the highest return was available for the S&P BSE 500 Shariah index (0.00434), followed by the return of the S&P BSE CARBONEX index (0.00305), whereas the return of the market index i.e. S&P BSE Sensex is only (0.003394). This clearly indicates that the returns generated by the sustainably sensitive indices are greater than the average return generated by the market index.

The standard deviation showed that the *S&P BSE 500 Shariah* index has the lowest standard deviation, followed by the *S&P BSE GREENEX*. The standard deviation of S&P BSE Sensex, the market index stood at third position indicating higher risk when compared to risk generated by sustainably sensitive indices of S&P BSE 500 Shariah and S&P BSE GREENEX. S&P BSE ESG Index is the most sensitive or volatile index out of those studied.

Another measure adopted for comparing the volatility of the different indices is the variance. For a given market index volatility measures the dispersion of returns. Higher variance indicates higher volatility or higher risk per unit of amount invested. The most volatile index is the S&P BSE ESG Index, followed by S&P BSE CARBONEX index. The volatility of the market index or S&P BSE Sensex is high as compared to other sustainable stock indices like S&P BSE 500 Shariah and S&P BSE GREENEX.

Discussion

This research work empirically tested the performance along with the unpredictability of the different socially responsible indices functioning in the Indian stock marketplace against the general marketplace performance of the Indian Stock Socially. Social responsible investing (SRI) has been emerging as a new concept over the past few years. Many compare real attempts to invest in companies higher on ethical and sustainable values. With a compulsory contribution towards CSR activities which is part of corporate sustainability in the Indian companies as per the Companies Act 2013, the efforts of the Indian companies towards contributing to the environment, socially backward communities, and adoption of ethical and legal policies and strategies are on the rise. For example, the country's largest thermal power producer has vowed to generate 30% of its capacity from non-conventional

sources by 2030 and has also opted not to acquire new land for coal plants, aligning with India's goal to produce 40% of its electricity from non-conventional sources (Bhatia, 2021). Such actions are being highlighted in the profits generated by the companies as the ultimate customer will prefer those companies which are providing sustainable goods and services and undertaking the concept of corporate sustainability in real spirits (Tingchi Liu et al., 2014; Raza et al., 2020). The results of this study indicate that the S&P BSE 500 Shariah has the highest average return with the least volatility. This index is performing better than the S&P BSE Sensex index which is considered as a substitution of the marketplace index. Moreover, the paper revealed that socially responsible or socially active indices generated returns with better returns with less volatility.

Hence, socially sensitive indices can be used as a better investment opportunity having decent returns with minimum risk. Therefore, it is worthwhile for all-purpose companies to absorb the essence of societal accountability and must begin considering ESG customs while making their strategies for investing. It can be concluded that with time, investors are becoming additional informed about societal obligations and have started absorbing and internalising the behaviour of socially responsible companies. The outcomes of the research work specify that slowly and gradually stockholders of India are also becoming socially conscious as there are indicators that the stock market has started rewarding socially responsible companies with high net returns. As a positive trend toward greater corporate social responsibility (CSR) commitment was observed by Dharmapala & Khanna (2018) among the firms they studied, there is a chance of overall improvement in the sustainability and ethical practices of the firms. This could attract SRI investors who often seek to invest in companies that exhibit strong CSR practices. The results are in support of the notion that Socially Responsible Investing is the demand of the era and is gaining due acceptance in India as well. It will be in favour of companies to become publically accountable and start developing publically accountable yields to begin the drive or phrase of socially accountable pending across India.

Limitations and Future Scope

The current research work was undertaken for a limited period hence there is a scope to further increase the period covered. Moreover, only limited indices have been studied in the present study. Thus, in the future more indices can be investigated. Also, a comparative study can be performed for developing and developed countries.

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Author contributions

All authors contributed toward data analysis, drafting and revising the paper and agreed to be responsible for all aspects of this work.

Declaration of conflicts of interests

The authors declare that they have no conflict of interest.

Data Availability Statement

Not Applicable

Ethical Approval

Not applicable as no experiment was conducted on any animal or human.

Use of Artificial Intelligence

Not applicable

Use of Research Reporting Tool

Not applicable

Declarations

Authors declare that all works are original and this manuscript has not been published in any other journal.

