Research Paper   **Management**

Investors' Painstaking - The Reasons for Investment on Indian Derivatives Market

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ABSTRACT

The investor plays a very important role in the Indian derivatives market, A survey is conducted to collect data relating to investors perception1. Factor consider for investment2, investors investment decision3 and risk management4, Respondents were classified into different categories based on socio-economic profile. This paper considers only factors considered for investment and other variable will publish forthcoming papers.

KEYWORDS | Investors perception, Factor consider for investment, Risk management

Introduction

A traditional faith of investment assumption is that investors are strong beings who always attempt to maximize expected value based on their expectations of returns from investment. The individual investor consider the benefits of consuming today against the benefits that may be gained by investing unconsumed funds in order to enjoy greater utilization at some point in the future.

To get the best out of investment, an understanding of human nature in financing perspective is required to consider number of factor in derivatives segments. To study the factor which is going to consider by investors for investment, the researcher framed eighteen factors in the form of statements and same collected from the respondents. All the eighteen statements divided in the three dimensions such as market behaviour, index return and market volatility. The entire three dimensions were having significance influence for investing their money on derivatives market.

Research Methodology

The primary data were used for the study. Data have been collected through questionnaire. 402 respondents have been collected from the derivatives investors of Tamilnadu and totally sixteen districts are selected for the data collection. Secondary data have also been used for the study. These data were collected from newspapers, magazines and various research articles.

Sampling Procedure

The investors who have invested in Indian derivatives market of Tamilnadu represent the population for the study. The sample respondents have selected from 16 districts of Tamilnadu by adopting probability sampling method.

According to the sample size determination, 402 respondents were chosen from 16 districts (50%) out of 32 districts of Tamilnadu namely, Chennai, Coimbatore, Dharmapuri, Dindigul, Erode, Kanchipuram, Karur, Krishnagiri, Madurai, Namakkal, Salem, Thiruvallur, Triruppur, Tiruvannamalai, Trichy and Villupuram. These sixteen districts were chosen by lot system.

Objectives of the study

1. To study investors considering the factor for investing in derivatives market.

2. To study investor investment decision towards derivatives market.

Limitations of the study

The study is limited to 402 Investors

The study has been conducted to analyze factors considered for investment on derivatives market and other (perception, Investment decision and risk management) variable is not taken for this paper.

The survey is conducted in only sixteen districts in Tamilnadu

Review of Literature

Giridhari Mohanta and Dr. Sathya Swaroop Debasish (2011) studied that investors invest in different investment avenues for fulfilling financial, social and psychological need. While selecting any financial avenue they also expect other type of benefits like, safety and security, getting periodic return or dividends, high capital gain, secured future, liquidity, easy purchase, tax benefit, meeting future contingency etc.

E. Bennet, Dr. M. Selvam, Eva Ebenezer, V. Karpagam, S. Vanitha (2011) concluded that the average value of the five factors, namely, Return on Equity, Quality of Management, Return on Investment, Price to Earnings Ratio and various ratios of the company influenced the decision makers.

Hoffmann and Post (2012) found that past returns positively impact investors' return expectations and risk tolerance, and negatively impact their risk perception.

Data Analysis and Interpretation

Structural equation modeling (SEM)

The researcher has put to test the conceptual representation of the relationships between the construct Investors Perception, Factors considered for investment, Investment Decision and Risk Management. The structural model developed represents the theory with a set of structural equations constructed with the above mentioned latent variables each captured with a set of observed variables. This model has 2 latent variables each with a set of 8 observed variables.

Figure 1 SEM Module Construction
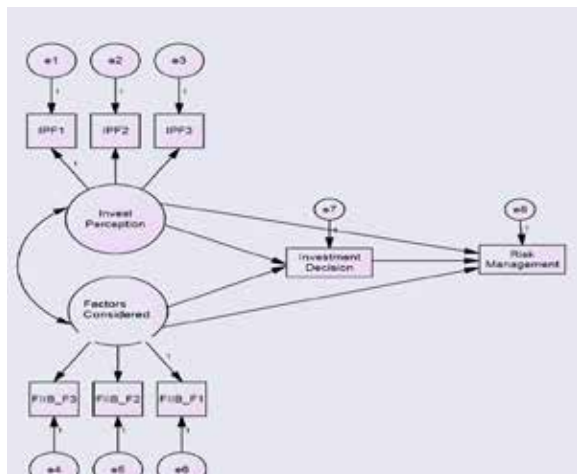
Note: This paper considered only FIIB_F1: Market Behaviour, FIIB_F1: Index Return FIIB_F1: Market Volatility and other variables will be publish in another paper

Having set the precursor to SEM, the model's fit to the data is evaluated. The researcher has used the same set of indices used to test model fitness under CFA. Chi-square statistic is a direct function of sample size and is based on the discrepancy between the sample moment and the fitted covariance matrix. In our structural model, chi-square value of 68.032 with df = 24 and p = 0.000. A significant chi-square suggests that the model does not fit the data and the measurement model should be rejected (Bentler & Bonett, 1980). So, an alternate estimate is used where chi-square is divided by its degrees of freedom, resulting in a lower value which is less sensitivity to the sample size.

