



## INVESTORS' PERCEPTION ON DERIVATIVES MARKET IN INDIA

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### Abstract

*This paper has attempted to assess the investors' perception on derivatives market in India. Derivative is new class of investment invention which offers sophisticated management of risk when the market is of high degree volatility. Now derivatives market performs a number of monetary functions. Derivative contracts have several variants such as forwards, futures, options and swaps being the common. Derivative products available in India are index futures, index options, stock futures and stock options. The primary data have been collected from Indian derivative market investors in 16 districts of Tamilnadu and secondary data were collected from reports published by the derivatives market, stock market website in India, journals, magazines, periodicals and dailies. The sample size for the study was 402 derivative investors' covering 16 districts in Tamilnadu. Factor analysis, cluster analysis and chi – square test were used to analyse the data. It is concluded that there is a need for strong joint efforts from regulating authority and corporate sectors to take the derivative products into all areas as well as into all levels of investors and to mobilise the untapped resources from different categories of investors in different areas. Such kind of concerted joint efforts will help the market to popularize the derivative products and to gain prominence among the investors in general and derivative investors in particular.*

**Key Words:** *Investors' Perception, Derivatives Market, SEBI, BSE, NSE, MCX.*

### 1. Introduction

Derivatives are new segment of secondary market operation in India, investors have a way of thinking that measuring the derivative trading activities is a more complex process, in this regards SEBI has taken more effort to change their perception on derivatives market process but still Indian investors are not clear of the derivatives market mechanism. This research aims to quantify the investors' perception on derivatives market. The securities market has witnessed a superfluity of reforms which have refined the micro market structure, modernized operation and broadened investment choice for investors. Derivative is new class of investment invention which offers sophisticated management of risk when the market is of high degree volatility. Now derivatives market performs a number of monetary functions. Derivative contracts have several variants such as forwards, futures, options and swaps being the common. Derivative products are available in India are index futures, index options, stock futures and stock options. The SEBI has permitted derivative segments in only two stock exchanges; they are National Stock Exchanges (NSE) and Bombay Stock Exchanges (BSE), and their clearing corporation/house to commence trading and settlement in approved derivative contract. Trading in S&P CNX NIFTY and BSE 30 (SENSEX) future commenced in June 2000, Index option in June 2001, options on individual securities in July 2001 and future in September 2001. Thirty one individual scrips have been approved by the SEBI for trading in derivative segments. There are three broad categories of participants, hedger, speculator and arbitrageur.

### 2. Significance of the Study

The most significant aspect of derivatives is risk management not about the elimination of risk. It is rather about the management of risk. Financial derivatives provide a powerful tool for limiting risks that investors face in the ordinary conduct of their businesses. It requires a thorough understanding of the basic principles that regulate the pricing of financial derivatives. Effective use of derivatives can save cost and it can increase returns for the investors. Financial derivatives allow free trading of risk components that lead to improving market efficiency. Investors can use a position in one or more financial derivatives as a substitute for a position in the underlying instruments. In many instances, investors find derivatives to be a more attractive instrument than the underlying security. This is mainly because of the greater amount of liquidity in the market offered by derivatives as well as the lower transaction costs associated with trading a derivative as compared to the costs of trading the underlying instrument in cash market. Derivative market helps to keep a stabilizing influence on spot prices by reducing the short-term fluctuations. In other words, derivatives reduce both peak and depth and leads to price stabilization effect in the cash market for underlying asset.

### 3. Statement of the Problem

Derivatives are new segment of secondary market operation in India where investors need to understand the complex nuances of the derivative trade process and to make profit in derivatives market, however the impact of derivatives market has not reached the small investors in the Indian market. Technological enablement and rapid growth of derivative market



since the new economic policy of 1991 has given more importance to investors. Investor behaviour also tend to move from savings to investment, more number of brokers have also entered into the capital market due to the liberalized regulation in capital market. Brokers are providing a number of services under a single umbrella to the investors based on their need. The spot and future markets are linked through risk transfer (hedging) and price discovery, after the introduction of derivative products which may increase volatility in component stocks. (Rahman,2001). Theoretically, the impact of stock index futures and options on the stock market volatility is still not clear. The linkage between these derivatives markets and the stock market is generally established through arbitraging activities.

