MEASURING RELATIVE WORTH OF ANTECEDENTS OF INVESTORS' COMPANY AND MARKET-REGULATORY LINKED RISK PERCEPTION IN EQUITY MARKET: AN RII APPROACH

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**ABSTRACT**

**Purpose:** The focus of this study is to measure the relative worth of antecedents of perceived risk in equity market and contrast the same across socio economic characteristics.

**Theoretical framework:** Risk perception is crucial for equity investors as it influences their investment decisions. In this study the risk perception of the retail investors about the antecedents of risk, relative worth wise, was tried to be tested through 13 antecedents grouped under two dimensions i.e., Company and Market-Regulatory Linked Information based on age and income groups.

**Design/methodology/approach:** The study used descriptive design. 204 retail investors were surveyed from Jorhat, India. The Relative Importance Index (RII) and Kruskal-Wallis test were used to measure and compare the antecedents.

**Findings:** The study found that under Company-Linked Information, "Market share" and "Composition and fame etc., of Board of Directors of the companies" were the most and least influential antecedents. Secondly, "Further Public Offer" and "Trends in the Fluctuations in the price of Gold" were the most and least influential antecedents under Market-Regulatory Linked Information. Moreover, retail investors’ risk perception significantly differed across three income groups under the Company-linked information.

**Research, practical and social implications:** The equity market investors, data analyst and academicians may be benefited by depending on more objectively carved out relative importance of the antecedents based on the findings of this study.

**Originality/value:** The value of the research lies in its endeavor to prioritize the antecedents that potentially impact the risk behaviour of investors, thereby facilitating informed decision-making.

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MENSURAÇÃO DO VALOR RELATIVO DOS ANTECEDENTES DA PERCEPÇÃO DE RISCO DOS INVESTIDORES VINCULADA À EMPRESA E AO MERCADO REGULATÓRIO NO MERCADO DE AÇÕES: UMA ABORDAGEM RII

**RESUMO**

**Objetivo:** O foco deste estudo é medir o valor relativo dos antecedentes da percepção de risco no mercado de ações e contrastar o mesmo entre as características socioeconômicas.

**Estrutura teórica:** A percepção de risco é crucial para os investidores em ações, pois influencia suas decisões de investimento. Neste estudo, a percepção de risco dos investidores de varejo sobre os antecedentes de risco, em termos de valor relativo, foi testada por meio de 13 antecedentes agrupados em duas dimensões, ou seja, Empresa e Mercado - informações vinculadas à regulamentação, com base em grupos de idade e renda.

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**Projeto/metodologia/abordagem:** O estudo utilizou um projeto descritivo. Foram pesquisados 204 investidores de varejo de Jorhat, Índia. O Índice de Importância Relativa (RII) e o teste de Kruskal-Wallis foram usados para medir e comparar os antecedentes.

**Resultados:** O estudo constatou que, em Informações vinculadas à empresa, "Participação de mercado" e "Composição e fama etc. do Conselho de Administração das empresas" foram os antecedentes mais e menos influentes. Em segundo lugar, "Oferta pública adicional" e "Tendências nas flutuações do preço do ouro" foram os antecedentes mais e menos influentes em Informações vinculadas a regulamentações de mercado. Além disso, a percepção de risco dos investidores de varejo diferiu significativamente entre os três grupos de renda com relação às informações vinculadas à empresa.

**Implicações sociais, práticas e de pesquisa:** Os investidores do mercado acionário, os analistas de dados e os acadêmicos podem ser beneficiados por dependerem de uma importância relativa mais objetiva dos antecedentes com base nos resultados deste estudo.

**Originalidade/valor:** O valor da pesquisa está em seu esforço para priorizar os antecedentes que potencialmente afetam o comportamento de risco dos investidores, facilitando, assim, a tomada de decisões informadas.

**Palavras-chave:** Percepção de Risco, Valor Relativo, Investidores de Varejo, Informações Vinculadas à Empresa, Informações Vinculadas à Regulamentação do Mercado, Mercado de Ações.

**MEDICIÓN DEL VALOR RELATIVO DE LOS ANTECEDENTES DE LA PERCEPCIÓN DEL RIESGO DE LOS INVERSORES VINCULADOS A LA EMPRESA Y AL MERCADO REGULADOR EN EL MERCADO DE VALORES: UN ENFOQUE RII**

**RESUMEN**

Objetivo: El objetivo de este estudio es medir el valor relativo de los antecedentes de la percepción del riesgo en el mercado de valores y contrastar el mismo a través de las características socioeconómicas.

