# Determinants of Investment Decisions in Security Market Instruments

R. Jayalakshmi, Research Scholar in Commerce, Sri G.V.G Visalakshi College for Women, Udumalpet, Tirupur District, Tamil Nadu, India.

Assistant Professor in Commerce, Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India.

E-mail: jayalakshmi.r@kahedu.edu.in

Dr.N. Lakshmi, Associate Professor and Head in Commerce, Sri G.V.G Visalakshi College for Women, Udumalpet, Tirupur District, Tamil Nadu, India. E-mail: n.lakshmi.gygvc@gmail.com

**Abstract---** Investors are individuals possessing portfolios for which they are direct beneficiaries. Investors propose to invest money when they recognize a chance to earn profit. The specific focus is on the determinants that drive investors before taking decisions in security market investment. In addition, the study also attempted to analyze the level of risk associated with return in security market investments. The primary data required for the study were collected using questionnaire from 100 investors of Coimbatore city in Tamil Nadu. To evaluate the factors influencing investments in security market instruments factor analysis as well as cross tabulation was used to study the association between the levels of risk associated with the level of returns in security market investments. Results of factor analysis disclosed that Governance, Image and Performance were the dominant factors that determined the investment decisions of investors before taking investment decisions in security market instruments and financial planners to develop investment strategies while taking decisions regarding the selection of financial instruments in the securities market.

Keywords--- Investment Decision, Governance, Image and Performance.

### I. Introduction

Investment companies channelize excess funds from investors to organizations to ensure capital formation leading to industrial development. Security market quickens the setups of interchange of securities in the secondary market. In a well-organized market, security prices represent the actual fact openly. Investment objectives should be specified in terms of both risk and return. The market, players, prevalence of uncertainty, risk premium, expected returns from the financial instruments are interlinked and interdependent in the security market. If inflation increases the return on security market investment will also increase reducing the market valuation. Individuals consider market trends and depend on experts while taking investment decisions.

# **II. Review of Literature**

Som Nath Paul and Rakesh Kumar Yadar (2019) analysed the role of financial autonomy and personality of individual investors in investment decisions. The study found that financial autonomy and personality influenced the investment decisions of middle class investors with same financial position. Arup Kumar Sarkar and Tarak Nath Sahu (2017) analysed individual investors' behaviour in stock market investments and revealed that knowledge, risk and deciding capability influenced investment decisions. Raghavendra Prasad (2016) studied the investors' attitude towards investment in equity marked. The study revealed that the expected returns and the purpose of investment were correlated with age and gender. The researcher concluded that the print media and brokers had a significant role to play in the investor's decision making. Haritha and Rashmi Uchil (2016) analysed the role of sentimental factors and behaviour problems in decision making. The study revealed that behavioural pitfalls and market sentiments such as herd behaviour, macro-economics, risk and cost factors, ambiguity aversion, action trading and familiarity biases affected individual investors' decision making.

Mehmet Islamoglu, et al. (2015) conducted a survey among 277 bank employers in Bartin and identified that income level, past experience, self-esteem and financial stability affected the individual investors' investment decisions. Sindhu and Rajitha Kumar (2014) examined the influence of risk perception of individual investors on their investment decisions. The study revealed that higher investment yields were highly associated with risk. The study concluded that investors were financial conservatives and were aware that diversified portfolios reduced the risk.

Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 10-Special Issue, 2019

Gnani Dharmaraja, et al. (2012) in their study found that accounting and neutral information influenced individual investor behaviour. Ebenezer Bennet, et. al., (2011) identified that risk tolerance, strength of the economy, media, political stability and government policy were the most influencing factors on retail investors. Gaurav Kabra et. al., (2010) found that investors between the age group of 22 and 28 years took more risks and were eager to receive suggestions from experts, whereas female investors invested for tax benefits. Thus, risk-taking capacity was decided by age and gender of the investors. Saif Siddiqui and Shuchita Singh (2009) identified that the psychology of the investor played a vital role in investment decisions. Their findings revealed that investors gave maximum weightage to the security of the principal amount invested and relied on their own analysis for investment.

