

## **SOCIALLY RESPONSIBLE INVESTMENTS – PERFORMANCE AND INVESTOR BEHAVIOUR**

Akbari Sarang Nileshbhai<sup>1</sup>, Aditya S Maheshwari<sup>2</sup> & Dr. Sumera Aluru<sup>3</sup>

1. IV Semester, MBA-BU, DSCASC, Dayananda Sagar Institutions, Bangalore, India.
2. IV Semester, MBA-BU, DSCASC, Dayananda Sagar Institutions, Bangalore, India.
3. Assistant Professor, Dept. of Management studies, DSCASC, Dayananda Sagar Institutions, Bangalore, India.

### **ABSTRACT**

**Key Words:** Socially Responsible Investing, ESG (environmental, social, and governance), Behavioural Bias, Ethical Drivers and Emotional Drivers, Investment Decisions.

Socially responsible investment (SRI) has gained impetus from both investors and financial institutions owing to constant dynamism for global climatic and financial landscape. Approaches to investing are evolving to incorporate environmental, social, and governance (ESG) aspects, indicating a growing need for investments that are in line with individual values and the advancement of society. This study explores the complex interactions between SRI investment performance and investor behaviour. This study aimed to unveil the relationship between SRI investments, investor preferences, and behavioural biases. The work compares two models using SEM with same latent variables (investment intent and investment decision) but different predictor variables (Model 1 –Predictors -demographics, awareness, preference, ethical drivers, emotional drivers, Returns Drivers and Model 2 – Predictors - demographics, awareness, preference, emotional drivers, future perception and behavioural score) to identify an effective model which is Model -2 with better CFI (1.0) and RMSEA (0) compared to Model-1 with CFI(0.98) and RMSEA(0.07).

### **INTRODUCTION**

#### **Socially Responsible Investment (SRI)**

A Socially Responsible Investment (SRI), often known as a sustainable or ethical investment, is one that takes into account the economic, environmental, and moral

implications of its actions. SRI's primary goal is to bring an investor's financial goals into line with their moral and ethical convictions. It's a way to put money into enterprises and initiatives that benefit people and the planet.

### Features of SRI

- **Environmental, Social, and Governance (ESG) Criteria:** SRI involves evaluating investments based on ESG criteria. The environmental effect, social responsibility, and corporate governance practices of a firm or investment opportunity are evaluated using these standards. Carbon emissions and water use are examples of environmental variables, whereas employment policies, diversity, and involvement in the local community are examples of social ones. The corporate governance field studies the efficiency and efficacy of a company's management.
- **Engagement and Advocacy:** SRI investors may actively engage with companies to encourage them to adopt better ESG practices. This can involve shareholder advocacy, voting on resolutions, and participating in discussions to influence positive change.
- **Thematic Investing:** Some SRI strategies focus on specific themes such as renewable energy, clean technology, healthcare, or education. Investors choose themes that align with their values and support those sectors through their investments.
- **Impact Investing:** In addition to financial rewards, impact investors aim to create beneficial, quantifiable social or environmental consequences via their investments. These funds are allocated to solve certain problems in society or the natural world.
- **Financial Performance:** While ethical considerations are central to SRI, financial performance remains an important factor. SRI does not necessarily mean sacrificing potential returns; in fact, companies with strong ESG practices can exhibit resilience and long-term growth.

### OBJECTIVES

To understand how well ethical investments work and if they are a good choice. The study aims to understand about investor perception about ethical investments and how they make their investment choices. To understand the potential risk and rewards associated with ethical

investments to determine their feasibility and stability and how emotions, beliefs, and personal values influence investors preference for ethical investments.

### **SCOPE AND LIMITATIONS OF THE STUDY**

The purpose of the research is to decipher the complex relationships between the profitability of socially responsible investments, investor behavior, and business results. In addition to contributing to the growing body of SRI research, this study hopes to be useful to ethically and sustainably minded investors, financial institutions, and enterprises.

It's important to acknowledge that this study has certain limitations viz., The study's ability to establish causal relationships may be constrained due to the complex interplay of factors influencing SRI and investor behaviour and also the study is confined to publicly available data and primary data collected from limited number of respondents.