Marco teórico: La percepción del riesgo es crucial para los inversores en bolsa, ya que influye en sus decisiones de inversión. En este estudio, la percepción de riesgo de los inversores minoristas sobre los antecedentes de riesgo en términos de valor relativo se puso a prueba mediante 13 antecedentes agrupados en dos dimensiones, es decir, Empresa y Mercado - Información vinculada a la regulación basada en grupos de edad e ingresos.

Diseño/metodología/enfoque: El estudio utilizó un diseño descriptivo. Se encuestó a un total de 204 inversores minoristas de Jorhat (India). Se utilizaron el Índice de Importancia Relativa (IIR) y la prueba de Kruskal-Wallis para medir y comparar los antecedentes.

Resultados: El estudio descubrió que, en la información vinculada a la empresa, "Cuota de mercado" y "Composición y fama, etc., del Consejo de Administración de las empresas" eran los antecedentes más y menos influyentes. En segundo lugar, "Oferta pública adicional" y "Tendencias en las fluctuaciones del precio del oro" fueron los antecedentes más y menos influyentes en la Información vinculada a la normativa del mercado. Además, la percepción del riesgo de los pequeños inversores difería significativamente entre los tres grupos de ingresos con respecto a la información vinculada a la empresa.

Implicaciones sociales, prácticas y de investigación: Los inversores bursátiles, los analistas de datos y los académicos pueden beneficiarse de basarse en una importancia relativa más objetiva de los antecedentes a partir de los resultados de este estudio.

Originalidad/valor: El valor de la investigación reside en su esfuerzo por jerarquizar los antecedentes que potencialmente afectan al comportamiento de riesgo de los inversores, facilitando así la toma de decisiones informadas.

Palabras clave: Percepción de Riesgo, Valor Relativo, Inversores Minoristas, Información Vinculada a la Empresa, Información Vinculada a la Regulación del Mercado, Mercado de Valores.

**INTRODUCTION**

Investment in the financial market involves certain elements of risk. Risk in the equity market can take many different forms. Investors’ behaviour also varies depending on how they view risk. The term "risk" refers to a potentially harmful effect that might be brought about by a current activity or a prospective future occurrence on an asset or certain attributes of value
Risk perception is crucial for equity investors, as it influences how they analyse and make investment decisions. The perception of risk also varies from investor to investor and changes over time. Rosi. A et al., (2021) define risk perception as a complex cognitive process that directs people's behaviour in the presence of potentially dangerous events. People's values, beliefs, attitudes, and judgements all have a role in how they perceive risk. It is a significant factor in how individuals make decisions (Pidgeon et al., 1992). Any rational investor always envisions a safe and secure return on their investment. Expectations for capital appreciation as well as a regular return encourage investors to invest in risky investment avenues. The equity stock market is one such avenue for investment where risk is high but rewards are equally satisfying (Consigli, 2009). In the context of India, retail investors are generally considered to be risk-averse by nature (Singh & Yadav, 2016). Only a handful of retail investors consider the risk-return trade-off when choosing investments, as they expect to receive a higher return on investments that have a higher level of risk; therefore, their behaviour in the market is determined by their expectations of it. On the other hand, the volatility in the equity market reveals differences in the ideologies of investment among the investors. The Indian equity market is no exception to this volatility, and as the market is considerably novel, much fluctuation could be seen in it (Nanda, 2015). Apart from volatility, past research has identified certain factors or antecedents that directly influence or may influence an investor's risk behaviour, which in turn may influence the investor's decision-making behaviour (Vlaev et al., 2009; Saivasan & Lokhande, 2022). According to (Mishra, 2018; Patil & Bagodi, 2021), retail investors’ risk on a share buying decision can be influenced by the investor's personal characteristics, such as their risk tolerance and investment experience, as well as external factors, such as market conditions and economic indicators. For example, an investor with a high-risk tolerance may be more willing to invest in a high-risk, high-return stock, while an investor with a low risk tolerance may prefer to invest in a low-risk stock.