## Statement of the Problem

Investors' investment decision depends on the fluctuations in price, economic situations and opportunities available. The knowledge of market trends, risk-taking ability and the motive behind buying and selling securities decide investors' active participation in the security market. Investors hesitate to take high risks and avoid uncertainties in investment decisions. Investors should understand the information and analyse the market while investing. Hence, the present study focuses on determining the factors influencing investment decisions in security market instruments. The study also attempts to find the association between levels of risk and return on investments in various security markets' instruments.

# **III. Research Methodology and Research Design**

As the population size was very large making it difficult to prepare the sampling frame, convenient sampling technique was adopted. The data of quantitative nature required for the study were collected primarily by distributing structured questionnaires among 100 individual investors in Coimbatore District, Tamil Nadu. The reliability co-efficient Cronbach's Alpha was calculated to ensure the logical reliability of the questionnaire through a pilot study. The highest alpha score value of 0.962 for the various factors under study ensured the reliability of the questionnaire. Statistical tools like Factor Analysis and Cross Tabulation were used to study the determinants of investment decisions.

#### **IV. Data Analysis and Interpretation**

To identify the factors that influence investment in security market 16 items were taken for study and Factor analysis was applied. The KMO test was used to decide whether the data were good.

KMO	and	Bartlett	's	test	

Communalities

Kaiser-Mayer-Olkin Measure	Kaiser-Mayer-Olkin Measure of Sampling Adequacy					
Barttlett's test of sampling	Chi Square	1250.483				
adequacy	Sig	.000				

The significant value, Bartlett's test and chi-square test confirm the application of factor analysis.

Communanties		
	Initial	Extraction
Company Goal	1.000	.923
Operations of Company	1.000	.837
Company Profile	1.000	.876
Management Style	1.000	.802
Corporate governance (Policies and Strategies)	1.000	.818
Details in Prospectus	1.000	.708
Credit Rating	1.000	.635
Market Share / Market Price / Market Capitalization	1.000	.838
Corporate Social Responsibility	1.000	.595
General Financial Performance	1.000	.722
Profit Earning Ratio	1.000	.793
Earnings per Share	1.000	.862
Recommendation from Investors	1.000	.679
Price trends	1.000	.840
Promoters	1.000	.738
Others	1.000	.633

Communality table reveals all 16 items contribute significantly to the factors decided by the factor analysis. All extraction values are more than 0.600 (the least is  $0.595 \approx 0.600$ )

	Initial Eigen values		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			
Component	Total	% of Varianc e	Cumulativ e %	Tota 1	% of Varianc e	Cumulativ e %	Tota 1	% of Varianc e	Cumulativ e %
Company Goal	8.970	56.066	56.066	8.97 0	56.066	56.066	4.76 8	29.801	29.801
Operations of Company	1.704	10.648	66.714	1.70 4	10.648	66.714	4.60 7	28.796	58.597
Company Profile	1.624	10.149	76.863	1.62 4	10.149	76.863	2.92 3	18.266	76.863
Management Style	1.214	7.590	84.453						
Corporate governance (Policies and Strategies)	.950	5.936	90.389						
Details in Prospectus	.508	3.175	93.564						
Credit Rating	.468	2.923	96.486						
Market Share / Market Price / Market Capitalization	.321	2.005	98.491						
Corporate Social Responsibility	.175	1.097	99.588						
General Financial Performance	.043	.269	99.857						
Profit Earning Ratio	.023	.143	100.000						
Earnings per Share	2.328E -15	1.455E- 14	100.000						
Recommendatio n from Investors	5.430E -16	3.394E- 15	100.000						
Price trends	3.117E -16	1.948E- 15	100.000						
Promoters	- 7.556E -16	- 4.723E- 15	100.000						
Others	- 8.612E -16	- 5.382E- 15	100.000						

Total Variance Explained

The table "Total Variance Explained" says Cumulative Eigen Value of 76.86% is explained by the three factors. The three factors are identified by the Rotated Component Matrix.