### **METHODOLOGY**

Empirical and descriptive research together form the basis of this work. The goal of this study is to validate the integration of qualitative and quantitative approaches. By using such a thorough approach, the research hopes to provide useful insights for responsible and sustainable investing practices in India's financial environment by clarifying the complicated link between SRI performance and Investor behavior

### **REVIEW OF LITERATURE**

“Rients Galema et al., (2008), What's at Stake? : Profitability and Peril in Investing with a Purpose. Portfolio returns, book-to-market values, and excess stock returns are only few of the important financial measures that are examined in regard to their association with several aspects of socially responsible performance in this analysis of American companies. The research shows that SRI has an effect on stock returns, although not via positive alpha returns but rather by lowering the book-to-market ratio. This result accords with theoretical frameworks that propose demand differences between SRI and non-SRI equities are where the effect of SRI is most evident.

“Luc Renneboog et al., (2008), Institutional considerations, financial returns, and the actions of investors in socially responsible investments. This study reviews and analyzes the existing literature on SRI to draw conclusions about the field as a whole. It highlights the singularity of SRI in its pursuit of financial and social goals in tandem.

“Lars Hornuf et al., (2023), A systematic review of the financial returns of ethical investments. This article presents the results of a meta-analysis on the effectiveness of SRI and draws numerous important conclusions. SRI does neither outperform or underperform the market on average.

“Renu Jon wall et al., (2022), A Comparison of Investment Behaviour, attitudes, and demographics of Socially Responsible and Conventional Investors in India. This study focuses on India's status as an emerging economy and a favoured destination for environmental, social, and governance (ESG) fund issuers. The research delves deeper into Indian investors' attitudes toward SRI by categorizing them based on their SRI awareness, their stance on ESG matters, their willingness to accept lower financial returns, and their consumer choices.”

“Halil kiymaz et al., (2019), Factors influencing SRI fund performance. This paper aims to delve into the performance of socially responsible investment (SRI) funds while scrutinizing the various factors that exert influence on their performance. It seeks to understand whether SRI funds consistently achieve their financial objectives and, if not, to pinpoint the key determinants that contribute to their returns.”

“Julia M. Ptaschunder et al., (2017), Why Socially Responsible Investors Care About Their Social Impact. The 2008-2009 global financial crisis prompted a rise in non-mainstream economic theories by highlighting the need for social responsibility in capitalist economies. As a result, there has been a rising movement to include social considerations in conventional economic models.

“Thomas C. Berry et al., (2013), Socially Responsible Investing: An Investor Perspective. This study addresses the lack of a clear consensus on the definition of Socially Responsible Investing (SRI) among investors, which is surprising given its growing significance.”

“Thomas C. Berry et al., (2010), The demographic profile of Socially Responsible Investors. This paper addresses the significant and expanding realm of socially responsible (SR) investments and aims to investigate whether individuals who engage in socially responsible investments (SRIs) exhibit distinctive characteristics and whether this profile significantly diverges from that of a conventional or typical investor.”