Another essential factor in shaping investors’ investment behaviour has been information. These may be in the form of financial reports, periodicals, press releases, media, etc., (Chandra & Kumar, 2011). Raaij (2016) confirmed that information speed, availability, and newsworthiness all have significant roles in the formation of investors’ risk behaviour. In addition to this, equity investors frequently use corporate information to decide whether to buy or sell a particular investment (Spicer, 1978; Ferreira & Laux, 2007). Investors may consider the security less risky and more likely to generate a return on investment if the information is favourable. Investors may consider the investment to be riskier and are more likely to sell it or
completely avoid it if the information is unfavourable. Investor risk behaviour can also be influenced by the timing and frequency of company-related information releases. It may also happen that if a firm releases information on a regular basis, investors can become accustomed to fluctuations in its performance. In contrast, investors may be more aware of any developments and more likely to react properly if a firm simply releases information on a regular basis. There is a considerable link between information pertaining to the stock market and regulations related to it and the risk-taking behaviour of investors (Ahmad, 2017). This sort of information may have a significant impact on how investors evaluate the risks associated with investing in a particular investment. Information that investors have access to on the stock market, such as market trends and the performance of other securities, can also have an effect on the amount of risk that they are willing to take (Malathy & J, 2017). Alterations in rules and regulations, for instance, may have an effect on how investors view the dangers associated with investing in a particular company's share or in a certain industry. For instance, if any new legislation makes it more difficult for a company to function, investors would regard the asset as having a higher level of risk and be more ready to sell their shares as a result. Changes in the laws governing taxes or limits placed on trade may also have an effect on how investors view the dangers associated with a specific security.

Hence, it was felt the need by the researchers to have an understanding on the importance of level of the antecedents that have the potential to alter the risk perception of retail investors in the share market. In this regard, the research was carried out in the North East India with the goal of gaining a deeper comprehension of the risk perceptions held by retail equity investors. The following objectives were undertaken for the study:

1. To measure the relative worth of the select antecedents of perceived risk of retail investors’ investment behaviour in equity market.
2. To compare the relative worth of the antecedents of perceived risk of the retail investors’ investment behaviour based on equity market across select socio economic characteristics.

LITERATURE REVIEW

The literature research was used to gain a better understanding of the various attributes and their dimensions that influence retail investors' company and market-regulatory risk perceptions in the financial market. The following are excerpts from several web sources that
address the many conceptual components, techniques, and procedures employed in prior and current studies.

Singh (2012) aimed to ascertain how investors perceived risk in relation to IPO investment and the extent to which the marketing mix’s components influenced risk perception overall. The registered investors of the top share brokerage businesses in Silchar, Assam, India, were the subject of the study. It was discovered that equity investors view IPO stock investments as having a medium level of risk. Vijaya (2014) analysed the variables that affect retail investors' investing choices on the Indian Stock Market. In order to identify the factors that influence a person's investing behaviour, the author used factor analysis to analyse 200 samples from the Hyderabad region that were acquired using a simple random sampling approach. Five key elements were identified in their study: overconfidence, anchoring, loss aversion, herd behaviour, and market dynamics, which were anticipated to have an impact on retail investors' investing behaviour in the Indian stock market. Researchers (Velmurugan et al., 2015) conducted an empirical analysis of investors' perceptions of various investment opportunities. Using convenient sampling, they obtained a sample of 100 investors from Vellore. Although there were differences with regard to the stock market, gold, bank savings, and post office, the order of preference for real estate and insurance was the same across all age groups. Also, the respondents' judgements of the sequence of investments towards the post office varied according to their various income levels, the study concluded. Deb & Singh (2018) assessed the risk perceptions of bank employees when it came to mutual fund investments. They discovered 18 parameters that influence risk perception. Their research is based on primary data acquired through a questionnaire from bank employees in Tripura. They discovered that bank workers' risk perception was moderate using factor analysis, regression, the mean, and S.D. The bank workers' total risk perception was influenced by fear psychosis, a lack of information, and a lack of confidence. Al Maani (2023) aimed to understand how disclosures on economic, social, and environmental sustainability are affected by corporate governance (CG). Their research found that boards with more members, including at least one woman, and a dedicated Corporate Social Responsibility Committee (CSRC) were better equipped to audit and regulate management decisions pertaining to economic, environmental, and social sustainability.

Kassem et al. (2020) assessed 51 risk indicators and rated them in terms of profitability and influence on oil and gas construction projects. They performed a survey with 357 participants from construction project teams in Yemen as a sample and used the relative
importance index (RII) approach and correlation to prioritise project risk variables. Subsequently, Ayarkwa et al. (2022) employed the relative importance index (RII) ranking method and the Kruskal-Wallis H test to rank and compare the components influencing project management teams in sustainable building processes. Their research found sixteen difficulties as well as sixteen mitigating solutions. Pandiya et al. (2023) used a survey tool to perform an empirical assessment of the factors that might draw in future brilliant workers for the information technology sector. They investigated the relative importance of the six elements and discovered that the two that carried the most weight were the ‘organization's culture’ and ‘growth.’ Ali (2023) used relative weight, mean, and standard deviation to determine the extent to which electronic management had been adopted by the banking sector in a case study of Babel Bank in Iraq. The study found a mean value of 4.163 and a standard deviation of 0.7, indicating a high degree of adoption.