#### 4. Objective of the Study

1. To assess the level of investors' perception towards the derivatives market in India.
2. To study the relationship between independent variables and investors' perception.

#### 5. Research Methodology

As far as objectives of the study are concerned, the study aims to analyse and describe the socio-economic profile of the respondents, investors' perception with respect to derivatives market. Hence, the research design applied for this study is analytical and descriptive in nature. Both primary and secondary data were used in this study. The primary data was collected from investors of derivative instruments in all the 16 districts of Tamilnadu. The details regarding socio-economic profile of the investors, investors' perception with respect to derivative market were collected by using a well structured interview schedule. The secondary data was collected in the form of reports published by derivatives market, stock market website in India, journals, magazines, periodicals and dailies.

The questions in the interview schedule were designed in accordance with the statement of problem and objectives of study. The variables identified from review of literature were taken into account while drafting the interview schedule. Opinion from a panel of members comprising experts in the field of derivatives market, security analysis, portfolio management, statistics, psychology, economics and commerce was sought for, at every stage of designing the final interview schedule. Validity test means testing the instrument whether it has the ability to measure what it intends to measure. In this study two types of validity tests were applied. One is content validity and the other is criterion validity. The following formula is applied to determine the optimum sample size.

$$n = \frac{Z_{\alpha/2}^2 \cdot p \cdot q}{e^2}$$

Where,

e =0.03(since the estimate should be within 3% of the true value)

Z<sub>α/2</sub>=2.005(as per table of area under normal curve for the given confidence level of 95%)

P=0.1(It is calculated on the basis of result of a pilot study)

q =0.1

$$n = \frac{(2.005)^2 \cdot (0.1) (1-0.1)}{(0.03)^2}$$

Required sample size (n) = 402

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

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

#### 6. Review of Literature

Mitra <sup>1</sup>(2000) commented on the increasing volatility of the bourses, which force an investor to shift away from the equity market. He observed that analysts profess to the investors the virtue of long-term time horizon for the equity investment. But sharp volatility has become a feature of the derivative market worldwide, resulting in frequent, sharp, downward corrections. In this scenario it is proving difficult to convince the investors to think long-term. He opined that the risk of obsolescence and failure have increased enormously in the highly valued economy companies, resulting in huge loss on investments. Investors with long outlook are real losers in this new paradigm of stock market gambles. He argued that, in



this scenario, investors are shifting away from the equity market to cash and debt. Long-term vision in the equity investments has given way to short term trading.

**Ramanjaneyalu and Hosamani<sup>2</sup>(2008)** surveyed investors to know their views about derivative segment as there are a lot of myths about derivative segment among participants. Their study revealed that majority of investors (62%) assume that derivative instruments are meant for speculation. Thus, they are ignorant of the main purpose of derivatives that is risk hedging. More than 50% investors take derivatives as new complex and hi tech products in reality. These products can be easily used with some orientation. With this study one can understand the need of orientation of common investors towards derivative products as risk hedging tools.

**Syed Tabassum Sultana<sup>3</sup>(2010)** concludes that the individual investor still prefers to invest in financial products which give risk free returns. This confirms that Indian investors even if they are of high income, well educated, salaried and independent they are conservative investors who prefer to play safe. The investment product designers can design products which can cater to the investors who are low risk tolerant and use TV as a marketing media as they seem to spend long time watching TVs.