Factor analysis was performed on all 16 factors influencing security market investments. Principal Component Analysis was used to convert variables specifying the number of rotations.

Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 10-Special Issue, 2019

	Component		
	1	2	3
Management Style	.871	.188	.086
Company Profile	.781	.301	.419
Promoters	.780	.298	.200
Others	695	.073	.380
General Financial Performance	.692	.371	.325
Company Goal	.660	.597	.362
Market Share / Market Price / Market Capitalization	.597	.573	.391
Credit Rating	.527	.444	.400
Earnings per share	.133	.905	.161
Profit Earning Ratio	.112	.880	078
Policies and strategies	.244	.861	.130
Price trends	.519	.713	.249
Operations of Company	.530	.625	.407
Recommendation from investors	.025	.025	.823
Corporate Social Responsibility	.141	.065	.756
Details in prospectus	.313	.360	.693

Rotated Component Matrix<sup>a</sup>

**Component Transformation Matrix** 

Components	1	2	3
1	.653	.637	.410
2	410	158	.898
3	637	.755	158

The Eigen value decides the number of factors to be extracted. The higher the Eigen value the higher the variance obtained by the factor. Three factors have been extracted using Varimax rotation along with Kaiser Normalization to group and reduce the variables. Consolidating the items an appropriate nomenclature was assigned, and the three important factors influencing investment in Security Market were identified as follows:

- Governance
- Image
- Performance

The rotated matrix revealed first factor component as Governance consisting of Management Style, Company Profile, Promoters, General Financial Performance, Company Goal, Market Share / Market Price / Market Capitalization and Credit Rating. The second component factor Image constituted the items Earnings per share, Profit Earning Ratio, Policies and strategies, Price trends and Operations of Company. The third component factor Performance considered Recommendation from investors, Corporate Social Responsibility and Details in prospectus. All the three factors Governance, Image and Performance influence investments in security market.

Note: Factor loading is correlation between item and factor.

#### Association between Level of Risk and Return on various Security Markets' Investments

In the following analysis the researcher tries to find the association between the level of risk and return on various security markets' investments. Cross tabulation and percentage difference calculation for the level of risk associated with security markets' investment and the level of returns associated with security markets' investments revealed:

Level of Risk and Return A	Associated with	I Equity Share	Investments
----------------------------	-----------------	----------------	-------------

= -								
	Returns on							
		Moderate	High	Very high	Total			
Risk on Equity Shares	Very high	0	7	7	14			
	High	17	5	16	38			
	Moderate	33	0	0	33			
	Low	15	0	0	15			
Total		65	12	23	100			

Symmetric Measures							
		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.		
Interval by Interval	Pearson's R	647	.038	-8.394	.000 <sup>c</sup>		
Ordinal by Ordinal	Spearman Correlation	703	.033	-9.781	.000 <sup>c</sup>		
Number of Valid Cases		100					

Among the respondents investing in equity shares 33 % were taking moderate risk and moderate return.

Level of Risk and Return Assoc	viated with Preference	Share Investments
--------------------------------	------------------------	-------------------

		Return on Preference Shares					Total
		Very low	Low	Moderate	High	Very high	
Risk on Preference Shares	Very high	12	0	0	0	0	12
	High	0	0	8	0	0	8
	Moderate	7	8	43	0	7	65
	Low	0	0	8	7	0	15
Total		19	8	59	7	7	100

## Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Interval by Interval	Pearson's R	.326	.068	3.417	.001 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	.423	.085	4.621	.000 <sup>c</sup>
Number of Valid Ca	ses	100			

In the case of level of risk associated with preference shares investment and the level of returns associated with preference shares in security market investments 43% of the respondents are of the opinion that moderate risk yields moderate returns.