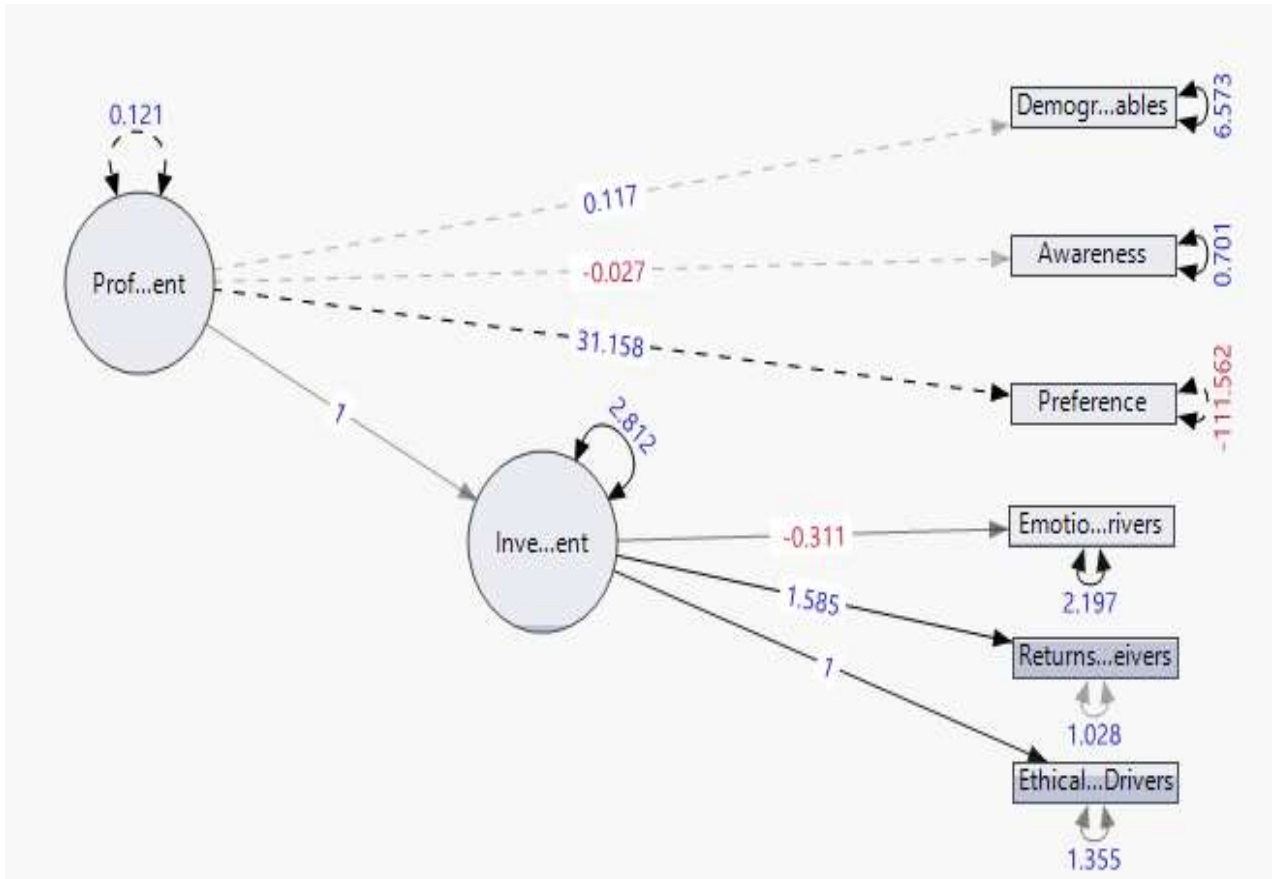
**Results**

**Analysis of the Structural Equation Modelling**

**Model-1**

Model Variables - Demographic Variables, Awareness, Preference, Returns Intent Drivers, Ethical Intent Drivers, Emotion Drivers

Latent Variables – Investment Intent and Profitable Investment Decision



The latent variable, profitable investment decision is not affected significantly by the predictor variables viz., demographics (0.117), awareness (-0.027) about SRIs and preference (31.158) towards SRIs. However, the latent variable, investment intent is significantly influencing the other latent variable viz., profitable investment decision. At the same time, the predictor variables viz., Emotional Drivers (-0.311), Returns Drivers (1.585) and Ethical Drivers (1.0) are statistically significant in influencing the investment intent.

**EQ1: Investment intent = Ethical drivers + 1.585 Return drivers – 0.311 Emotional drivers.**

<b>Summary Fit</b>	
<input checked="" type="checkbox"/> Maximum Likelihood. Converged in Objective Function.	
<input type="checkbox"/> Standard errors might not be accurate due to an ill-conditioned Hessian matrix. The model might not be identified.	
<input type="checkbox"/> Implied covariance matrix is not positive definite.	
<input type="checkbox"/> Model has a negative variance estimate.	
Sample Size	173
Row with Missing	0
-2 Log Likelihood	3893.7264
Iterations	7
Number of Parameters	19
AICc	3936.6937
BIC	3991.639
ChiSquare	15.244961
DF	8
Prob>ChiSq	0.0545538
CFI	0.9821232
RMSEA	0.0723519
Lower 90%	0
Upper 90%	0.1271029

CFI and RMSEA (CFI= 1 and RMSEA = 0)

Interpretation:

The Chi-squared test of model fit and the normed fit index both have problems with small sample sizes; the Comparative Fit Index (CFI) addresses these issues by evaluating how well a proposed model fits the data. Higher CFI values indicate a better fit, with values between 0 and 1 suggesting a closer match. The conventional cutoff for a satisfactory model fit is a CFI of 0.95 or above (CFI 0.95).