**Pasha<sup>4</sup>(2013)** studied retail investors' perception on financial derivatives in India. It is found that 55 percent of the small investors (respondents) are of the opinion that derivatives are new, complex, and high-tech products. 38 percent of the respondents, who are familiar with derivatives said that derivatives are not new, complex, and high – tech products. And the remaining 7 percent of the investors could not answer the question. This shows that a large number of investors are not familiar with derivatives. The study also found that 62 percent of the small investors are of the opinion that derivatives are purely speculative and highly leveraged instruments.

**Tripathi<sup>5</sup>(2014)** examined Investors' Perception towards Derivative Trading in India. The study shows that Indian investors mainly invest their money in real estates and insurance as they are the options offering great returns with minimum risk associated with it. It is found that more than 75 percent of investors are aware about derivatives, out of which 74 percent have invested in derivatives. Most of the users often invest 10 percent – 20 percent of their total investment in derivatives followed by users who invest 20 percent – 35 percent of their total investment in derivatives. Out of derivative users 76 percent investors have invested in options which offer benefits like risk diversification and promise their investors for great profits with minimum investment. The study concluded that derivative market is dominated by male investor with 72 percent whereas female investors are only 28 percent.

## 7. Data Analysis and Interpretation

Investors' perception on derivatives market is analyzed using statistical tools namely, factor analysis, cluster analysis, and chi-square analysis.

### Factor Analysis

Factor analysis is used to identify and define the underlying dimensions (factors) in the original variables. Here 21 statements are identified to study the investors' perception towards derivatives market. The variables are stated in the form of statements to collect opinion from investors. They were asked to give their opinion for all the 21 statements in the Likert's five point scale with alternate options such as strongly disagree, disagree, neither agree nor disagree, agree and strongly agree. Initially, the correlation among these variables is calculated. Usually a correlation value of 0.3 is considered sufficient to explain the relation between variables. If the correlation between variables is small, it is not likely that they share common factors. A closer examination of the correlation matrix may reveal variables which do not have any relationship. Therefore, all the 21 variables have been retained for further analysis. Further, two tests were applied to the result of a correlation matrix to test whether the relationship among the variables is significant or not.

**Table 1 ,KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.810
Bartlett's Test of Sphericity	Approx. Chi-Square	5.625
	df	210
	Sig.	.000

[Source: Primary Data]



### KMO and Bartlett's Test

The Kaiser Meyer Olkin test is based on the correlations and partial correlations of the variables. If the test value of KMO measure is closer to one, it is good to use factor analysis. If KMO measure is closer to zero, the factor analysis is not a good idea for the variables and data. The value of test statistics is given above as 0.700 which means the factor analysis for the identified variables is found to be appropriate to the data. The value of KMO measure of sampling adequacy is 0.810

Another test namely, Bartlett's test of sphericity is used to test whether the correlation matrix is an identified matrix i.e., all the diagonal terms in the matrix are zero. The significant value of Bartlett test is 0.000. Hence, there exists significant relationship among the variables. The measure of KMO test and value of Bartlett test indicate that the present data is useful for factor analysis.

**Table 2, Total Variance Explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.297	34.746	34.746	7.297	34.746	34.746	5.12	24.383	24.383
2	2.659	12.661	47.407	2.659	12.661	47.407	4.273	20.346	44.728
3	2.204	10.496	57.903	2.204	10.496	57.903	2.767	13.174	57.903

[Source: Primary Data]

### Factors and Total Variance

The next step in the process is to decide about the number of factors to be derived. Principal Component Analysis (PCA) method is applied to choose the number of factors for which "Eigen Values" with greater than unity. The component matrix so framed is further rotated orthogonally using Varimax Rotation Algorithm. All the statements are added on the three factors. The results so obtained have been given in the tables separately along with factor loadings. Among the three factors, the first factor which accounts for 24.383 percent of variance is the prima criteria considered to study the investors' perception on derivatives market for making investment in Indian derivatives market. The second factor accounts for 20.346 percent and third factor for 13.174 percent. The cumulative variance of all three factors is 57.903 percent. The following table gives the factor matrix where principal component analysis extracted three factors.