With regard to socio-economic indicators and risk perception, Usul et al. (2002) investigated the factors that influence how investors buy and sell stocks. During their investigation, they concluded that the socio-economic indicators had the greatest impact on the factors that investors took into consideration when purchasing stocks. Socio-economic variables here refer to personal and environmental changes. They found that young investors made up 20% of all investors, and as income rose, so did shareholding time. Older investors were quick to sell assets and would not take any chances. Bairagi & Chakraborty (2018) attempted to study the influence of gender, age, and income disparities on investors’ perceptions of risk in investing decisions. They had employed a questionnaire to choose the Delhi-NCR region for the study. They revealed that there was no substantial variation in risk perception among the several independent groups of investors. The process of digging up relevant literature indicated that a little amount of work has been done on the subject of this study in the north-eastern portion of India, particularly in tier II cities. It has been also found that the use of Relative Importance Index in calculating the relative worth of factors is more prevalent in the industrial, banking, and other sectors than in the equity market. Besides, an attempt has been made in this study to fill the gap by selecting two broad dimensions of antecedents viz; company-linked and market-regulatory linked information, based on the literature review. In addition to this, based on the past studies, the following hypotheses were framed:

- H01= The overall risk perception of the retail investors about company-linked information based on their relative worth, in being able to influence the investing behaviour of retail investors do not differ significantly across the age groups.
• $H_{02}$ = The overall risk perception of the retail investors about market-regulatory linked information based on their relative worth, in being able to influence the investing behaviour of retail investors do not differ significantly across the age groups.

• $H_{03}$ = The overall risk perception of the retail investors about company-linked information based on their relative worth, in being able to influence the investing behaviour of retail investors do not differ significantly across the average annual income groups.

• $H_{04}$ = The overall risk perception of the retail investors about market-regulatory linked information based on their relative worth, in being able to influence the investing behaviour of retail investors do not differ significantly across the average annual income groups.

MATERIALS AND METHODS

In order to attain the objectives, a structured methodology was carried out which is explained through the following segments:

Research type: Descriptive research design.

Selection of antecedents of risk aspects of retail investors investment behaviour: Primarily, an exhaustive assessment of the available research on the topic of the study was conducted with the goal of identifying the antecedents considered capable of influencing retail investors’ investing behaviour. To confirm the validity of the antecedents selected from the literature concerned, around 20 retail investors residing in Jorhat, Assam, were approached with the intention of cross-checking the correctness and exhaustiveness of the antecedents identified and selected for the study. Their valuable opinion and ideas were taken into account while compiling the list of antecedents to be included in the questionnaire to be distributed to the sample investors. To put it another way, after completing the exercise of identifying and selecting antecedents, only those were included in the questionnaire that were considered appropriate. The two tasks discussed above aided in the selection of 13 (thirteen) antecedents of perceived risk in retail investors’ investing behaviour, which were split into two (2) distinct dimensions in the study based on affinity. The antecedents considered for the study were:

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>ANTECEDENTS</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Company-linked Information</td>
<td>Market share (A1)</td>
<td>Morck, 1990</td>
</tr>
<tr>
<td></td>
<td>Reputation of select companies (A2)</td>
<td>Golebiewska, 2021</td>
</tr>
<tr>
<td></td>
<td>Composition and fame etc., of Board of Directors of the companies(A3)</td>
<td>Al Maani, 2023</td>
</tr>
</tbody>
</table>
Survey instrument: Since the study warranted the acquisition of primary data, a structured questionnaire was designed to elicit respondents' opinions on the subject matter. The questionnaire was divided into two sections: section one included questions seeking respondents' select socio-economic identities, and section two included questions on respondents' perceptions about the degree of capability of the antecedents of the perceived risk aspect of retail investors' investment behaviour in being able to influence retail investors' investment behaviour.

Survey Method: On a seven-point ordinal scale, respondents were asked to share their views on each of the antecedents classified under the two dimensions of the perceived risk aspect of retail investors' investment behaviour capable to influence retail investors' investment behaviour, with the first being - to a very high extent and the last being - to a very low extent.