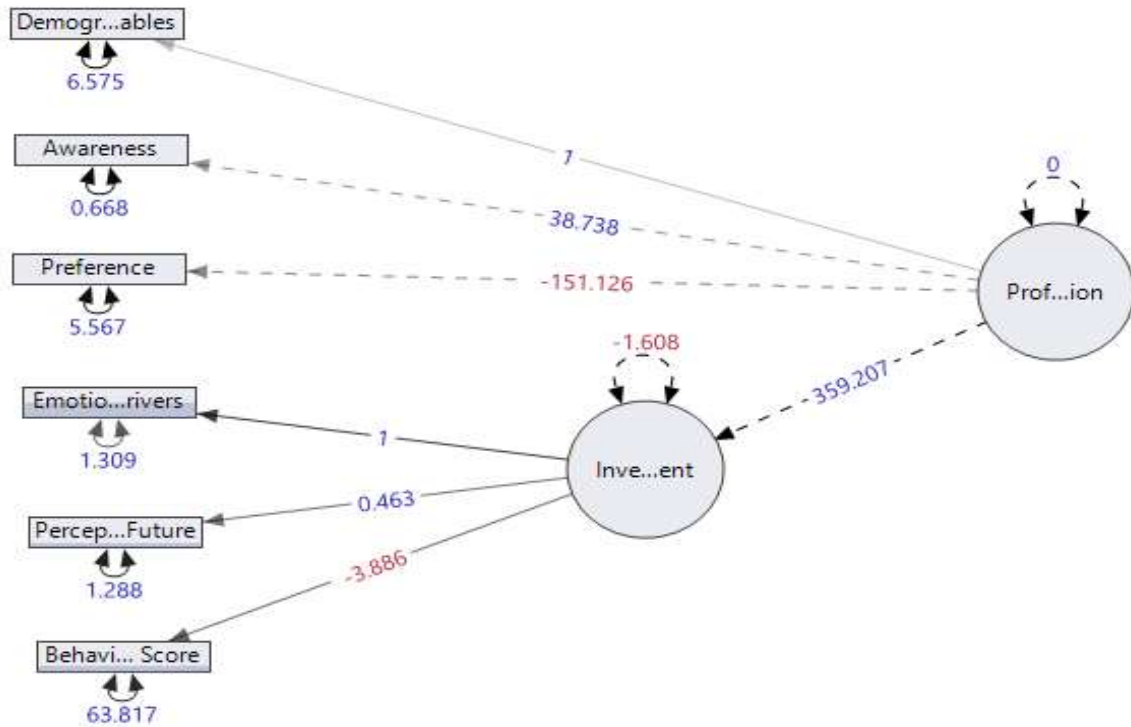
In order to quantify the discrepancy between the observed and anticipated covariances of a population, statisticians use a statistic called the Root Mean Square Error of Approximation (RMSEA). In most cases, a fit is regarded to be satisfactory if the RMSEA value is either zero or falls between the range 0.05 and 0.08.

In contrast, our CFI of 0.98 indicates a high degree of similarity between the two sets of data. And the RMSEA is just 0.07, which is a very respectable value for an approximation error.

**Model-2**

Model Variables - Demographic Variables, Awareness, Preference, Emotional Intent Drivers, Perception of Future, Behavioral Bias Score

Latent Variables – Investment Intent and Profitable Investment Decision



**Interpretation:**

The latent variable, profitable investment decision is affected significantly only by predictor variables viz., Demographic (1.0) and is not affected significantly by the predictor variables viz., awareness (38.738) about SRIs and preference (-151.126) towards SRIs. However, the latent variable, investment intent is significantly influencing the other latent variable viz., profitable investment decision. At the same time, the predictor variables viz., Emotional Drivers (1.0), Perception of Future Drivers (0.463) and Behavioral Bias Score Drivers (-3.886) are statistically significant in influencing the investment intent.