**Table 3, Component Matrix**

Statements	Component		
	1	2	3
It is tough to understand the derivative market transaction than equity market.	0.830		
Future and options agreement is too complicated to understand.	0.797		
It is profitable to invest on the BSE/NSE stock exchange.	0.779		
Market reforms are very important for the investors.	0.776		
Generally the BSE / NSE is a stable market for derivatives.	0.763		
Derivative market process is more risky.	0.724		
Government policies have an impact on investor confidence and capital mobility.	0.723		
The number of actively traded shares is increased over time as a result of the trust and efficiency of the exchange.	0.697		0.428
The Indian share market is highly speculative.	0.683		-0.497
The main reason for slump and raise is based on investor confidence.	0.677		
In practice, derivatives may be difficult to distinguish whether a particular trade is for hedging or speculation.	0.624		



Investors' confidence leads to making investment decision simple in right financial assets.	0.62		-0.496
The volatility of share prices has been stable enough to encourage Investors to participate.	0.596		-0.449
There are no guaranteed returns on future and option contract.	0.588		-0.442
Swaps are innovative financing methods which reduce borrowing costs, and increase control over interest rate risk and Forex exposure.		0.703	
More support from government is needed to encourage derivative market.		0.674	
Derivative trading enhances liquidity and reduces transaction cost in the markets of underlying assets.		0.672	
The derivative trading encourages a competitive trading in the market.		0.612	
Derivative markets continue to attract a great deal of attention from regulatory bodies.		0.611	
OTC contracts are flexible, and are often customized to fit the specific requirements of the user.			0.610
Markets require the participation of both hedgers and speculators.			0.504

[Source: Primary Data]

Table 3 reveals the factor loadings (co-efficient) which indicate how much weight is assigned to each factor. Factors with large co-efficient for a variable are closely related to that variable. Thus, the 21 variables in the data are reduced into three factor models and each factor is identified with the corresponding variables as given below.

**Table -4, Grouping of Factors**

Factors	Statements	Scores
Market Trend	It is tough to understand the derivative market transaction than equity market.	0.839
	Future and options agreement is too complicated to understand.	0.835
	Derivative market process is more risky.	0.82
	The number of actively traded shares is increasing over time as a result of the trust and efficiency of the exchange.	0.801
	It is profitable to invest on the BSE/NSE stock exchange.	0.705
	Generally the BSE / NSE is a stable market for Derivatives.	0.695
	In practice, derivatives may be difficult to distinguish whether a particular trade is for hedging or speculation.	0.685
	Markets require the participation of both hedgers and speculators.	0.47
Investors' Confidence	The Indian share market is highly speculative.	0.817
	Investors' confidence leads to making investment decision simple in right financial assets.	0.775
	The main reason for slump and raise is based on investor confidence.	0.722
	There are no guaranteed returns on future and option contract	0.72
	The volatility of share prices has been stable enough to encourage Investors to participate.	0.72
	Market reforms are very important for the investors.	0.622
	Government policies have an impact on investor confidence and capital mobility.	0.555
Market Regulation	Swaps are innovative financing methods which reduce borrowing costs, and increase control over interest rate risk and forex exposure.	0.727
	More support from government is needed to encourage derivative market	0.699
	Derivative trading enhances liquidity and reduces transaction cost in the markets of underlying assets.	0.668
	Derivatives market continues to attract a great deal of attention from regulatory bodies.	0.632
	The derivative trading encourages the competitive trading in the market.	0.627
	OTC contracts are flexible, and are often customized to fit the specific requirements of the user.	0.611

[Source: Primary Data]



Table 4 exhibits the factors and corresponding statements with scores. Factor scores are obtained for each statement. If the score is high the level of factor related to the investors' perception will be high on the respondents. All the 21 statements with score and rank are provided in the following table.