References

- Abdellah Ibrahim Mohammed Elfeky; Ali Hassan Najmi; Marwa Yasien Helmy Elbyaly (2024). Effects of Big Data Analytics in Learning Management Systems for Improving Learners' Academic Success, *Profesional de la información*, v. 33, n. 1, e330016 <https://doi.org/10.3145/epi.2024.0016>
- Ang, W. R. (2015). Sustainable investment in Korea does not catch a cold when the United States sneezes. *Journal of Sustainable Finance & Investment*, 5(1-2), 16-26.
- AON. 2007. Industry Update: Sustainability – Beyond Enterprise Risk Management. Retrieved 2/25/2012 from http://www.aon.com/about-aon/intellectual-capital/attachments/riskservices/sustainability_beyond_enterprise_risk_management.pdf.
- Bhatia, R. (2021). India Warms Up to Socially Responsible Funds. Invest in environmental, social and governance funds to make your portfolio future-proof. <https://www.outlookmoney.com/equity/indians-are-warming-up-to-socially-responsible-funds-7579>
- Brundtland, G. (1987). Our common future: the world commission on environment and development. Oxford: Oxford University Press
- Chiappini, H., & Vento, G. (2018). Social responsible investments and their anticyclical attitude during financial turmoil. Evidence from the Brexit shock. *Journal of Applied Finance & Banking*, 8(1), 53-69.
- Cho O H. 2024. An Evaluation of Various Machine Learning Approaches for Detecting Leaf Diseases in Agriculture, *Legume Research*. <https://doi.org/10.18805/LRF-787>
- de Souza Cunha, F. A. F., & Samanez, C. P. (2013). Performance analysis of sustainable investments in the Brazilian stock market: a study about the corporate sustainability index (ISE). *Journal of business ethics*, 117(1), 19-36.
- Dharmapala, D., & Khanna, V. (2018). The impact of mandated corporate social responsibility: Evidence from India's Companies Act of 2013. *International Review of law and Economics*, 56, 92-104.
- Godfrey, P. C. & Hatch, N. W. (2007), „Researching corporate social responsibility: An agenda for the 21st century”, *Journal of Business Ethics*, 70, 87-98.
- IFC (International Finance Corporation). (2011). <http://www.ifc.org/>. Accessed July 1, 2011.
- Irfan, M., & Tanwar, S. (2018). Economic and Sustainable Development of Entrepreneurial

- Practices: A Philanthropic Approach of Islamic Finance in India. *Arthshastra Indian Journal of Economics & Research*, 7(1), 58-67.
- Kumar, V., Chaturvedi, V., Lal, B., & Alam, S. (2023). Application of Machine Learning in Analyzing the Psychological Well Being amongst the Employees in the Private Sector. An Analysis of Work-Life Balance in the Healthcare Industry. *Pacific Business Review (International)*, 16(1), 124-131.
 - Lesser, K., Roble, F., & Walkshausl, C. (2016). International socially responsible funds: financial performance and managerial skills during crisis and non-crisis markets. *Problems and perspectives in management*, (14, Iss. 3 (contin. 2)), 461-472.
 - Min P K, Mito K and Kim T H. 2024. The Evolving Landscape of Artificial Intelligence Applications in Animal Health. *Indian Journal of Animal Research*, <https://doi.org/10.18805/IJAR.BF-1742>
 - Murthy, K. V., Bhandari, V., & Pandey, V. (2014). Does the Indian Stock Market encourage Socially Responsible Companies?. *Manthan Journal of Commerce and Management*, 1(01), 1-34.
 - Nakai, M., Yamaguchi, K., & Takeuchi, K. (2016). Can SRI funds better resist global financial crisis? Evidence from Japan. *International Review of Financial Analysis*, 48, 12-20.
 - Nofsinger, J., & Varma, A. (2014). Socially responsible funds and market crises. *Journal of Banking & Finance*, 48, 180-193.
 - Paul, K. (2017). The effect of business cycle, market return and momentum on financial performance of socially responsible investing mutual funds. *Social Responsibility Journal*.
 - Raza, A., Saeed, A., Iqbal, M. K., Saeed, U., Sadiq, I., & Faraz, N. A. (2020). Linking corporate social responsibility to customer loyalty through co-creation and customer company identification: Exploring sequential mediation mechanism. *Sustainability*, 12(6), 2525.
 - Renneboog, Luc, Horst, Jenke ter, Zhang, Chendi, (2008). The Price of Ethics and Stakeholder Governance: The Performance of Socially Responsible Mutual Funds. *Journal of Corporate Finance* 14(3), 302328.
 - Riedl, A., & Smeets, P. (2017). Why do investors hold socially responsible mutual funds?. *The Journal of Finance*, 72(6), 2505-2550.
 - Sariannidis, N., Giannarakis, G., Litinas, N., & Konteos, G. (2010). GARCH examination of macroeconomic effects on US stock market: A distinction between the total market index and the sustainability index.
 - Sparkes, R., 2002, "Socially Responsible Investment: A Global Revolution", (Wiley, New York)
 - Takala, T., Pallab, P., 2000. Individual, collective and social responsibility of the firm. *Business Ethics: A European Review*, 9(2): 109-118.
 - Tingchi Liu, M., Anthony Wong, I., Shi, G., Chu, R., & L. Brock, J. (2014). The impact of corporate social responsibility (CSR) performance and perceived brand quality on customer-based brand preference. *Journal of Services Marketing*, 28(3), 181-194.
 - Tripathi, V., & Bhandari, V. (2015). Do ethical funds underperform conventional funds?-Empirical evidence from India. *International Journal of Business Ethics in Developing Economies*, 4(02), 10-19.
 - Tripathi, V., & Bhandari, V. (2015). Performance of socially responsible portfolios-do economic conditions matter?. *Journal of Commerce & Accounting Research*, 4(01), 14-30.
 - Tripathi, V., & Bhandari, V. (2016). Performance Evaluation of Socially Responsible Stocks Portfolios across Sectors during Different Economic Conditions. *Journal of Management Research*, 16(02), 87-105.
 - Tsai, P. H. S. (2015). Performance Of socially responsible indices during market crisis in North America and Europe.
 - WFE (World Federation of Exchanges). (2010). 2009 Annual report and statistics. Paris: WFE.