Level of Risk and Return Associated with Debenture Investments

		Return on	Debent	ures		Tatal	
		Very low	Low	Moderate	High	Very high	Total
Risk on Debentures	Very high	19	8	0	0	0	27
	High	0	0	9	0	16	25
	Moderate	0	0	8	7	0	15
	Low	0	7	26	0	0	33
Total		19	15	43	7	16	100

#### Value Asymp. Std. Error<sup>a</sup> Approx. T<sup>b</sup> Approx. Sig. Interval by Interval Pearson's R .306 .082 3.180 .002<sup>c</sup> Ordinal by Ordinal Spearman Correlation .381 .112 4.084 .000<sup>c</sup> Number of Valid Cases 100

Symmetric Measures

The level of risk associated and the level of returns associated with debentures investments revealed the opinion of low risk with moderate returns among 26 % of the respondents.

Level of Risk and Return Associated with Bond Investments

		Return on	Debent	ures		Tatal	
		Very low	Low	Moderate	Very high	Total	
Risk on Bonds	Very high	12	0	9	0	21	
	High	0	0	9	16	25	
	Moderate	0	0	22	0	22	
	Low	0	7	16	0	23	
	Very Low	0	0	9	0	9	
Total		12	7	65	16	100	

Symmetric Measures						
		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.	
Interval by Interval	Pearson's R	.067	.098	.663	.509 <sup>c</sup>	
Ordinal by Ordinal	Spearman Correlation	.050	.122	.495	.622 <sup>c</sup>	
Number of Valid Cas	es	100				

Regarding the level of risk and the level of returns associated with bond investments 22% of the respondents are of the opinion that moderate risk gives moderate returns.

Level of Risk and Return A	Associated with	Mutual Fund	Investments
----------------------------	-----------------	-------------	-------------

	Return on	Mutual Fund	1		Tatal	
	Very low	Moderate	High	Very high	Totai	
	Very high	15	0	7	0	22
Dick on Mutual Fund	High	0	9	9	16	34
KISK OII WIULUAI FUIIU	Moderate	0	0	7	0	7
	Low	0	28	9	0	37
Total		15	37	32	16	100

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.			
Interval by Interval	Pearson's R	.195	.096	1.968	.052 <sup>c</sup>			
Ordinal by Ordinal	Spearman Correlation	.055	.123	.547	.586°			
Number of Valid Cases		100						

Symmetric Measures

In the case of mutual funds, the level of risk and the level of returns associated with investments, 28 % of the respondents are of the opinion that low risk will give moderate returns.

Return on Derivatives						Tatal	
		Very low	Low	Moderate	High	Very high	Total
	Very high	12	0	0	0	0	12
	High	0	0	9	0	16	25
Risk on Derivatives	Moderate	0	18	8	7	0	33
	Low	0	8	8	7	0	23
	Very Low	7	0	0	0	0	7
Total		19	26	25	14	16	100

Level of Risk and Return Associated with Derivative Investments

# Symmetric Measures

		Value	Asymp. Std. Error <sup>a</sup>	Approx. T <sup>b</sup>	Approx. Sig.
Interval by Interval	Pearson's R	103	.122	-1.025	.308 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	097	.131	963	.338 <sup>c</sup>
Number of Valid Cases		100			

It is very much clear from the given cross table that the level of risk associated with investment in derivatives and the level of returns associated with derivatives investments, 18 % of the respondents are of the opinion that moderate risk will give low returns.