**Table 5 ,Perceptive Statements with Rank and Score**

Sl. No	Statements	Scores	Rank
1	It is tough to understand the derivative market transaction than equity market.	0.839	I
2	Future and option agreement is too complicated to understand.	0.835	II
3	Derivative market process is more risky	0.820	III
4	The Indian Share Market is highly speculative.	0.817	IV
5	The number of actively traded shares is increasing over time as a result of the trust and efficiency of the exchange.	0.801	V
6	Investors confidence leads to making investment decision simple in right financial assets	0.775	VI
7	Swaps are innovative financing methods which reduce borrowing costs, and to increase control over interest rate risk and forex exposure.	0.727	VII
8	The main reason for slump and raise is based on investor confidence.	0.722	VIII
9	There are no guaranteed returns on future and option contract	0.721	IX
10	The volatility of share prices has been stable enough to encourage investors to participate.	0.720	X
11	It is profitable to invest on the BSE/NSE stock exchange.	0.705	XI
12	More support from government is needed to encourage derivative market	0.699	XII
13	Generally the BSE / NSE is a stable market for derivatives.	0.695	XIII
14	In practice, derivatives may be difficult to distinguish whether a particular trade is for hedging or speculation.	0.685	XIV
15	Derivatives trading enhances liquidity and reduces transaction cost in the markets of underlying assets	0.668	XV
16	Derivative markets continue to attract a great deal of attention from regulatory bodies.	0.632	XVI
17	The derivative trading encourages the competitive trading in the market	0.627	XVII
18	Market reforms are very important for the investors.	0.622	XVIII
19	OTC contracts are flexible, and are often customized to fit the specific requirements of the user.	0.611	XIX
20	Government policies have an impact on investor confidence and capital mobility.	0.555	XX
21	Markets require the participation of both hedgers and speculators	0.47	XXI

[Source: Primary Data]

Table 5 describes the most as well as the least issues relating to investors' perception. Out of the 21 statements pertaining to investors' perception, "It is tough to understand the derivative market transaction than equity market" has influenced the investors to perceive high on Indian derivatives market and this statement is placed first and the statement namely, "Markets require the participation of both hedgers and speculators" has low influence on the investors to perceive least on Indian derivatives market and this statement is placed in 21<sup>st</sup> place.

### Cluster Analysis

The investors' perception on derivatives market can be classified in three categories based on choice criteria using the cluster analysis. They are classified into three segments because the difference between the co-efficient is significant only on three cases on the hierarchical cluster. For the purpose of classification of investors, K- means cluster is used.

**Table 6 ,Final Cluster Centers**

Factors	Cluster		
	1	2	3
Market Trend	4.61	4.05	3.00
Investors' Confidence	4.79	3.88	2.82
Market Regulations	3.79	4.08	3.42
<b>Total</b>	<b>13.19</b>	<b>12.01</b>	<b>9.40</b>
<b>Average</b>	<b>4.40</b>	<b>4.00</b>	<b>3.25</b>
<b>Rank</b>	<b>I</b>	<b>II</b>	<b>III</b>

[Source: Primary Data]

The final cluster centers' table 6 shows the mean values for the three clusters which reflect the attributes of each cluster. The high mean value for the first cluster, second cluster and third cluster are 4.79, 4.08, and 3.42 respectively. The average



score of the first cluster is 4.40 with first rank, second cluster is 4.00 with second rank and third cluster is 3.25 with third rank. This means that the first cluster respondents have high level perception, second cluster respondents have medium level perception and third cluster respondents have low level perception on Indian derivatives market.

The following table 7 presents the cluster means square, error mean square and F- value.

**Table 7 ,ANOVA**

Factor	Cluster		Error		F - Value	Sig. Value
	Mean Square	Df	Mean Square	df		
Market Trend	76.118	2	0.167	399	454.542	.000
Investors Confidence	56.077	2	0.152	399	369.044	.000
Market Regulation	17.267	2	0.304	399	56.842	.000

[Source: Primary Data]

The Anova table 7 indicates that the difference existing among the three clusters in the mean values is significantly different. The significant value for the above three factors is 0.000. This means that the above three factors have significant contribution on dividing investors into three segments based on prime criteria. The F- Values for the factor 1, 2 and 3 are 454.542, 369.044, and 56.842 respectively. Similarly the cluster mean square for the factor 1, 2 and 3 are 76.118, 56.077 and 17.267 respectively.