Survey Design: The elements of the study were retail investors of Jorhat, Assam. Since the target population could not have been identified the samples were picked up conveniently from amongst the ones who were found registered in the broking houses of Jorhat city, India. The period of collecting data was May 2021 to September 2021.

Population & Sample: The population comprises of the retail investors registered in the actively operating broking houses from Jorhat city. Since the population could not be defined, therefore, based on convenience 204 samples were finally selected for the study.
Tools and techniques of analysis: The data collected with the help of the questionnaires was put into computational software i.e., Microsoft Excel for preparing master sheet. The master sheet was shifted to SPSS version 26 which in turn facilitated the preparation of requisite number of tables. The reliability of the questionnaire for each field was assessed using the Cronbach's coefficient alpha test (Taber, 2018) using the formula:

\[
\text{Cronbach's coefficient } \alpha = \frac{NC}{N+1(N-1)}C
\]

Where,

N = the no. of items, V= the average variance, and C= the average inter-item covariance. For the entire questionnaire, the alpha was 0.822, indicating a very high degree of reliability. Relative importance index (RII) was used to determine the relative importance of quality factors using comparative ranking method (El-Sawalhi & Hammad, 2015). The antecedents with highest RII value were considered comparatively more important than other factors. The RII ranges from 0 to 1.

It is calculated based on the following formula:

\[
\text{Relative importance Index (RII)} = \frac{\sum W}{AN} = \frac{7n_7 + 6n_6 + 5n_5 + 4n_4 + 3n_3 + 2n_2 + 1n_1}{7N}
\]

Where,

- W: Weight given to each antecedent by the respondent within the range 1 to 7, multiplied by the number of respondents [n_1; n_2; \ldots; n_7] for each antecedent.
- Here, \( n_1 \) = Respondent’s agreement to a very low extent
- \( n_7 \) = Respondent’s agreement to a very high extent
- A: Highest weight (Here, 7)
- N: Overall number of respondents.

Since the data was not normally distributed, Kruskal Wallis H test was used to compare the antecedents grouped under two dimensions across socio-economic identities.

RESULTS AND DISCUSSION

<table>
<thead>
<tr>
<th>Socio Economic Variables</th>
<th>Categories</th>
<th>No. of Investors</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group (in completed years)</td>
<td>18-30</td>
<td>56</td>
<td>27.5</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>78</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>46</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>51 &amp; above</td>
<td>24</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>204</td>
<td>100</td>
</tr>
</tbody>
</table>
Borah, N., Awungshi, Y. (2023)
Measuring Relative Worth of Antecedents of Investors’ Company and Market- Regulatory Linked Risk Perception in Equity Market: An RII Approach

The above table depicts the socio-economic identities of the participants in two categories: age and annual average income. In terms of age, 38.2% of respondents were between the ages of 31 and 40, while 11.8% were between the ages of 51 and above. In the year-average income group, however, 51.5% of respondents belonged to the income range of 2,50,001–5,00,000 INR, while 20.1% belonged to the income category of 5,00,000 INR and above.

<table>
<thead>
<tr>
<th>ANTECEDENTS</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market share (A1)</td>
<td>204</td>
<td>5.62</td>
<td>1.320</td>
<td>-0.794</td>
<td>0.170</td>
</tr>
<tr>
<td>Reputation of select companies (A2)</td>
<td>204</td>
<td>5.21</td>
<td>1.572</td>
<td>-0.975</td>
<td>0.170</td>
</tr>
<tr>
<td>Composition and fame etc., of Board of Directors of the companies(A3)</td>
<td>204</td>
<td>4.84</td>
<td>1.861</td>
<td>-0.579</td>
<td>0.170</td>
</tr>
<tr>
<td>Record of Bonus share issue of the company(A4)</td>
<td>204</td>
<td>4.90</td>
<td>1.614</td>
<td>-0.619</td>
<td>0.170</td>
</tr>
<tr>
<td>Diversification plans and projects, if any (proposed to be undertaken near in future) (A5)</td>
<td>204</td>
<td>4.90</td>
<td>1.614</td>
<td>-0.619</td>
<td>0.170</td>
</tr>
<tr>
<td>Expansion plans and projects, if any (proposed to be undertaken near in future) (A6)</td>
<td>204</td>
<td>4.73</td>
<td>1.634</td>
<td>-0.475</td>
<td>0.170</td>
</tr>
<tr>
<td>CSR activities of the select companies (A7)</td>
<td>204</td>
<td>3.34</td>
<td>1.851</td>
<td>-0.360</td>
<td>0.170</td>
</tr>
<tr>
<td>All-round status of the market (B1)</td>
<td>204</td>
<td>5.56</td>
<td>1.171</td>
<td>-0.806</td>
<td>0.170</td>
</tr>
<tr>
<td>Trends in the fluctuations in the global crude oil price(B2)</td>
<td>204</td>
<td>4.81</td>
<td>1.695</td>
<td>-0.569</td>
<td>0.170</td>
</tr>
<tr>
<td>Status and the possibilities of changes in the relevant structural framework along with the procedural variations of the concerned bodies capable of influencing stock market(B3)</td>
<td>204</td>
<td>4.47</td>
<td>1.529</td>
<td>-0.736</td>
<td>0.170</td>
</tr>
<tr>
<td>Trends in the fluctuations in the price of Gold(B4)</td>
<td>204</td>
<td>4.38</td>
<td>1.595</td>
<td>-0.262</td>
<td>0.170</td>
</tr>
<tr>
<td>Further Public Offer(B5)</td>
<td>204</td>
<td>4.13</td>
<td>1.694</td>
<td>-0.171</td>
<td>0.170</td>
</tr>
<tr>
<td>Initial Public Offer(B6)</td>
<td>204</td>
<td>4.03</td>
<td>1.913</td>
<td>-0.118</td>
<td>0.170</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors based on SPSS output (2023)