**EQ2: Investment intent = Emotional drivers + 0.463 perception of future – 0.886 Behavioral score**

<b>Summary Fit</b>
☑ Maximum Likelihood. Converged in Objective Function.
🕒 Standard errors might not be accurate due to an ill-conditioned

Hessian matrix. The model might not be identified.	
⌚ Implied covariance matrix is not positive definite.	
⌚ Model has a negative variance estimate.	
Sample Size	173
Row with Missing	0
-2 Log Likelihood	4448.2605
Iterations	561
Number of Parameters	19
AICc	4491.2279
BIC	4546.1731
ChiSquare	5.0505257
DF	8
Prob>ChiSq	0.7521625
CFI	1
RMSEA	0
Lower 90%	0
Upper 90%	0.0631322

CFI and RMSEA (CFI= 1 and RMSEA = 0)

Interpretation:

In model 2, where the CFI is 1, a superior comparative fit index (CFI) is indicated. When the RMSEA is zero, it means that the approximation is very accurate.

	<b>Model-1</b>	<b>Model-2</b>
<b>CFI</b>	0.98	1
<b>RMSEA</b>	0.07	0

**Comparison of Models 1 & 2:**

Both Model-1 and Model-2 appear to have good to excellent fits to the data based on the CFI and RMSEA values. Model-2, in particular, seems to have a perfect fit according to these indices. However, it's essential to consider other factors and theoretical considerations when evaluating the overall adequacy of these models for your specific research or analysis.

**Discussion of Findings**

Mode-1 the (CFI) Comparative Fit Index is 0.98, indicating a superior comparative fit index, according to the findings of structural equation modeling. Additionally, the Root Mean Square Error of Approximation (RMSEA) is 0.07, which is a superior RMSEA. The study's chosen model was consistent with the results. The mode fits for the demographic variables of



awareness (-0.027) and preference (31.158) for SRI performance and investor behavior are also confirmed by the fit indices.

The (CFI) Comparative match Index for Mode-2 structural equation modeling is 1, which indicates a very good match. And the Root Mean Square Error of Approximation (RMSEA) is zero, which is a good sign. The study's chosen model was consistent with the results. Socially responsible investment performance and investor behavior are validated by the fit indices, which also show that the mode fit, Emotional Intent Drivers (1), Perception of the Future (0.463), and Behavioral Bias Score (-3.886) are all significant.

Emotional Intent Drivers, Perception of Future, Behavioral Bias Score Socially responsible investment performance and investor behaviour emerges as significant individual predictors. The main intersect value indicates the applicants are aware of socially responsible investment.

According to the structural equation modelling, the fit indices analysis suggest that the models are good fit for the data, however the model 2 is better than model 1. The result also suggests that, Investment Intent decision is statistically significant in influencing the investment decision.

## REFERENCES

- 1 Rients Galema et al., (2008) "The Stock at Stake: Return and Risk in Socially Responsible Investment" Journal of Banking & Finance, Elsevier, vol. 32(12), pages 2646-2654, December.
- 2 Luc Renneboog et al., (2008) "Socially Responsible Investments: Institutional aspects, Performance aspects, and Investor behaviour" 2- Journal of Banking & Finance, Volume 32, Issue 9, September 2008, Pages 1723-1742.
- 3 Lars Hornuf et al., (2023) "The performance of socially responsible investments: A meta-analysis" European Financial Management, ISSN1354-7798, eISSN1468-036X.
- 4 Renu Jon wall et al., (2022) "A Comparison of Investment Behaviour, attitudes, and demographics of Socially Responsible and Conventional Investors in India" Social responsibility journal, 04 Jul 2023, Vol. 19, Issue 6, pages 1123 – 1141.
- 5 Halil kiymaz et al., (2019) "Factors influencing SRI fund performance" 21 Jun, Vol. 3, Issue 1, pages 68 – 81.
- 6 Julia M. Puaschunder et al., (2017) "Socio-Psychological Motives of Socially Responsible Investors" Global Corporate Governance, 30 Mar 2017, Vol. 19, pages 209 – 247.
- 7 Thomas C. Berry et al., (2013) "Socially Responsible Investing: An Investor Perspective" J Bus Ethics 112, 707–720.
- 8 Thomas C. Berry et al., (2010) "The demographic profile of Socially Responsible Investors" Managerial finance, 11 May 2010, Vol. 36, Issue 6, pages 474 – 481.