**Table 8,Numbers of Respondents in Each Cluster**

Cluster	Respondents	Percentage	Rank
Cluster 1	155	38.56	II
Cluster 2	179	43.78	I
Cluster 3	68	16.92	III
<b>Total</b>	<b>402</b>	<b>100</b>	

[Source: Primary Data]

The table 8 reveals that out of the 402 respondents, 155 (38.56%) respondents have high level perception, 179 (43.78%) respondents have medium level perception and 68 (16.92%) respondents have low level perception. It is important to note that 38.56% of the respondents have high perception about the Indian derivative market.

### Independent Variables and Investors' Perception towards Derivatives Market

Chi – square values for socio – economic variables and investors' perception towards derivatives market are given in the following table 9. To study the significant association between independent variables and investors' perception towards derivatives market, socio – economic variables such as age, gender, occupation, educational qualification, marital status, monthly income, family structure and family size are considered. A detailed discussion pertaining to each variable is given below.

**Table 9 ,Independent Variables and Investors' Perception towards Derivatives Market**

Sl. No	Variable	Chi-Square value	Sig. Value	Significance or not
1	Age	13.694	.090	Not Significant
2	Gender	9.088	.011	Significant
3	Occupation	43.670	.000	Significant
4	Educational Qualification	23.721	.001	Significant
5	Marital Status	7.932	.019	Significant
6	Monthly Income	16.147	.040	Significant
7	Family Structure	3.567	.168	Not Significant
8	Family Size	9.745	.136	Not Significant
9	Private Sector	38.223	0.000	Significant
10	Government Sector	9.231	0.010	Significant
11	Public Sector	1.951	0.377	Not Significant
12	Foreign Sector	27.679	0.000	Significant
13	Percentage of Amount Invested	1.004	0.000	Significant
14	Income Vs Expenses	53.410	0.000	Significant
15	Investment Term	9.502	0.050	Significant
16	Investment Revision	76.595	0.000	Significant



17	Trading On Derivative Market	9.259	0.055	Not Significant
18	Present Investment Value	31.519	0.000	Significant
19	Market Capitalisation	31.444	0.000	Significant
20	Income from Spot Market	12.062	0.002	Significant
21	Income from Future Market	6.910	0.032	Significant
22	Income from Forward Market	12.171	0.002	Significant
23	Income from Option Market	6.925	0.031	Significant
24	Reason to Select Derivative Instruments	69.032	0.000	Significant
25	Stable Income from Investment	3.260	0.196	Not Significant
26	Willingness for the Continuance of Investment	35.166	0.000	Significant
27	Awareness on SEBI Guidelines	16.393	0.000	Significant
28	Solution to Protect Investors Rights	28.896	0.000	Significant

[Source: Primary Data]

From table 9 it is observed that 28 variables such as gender, occupation, educational qualification, marital status, monthly income, investment objectives, sector wise preference, percentage of amount invested, relationship between income and expenses, investment term, investment setting and revising, trading on derivatives market, present contract holding, investment decision, income from spot market, income from future market, income from forward market, income from option, reason to select derivative instruments, willingness for the continuance of investment, awareness on SEBI guidelines and solution to protect investors' rights have significant association with investors' perception towards derivatives market and age, family structure and family size, capital appreciation, earning income on idle resources, public sector, stable income from investment do not have significant association with investors' perception towards derivatives market.