Level of Risk and Return Associated with investments in Other Security Market Instruments

		Return on investments in other security market instruments			
		Very high Moderate		Total	
	Very high	67	10	77	
Risk on investments in other	High	8	0	8	
security market instruments	Low	8	7	15	
Total		83	17	100	

Jour of Adv Research in Dynamical & Control Systems, Vol. 11, 10-Special Issue, 2019

Symmetric Measures							
Value Asymp. Std. Error <sup>a</sup> Approx. T <sup>b</sup> Approx. Sig							
Interval by Interval	Pearson's R	.632	.094	8.077	.000 <sup>c</sup>		
Ordinal by Ordinal	Spearman Correlation	.550	.087	6.517	.000°		
Number of Valid Cases		100					

The level of risk associated with other securities market investment and the level of returns associated with other security market investments, 67% of the respondents are of the opinion that very high risk will give very high returns.

#### V. Conclusion

The nature, quality and quantity of information influence the decision of investors, and have their effects on the security market. Company goal, operations of company, company profile, management style, policies and strategies, details in prospectus, credit rating, market share/market price/ market capitalization, corporate social responsibility, general financial performance, profit earnings ratio, earnings per share, recommendation from investors, price trends and promoters are the factors considered by investors before investing in security market instruments. Cross tabulation analysis revealed the association between the level of risk associated with security market instruments and the level of returns. The expected return has an impact on the risk-taking attitude. The study would be of great help to the fund managers and financial planners to develop investment strategies and take decisions regarding the selection of financial instruments in the securities market.

#### **VI. Suggestions**

The corporates should develop various securities with less market risk, and the credibility of the institution should be concisely clarified to the investors. Most of the investors sensed that they lacked expertise to ease the market risk, and they also said that they followed the ideas given by the financial experts and tips given in the newspaper to reduce their risks. So, institutions must educate the investors on their institution investors in a positive way.

# **Bibliography**

#### Journals

- [1] Som Nath Paul and Rakesh Kumar Yadar, "The Role of Financial Autonomy and Personality in Individual Investment Decisions", *Effulgence*, Volume 17, No 1, January-June 2019, pp. 66-76.
- [2] Arup Kumar Sarkar and Tarak Nath Sahu, "Factors influencing behaviour of individual investor in stock market: a case study in West Bengal", *International Journal of Commerce and Management Research*, 2017, pp. 32-39.
- [3] Raghavendra Prasad, "Investors' Attitude Towards Investment in Equity Market A Study with Reference to Anantapuramu District in Andhra Pradesh", GE- *International Journal of Management Research*, Vol.4, Issue 8, August 2016, pp. 39-48.
- [4] Haritha and Rashmi Uchil, "Conceptual framework on market factors affecting investor's sentiments and the effect of behavioural pitfalls on investment decision making", *IOSR Journal of Economics and Finance, SIMSR International Finance Conference,* SIFICO 2016, pp. 29-34.
- [5] Mehmet Islamoglu, et. al., "Determination of Factors Affecting Individual Investor Behaviours: A Study on Bankers", *International Journal of Economics and Financial Issues* (2015), Vol-5 Issue 2, pp. 531-543.
- [6] Sindhu and Rajitha Kumar, "Influence of Risk Perception of Investors on Investment Decisions: An Empirical Analysis", *Journal of Finance and Bank Management*, June 2014, Vol. 2, No, 2, pp15-25.
- [7] Gnani dharmaja et.al, "A Study on the Individual Investor Behaviour with Special Reference to Geojit BNP Paribas Financial Service Ltd, Coimbatore", *International Journal of Research in Management & Technology*, Vol.2, No.2, April 2012, PP243-252.
- [8] Ebenezer Bennet et. al., "Factors Influencing Retail Investors' Attitude towards Investing in Equity Stock: A Study in Tamil Nadu", *Journal of Modern Accounting and Auditing*, Vol.7, No.3, March 2011, pp. 316-321.
- [9] Gaurav Kabra et.al, "Factors Influencing Investment Decision of Generations in India: An Econometric Study", *Asian Journal of Management Research*, 2010, pp. 308-326.
- [10] Saif siddiqui and Shuchita Singh, "Behaviour Influence on Stock Market Investments: A Survey", *Pranjana*, Vol.12, No.2, Jul-Dec 2009, pp95-104.