The table presented above displays the descriptive statistics of the antecedents analysed in the study, including measures such as mean score, standard deviation, skewness, and kurtosis. The data indicates that the antecedent coded as 'A1' has a higher mean score compared to the antecedent labelled as 'A7', which has a lower mean score. The standard deviation is observed to be greater for the variable 'B6' and lesser for the variable 'B1'. In instances of
skewness, all antecedents exhibit negative statistics, whereas in cases of kurtosis, antecedents 'A1', 'A2', 'A4', 'A5', 'B1', and 'B3' demonstrate positive statistics.

Table 4: Measurement of the Relative worth of Antecedents under two dimensions using RII and Ranking.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>ANTECEDENTS</th>
<th>RII</th>
<th>RANK</th>
<th>OVERALL RANKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Company-linked Information</td>
<td>Market share (A1)</td>
<td>0.7436</td>
<td>1st</td>
<td>2nd</td>
</tr>
<tr>
<td></td>
<td>Reputation of select companies (A2)</td>
<td>0.6659</td>
<td>5th</td>
<td>9th</td>
</tr>
<tr>
<td></td>
<td>Composition and fame etc., of Board of Directors of the companies (A3)</td>
<td>0.6344</td>
<td>7th</td>
<td>12th</td>
</tr>
<tr>
<td></td>
<td>Record of Bonus share issue of the company (A4)</td>
<td>0.6995</td>
<td>3rd</td>
<td>5th</td>
</tr>
<tr>
<td></td>
<td>Diversification plans and projects, if any</td>
<td>0.6925</td>
<td>4th</td>
<td>6th</td>
</tr>
<tr>
<td></td>
<td>Expansion plans and projects, if any (proposed to be undertaken near in future) (A5)</td>
<td>0.6379</td>
<td>6th</td>
<td>11th</td>
</tr>
<tr>
<td></td>
<td>CSR activities of the select companies (A7)</td>
<td>0.7009</td>
<td>2nd</td>
<td>4th</td>
</tr>
<tr>
<td>B. Market-Regulatory Linked Information</td>
<td>All-round status of the market (B1)</td>
<td>0.6715</td>
<td>4th</td>
<td>8th</td>
</tr>
<tr>
<td></td>
<td>Trends in the fluctuations in the global crude oil price (B2)</td>
<td>0.6771</td>
<td>3rd</td>
<td>7th</td>
</tr>
<tr>
<td></td>
<td>Status and the possibilities of changes in the relevant structural framework along with the procedural variations of the concerned bodies capable of influencing stock market (B3)</td>
<td>0.7030</td>
<td>2nd</td>
<td>3rd</td>
</tr>
<tr>
<td></td>
<td>Trends in the fluctuations in the price of Gold (B4)</td>
<td>0.5700</td>
<td>6th</td>
<td>13th</td>
</tr>
<tr>
<td></td>
<td>Further Public Offer (B5)</td>
<td>0.7948</td>
<td>1st</td>
<td>1st</td>
</tr>
<tr>
<td></td>
<td>Initial Public Offer (B6)</td>
<td>0.6596</td>
<td>5th</td>
<td>10th</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