Parameter Estimates for Factor Influencing Investment Behaviour
The hypotheses were tested by examining the maximum likelihood estimates, their standard errors and the associated critical ratio values. The table given below indicates the unstandardised weight, the standard error, critical ratios associated with the significance and the number of parameters estimated. It is seen that all the hypotheses developed are supported. The SEM model has generated 16 parameters all in the direction hypothesized.

Table 1 Testing of Hypotheses

Hypotheses	Hypothetical Relationship	Results
H1: There is a positive impact on Factor Considering for invest In derivatives Market and Market Behaviour	Positive	Confirmed
H2: There is a positive impact on Factor Considering for invest In derivatives Market and Index return	Positive	Confirmed
H3: There is a positive impact on Factor Considering for invest In derivatives Market and Market Volatility	Positive	Confirmed

Table 2 Regression Weights: (Group number 1 - Default model)

Factors Considered	Root Path		Estimate	S.E.	C.R.	P
Market Behaviour	<---	Factor Considering for investment	0.925	0.07	12.5	0.000
Index Return	<---	Factor Considering for investment	0.926	0.07	12.5	0.000
Market Volatility	<---	Factor Considering for investment	0.896	0.07	12.4	0.000

(Source: Primary Data)

Above table shows the regression co-efficient of the exogeneous variables. It is noted that the critical ratio of market behaviour, Index return and market volatility is above the table value and it is significant at 1 percent level. Among the selected three dimensions all the variables have high influence towards invest in derivatives market in India. It noted that all three dimensions is plying vital role for investors investment on derivatives market.

Table 3 Standardized Regression Weights: (Group number 1 - Default model)

Factors Considered	Root Path		Estimate
Market Behaviour	<---	Factor Considering for investment	0.774
Index Return	<---	Factor Considering for investment	0.689
Market Volatility	<---	Factor Considering for investment	0.678

(Source: Primary Data)

The squared multiple correlation R^2 is displayed in the table above. This value explains the amount of variance accounted for by the independent variables in the equation in the dependent variable. It has been noted that 0.774, 0.689 and .678 respectively and squared multiple correlation given below.

Model Fit Summary-CMIN
The following table 4 portrays the CMIN for the "default model". A significant Chi-square indicates satisfactory models fit.

Table 4 Model Fit Summary-CMIN

Model	NPAR	CMIN	df	P	**CMIN/df**
Default Model	20	68.032	24	.000	2.83
Saturated Model	36	.000	0	.000	
Independence Model	8	1199.932	40	.000	30.0

(Source: Primary Data)

CMIN is a Chi-square statistics comparing the default model and the independence model with the saturated model. The table 4 reveals that the default model has been associated at 2.83 percent with saturated model and other side, the independence model has been associated at 30.0 percent with saturated model.

Root Mean Square Residue and Goodness-of-Fit Index
The Root Mean Square Residual (RMR) is the mean absolute value of the covariance residuals, which reflect the difference between observed and model-estimated covariance.

Table 5 Root Mean Square Residue and Goodness-of-Fit Index

Model	RMR	GFI	AGFI	PGFI
Default Model	0.019	0.981	0.957	0.58
Saturated Model	.000	1.000		
Independence Model	0.166	0.489	0.343	0.38

(Source: Primary Data)

Table 5 indicates that the model is good fit by the influence of RMR value 0.019. GFI (Goodness of Fit Index) refers to a fact that 98.1 percent has been fitted in default model for the proportion of variance- covariance matrix, on the other hand, 48.9% fit in independence model.

Baseline Comparisons

The NFI, Normed Fit Index, also known as Δ 1 was developed as the alternative to CFI, Comparative Fit Index,

Table 6 Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta 1	Rho 1	Delta 2	Rho 2	
Default Model	0.946	0.912	0.931	0.951	0.973
Saturated Model	1.000		1.000		1.000
Independence Model	.000	.000	.000	.000	.000

(Source: Primary Data)

From table 6, it is noted that the evidence of NFI (0.946) and CFI (0.973) is greater than 0.8. It means the latent variables correlate with independent variables.

Summary

First, the fact that AMOS output did not encounter any warning indicating a positive sign that the researcher will be able to estimate the model developed. Second, the researcher found that several of the estimates of model fitness showing a good fit of the model. Third, an examination of the parameter estimates reveals the absence of unreasonable estimates as indicated by the non-negative error variances. Fourth, the vast majority of the parameter estimates and all the error variance are significantly different from zero. Fifth, the signs of the parameter estimates are consistent with the hypothesized relationships among the variables.

Conclusion

This study has helped in throwing light on factors that creates an impact on investing activity of investors. Also this study has revealed that investing activity of investors is depending on market behaviour, index return and market volatility. According to the study it can be inferred that majority of investors considering above mention factors for invest on derivatives market.

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