The above table reflects the relative worth of the antecedents based on relative importance index (RII) dimension-wise and overall-wise using ranking method. Among the antecedents of risk perception of retail investors towards investment in equity market under the dimension Company Linked Information the antecedent Market share (A1) was perceived as the greatest influencer as it was ranked 1st under this dimension, followed by CSR activities of the select companies (A7) which occupied 2nd position and Record of Bonus share issue of the company (A4) which got pushed to 3rd position. The remaining four antecedents were perceived as having comparatively lesser influence on the retail investors in being able to lure them for the purpose. Again, under the dimension Market and Regulatory Linked Information the antecedent Further Public Offer (B5) was perceived as the greatest influencer as it was ranked 1st under this dimension, followed by Status and the possibilities of changes in the relevant structural framework along with the procedural variations of the concerned bodies capable of influencing stock market (B3) which occupied 2nd position and Trends in the fluctuations in the global crude oil price (B2) which got pushed to 3rd position. The remaining three antecedents
were perceived as having comparatively lesser influence on the respondents of the retail investors in being able to lure them for the purpose. However, when we analyse under the head overall ranking, *Further Public Offer (B5)* stood 1st position, followed by *Market share (A1)* and *Status and the possibilities of changes in the relevant structural framework along with the procedural variations of the concerned bodies capable of influencing stock market (B3)*. The antecedent *Trends in the fluctuations in the price of Gold (B4)* was perceived as having comparatively least influence over the matter and got pushed to 13th position under overall ranking.

The narration above depicts the ranks of the antecedents under two dimensions which is capable of highlighting the positions occupied alone and not the amount of the gap(s) between and among the antecedents. Thus, it is obvious that the ranks do not communicate the amount of the gap(s) between and among the antecedents. To have a micro level understanding of the difference one would need to observe the amount of the gap(s) between and among the antecedents based on the RII (Relative Importance Index). The fact that the difference in the capacity of the antecedents to influence the investors should not only be kept in mind in terms of the ranks alone but also in terms of the weights allotted by the respondents in terms of RII, which will help in understanding the amount of the gap(s), if any. Any inference about the capacity of the antecedents discussed above should ideally be drawn not based on the ranks achieved alone by these but also the gap between and among the RII which has been depicted in the above table under the column RII.

Table 5. Comparison of select antecedents of perceived risk group under two dimensions across age groups using Kruskal Wallis test

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Antecedents</th>
<th>Kruskal Wallis H value</th>
<th>P-value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Company-linked Information</td>
<td>Market share (A1) &lt;br&gt; Reputation of select companies (A2) &lt;br&gt; Composition and fame etc., of Board of Directors of the companies(A3) &lt;br&gt; Record of Bonus share issue of the company(A4) &lt;br&gt; Diversification plans and projects, if any (proposed to be undertaken near in future) (A5) &lt;br&gt; Expansion plans and projects, if any (proposed to be undertaken near in future) (A6) &lt;br&gt; CSR activities of the select companies (A7)</td>
<td>1.228</td>
<td>0.746</td>
<td>Insufficient evidence to Reject H₀₀</td>
</tr>
<tr>
<td>B. Market - Regulatory</td>
<td>All-round status of the market (B1) &lt;br&gt; Trends in the fluctuations in the global crude oil price (B2)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
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<tbody>
<tr>
<td><strong>A. Company-linked Information</strong></td>
<td>Market share (A1) &lt;br&gt; Reputation of select companies (A2) &lt;br&gt; Composition and fame etc., of Board of Directors of the companies (A3) &lt;br&gt; Record of Bonus share issue of the company (A4) &lt;br&gt; Diversification plans and projects, if any (proposed to be undertaken near in future) (A5) &lt;br&gt; Expansion plans and projects, if any (proposed to be undertaken near in future) (A6) &lt;br&gt; CSR activities of the select companies (A7)</td>
<td>7.605</td>
<td>0.022</td>
<td>Reject H₀₁ and Accept H₁₂</td>
</tr>
<tr>
<td><strong>B. Market-Regulatory Linked Information.</strong></td>
<td>All-round status of the market (B1) &lt;br&gt; Trends in the fluctuations in the global crude oil price (B2) &lt;br&gt; Status and the possibilities of changes in the relevant structural framework along with the procedural variations of the concerned bodies capable of influencing stock market (B3)</td>
<td>0.156</td>
<td>0.925</td>
<td>Insufficient evidence to Reject H₀₄</td>
</tr>
</tbody>
</table>

The results of the Kruskal-Wallis H test are displayed in the table above in relation to the dimensions of company-linked information and Market-Regulatory Linked Information. The test was performed in each of the four age groups. At a confidence level of 95%, the p-values for both Company -Linked Information and Market- Regulatory Linked Information are higher than 0.05, coming in at 0.746% and 0.767%, respectively. This indicates that there is no significant difference across age groups in retail investors' overall risk perception of the antecedents categorised under Company Linked Information and Market -Regulatory Linked Information based on their relative worth in influencing investing behaviour. Based on these results, this is the conclusion that can be drawn.

Table 6. Comparison of select antecedents of perceived risk grouped under two dimensions across average annual income groups using Kruskal Wallis test.
Borah, N., Awungshi, Y. (2023)
Measuring Relative Worth of Antecedents of Investors’ Company and Market-Regulatory Linked Risk Perception in Equity Market: An RII Approach

<table>
<thead>
<tr>
<th>Further Public Offer(B5)</th>
<th>Initial Public Offer(B6)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Significance level – 5%</strong></td>
<td></td>
</tr>
<tr>
<td>Source: Prepared by the authors based on SPSS output (2023)</td>
<td></td>
</tr>
</tbody>
</table>

The results of the Kruskal-Wallis H test are displayed in the table above in relation to the dimensions, viz., Company-Linked Information and Market-Regulatory Linked Information. The results are broken down according to each group's average yearly income. At a confidence level of 95%, the p-value was found to be lower than (0.05), which is (0.022). It implies that the overall risk perception of retail investors about the antecedents classed under Company-Linked Information based on their relative worth in being able to influence investing behaviour varies significantly across their average annual income groups. This may be further interpreted to mean that retail investors perceive the antecedents differently depending on their ability to influence investing behaviour. On the other hand, while looking at the p-value with respect to the Market-Regulatory Linked Information dimension, it was discovered that the p-value is greater than 0.05, which stood at 0.925 at the 95% confidence level. As a result, there is not enough evidence to accept $H_{A4}$.

**CONCLUSION**

The study aimed to measure the relative worth of the antecedents of the risk, categorized under two dimensions, as perceived by a select group of respondents from Jorhat city, India. The risk perception of the retail investors about the antecedents of risk, relative worth wise, tested through 13 antecedents grouped under two dimensions i.e., Company and Market-Regulatory Linked Information based on their two socio economic variables i.e., age and annual average income groups divided under four and three categories respectively revealed that the antecedents ‘Market share’(A1) and ‘Composition and fame etc., of Board of Directors of the companies’(A3) under the dimension **Company-Linked Information** proved to be the most and the least capable influencers respectively. Under the dimension **Market-Regulatory Linked Information** the antecedents ‘Further Public Offer’(B5) and ‘Trends in the fluctuations in the price of Gold’(B4) were perceived as the most and the least capable influencers respectively. Therefore, the measurement of the relative worth of the antecedents will provide a base for the retail investors to systematically assess the potential risk implications associated with it prior making investments in the equity market. Further, the comprehensive evaluation of risk perception among retail investors pertaining to company-linked information and market-regulatory linked information and their respective influences on investment behaviour does not
exhibit any significant variation across the four age groups. The past study, Bairagi & Chakraborty (2018) also found that the level of risk perception does not vary with respect to age groups. In addition, the study also found that there was no significant difference in the investors' overall risk perception regarding market-regulatory linked information across various average annual income groups. However, a statistically significant difference was observed in the collective risk perception of retail investors across three distinct average annual income categories under the dimension company-linked information.

To sum up, it may be useful for the investors to consult the findings of this study in relation to discovered relative worth of the antecedents, before making investment decisions. This study may also be of use to researchers, data analysts, journalists dealing with stock markets and academicians who might learn the changing trends in the preference of the investors guided by their perceptions and may be able to forecast over the matter. May be to a lesser extent that section of the masses which has not yet ever invested in stocks but was looking for such a material which may help them to change their identity from that of ‘potential investors’ to ‘investors of the day’ may also be benefited. The present study is centred on retail investors who engage in trading and investing activities within the equity market of Jorhat city. The study is exclusively focused on certain antecedents that exert an influence on the risk behaviour of retail investors. The findings of the study are based exclusively on the subjective viewpoints of the respondents; hence, it is not feasible to entirely eradicate the likelihood of biasness. However, there is potential for conducting extensive research using big samples of investors and on equity brokers in North Eastern India. Researchers may also carry out investigations aimed at ascertaining the extent of association between the antecedents of Risk perception and diverse socio-economic and demographic attributes of retail investors.

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REFERENCES