## 8. Major Findings

1. It is learnt from the Factor analysis that 21 variables in the data are reduced into three factor models such as Market Trend, Investors' Confidence and Market Regulations.
2. It is observed from the Factor analysis that the all the twenty one statements are loaded on the three factors. Among the three factors the first factor which accounts for 24.383% of variance is the prima criteria considered to study the investors' perception on derivatives market. The second and third factors account for 20.346 and 13.174 respectively. The cumulative variance of all the three factors is 57.903 percent.
3. It is found that out of the twenty one statements, the statement namely, "It is tough to understand the derivative market transaction than equity market." has secured the highest score and is placed in first rank. It is considered to be the most important variable than other variables (statements).
4. It is found from the Cluster analysis that the significant value for all the three factors is .000. It indicates that the three factors have significant contribution on dividing investors into three segments based on prime criteria. The F- Values for the Market Trend (Factor 1), Investors' Confidence (Factor 2) and Market Regulations (Factor 3) are 454.542, 369.044, and 56.842 respectively. Similarly the cluster mean square for the factor 1, 2 and factor 3 are 76. 118, 56.077 and 17.267 respectively. It is found that out of the 402 respondents, 155 (38.56%) respondents have high perception, 179 (43.78%) respondents have medium perception and 68 (16.92%) have low perception towards derivatives market.
5. It is observed from the Chi-square test that out of the 25 socio – economic variables, 20 variables such as gender, occupation, educational qualification, marital status, monthly income, sector wise preference, (government sector, private sector and foreign sector) percentage of amount invested, relationship between income and expenses, investment term, investment revision, present contract holding value, investment decision, income from spot market, income from future market, income from forward market, income from option, reason for the selection of derivative instruments, willingness to continue investment, awareness on SEBI guidelines and solution to protect investors' rights have significant association with investors' perception. The remaining variables namely, age, family structure, family size, public sector, trading on derivatives market and stable income from investment do not have significant association with investors' perception.

## 9. Suggestions

1. As far as investors' perception is concerned out of the 21 statements, the statement namely "It is tough to understand the derivatives market transaction than equity market" has influenced the investors to perceive high on Indian derivatives market and this statement is placed first. In this connection, the regulating body should seriously view this statement and enhance their level of perception on derivatives investment through simplifying the derivative





market transaction procedures or to provide to an opportunity to understand the derivative market transaction before making investment in derivative products. The regulating body should also consider the research finding that only 38.56% of the respondents have had high level of perception towards derivatives market. Hence the regulating authority has to take steps to improve the level of perception among the investors. It will help the investor to understand more about Indian derivatives market on the one hand and will help the corporate sectors to mobilise funds from untapped rural resources on the other hand. [As per the Factor Analysis and Cluster Analysis]

2. The regulating authority should consider investors' gender, occupation, educational qualification, marital status and monthly income while creating awareness on derivative products and derivative investment as these five socio economic variables have significant impact on investors' perception towards derivative market. [As per the Chi – Square Test]
3. Derivative investors should perceive the market trend, market reforms, government policies and market regulation obviously as only 38.56% of the respondents have had high level perception on Indian derivatives market. Increased perception on derivative investment can help the investors to make prudent investment decision at the right time. [As per the Factor and Cluster Analyses]

#### 10. Limitations of the Study

1. The study has covered 16 districts of Tamilnadu. The remaining districts of Tamilnadu are excluded from the study.
2. The independent variables pertaining to socio – economic profile of the investors are restricted to select variables only.

#### 11. Conclusion

The derivative investors ought to perceive the market trend, market reforms, government policies, market regulations, factors influencing derivatives investment [Motivating Factors], return, investment opportunities obviously and adequately take prudent investment decisions. They should consider their age, gender, occupation, educational qualification, marital status, income, family size, family type and other variables related to investment analysis while investing in derivative instruments. Suitable policy initiatives [taken by the Regulating Body] and disclosure of reliable and authentic information [by the corporate sector] will help the investor to perceive the derivative investment and to take right decisions. There is a need for strong joint efforts from regulating authority and corporate sectors to take the derivative products into all areas as well as into all levels of investors and to mobilise the untapped resources from different categories of investors in different areas. Such kind of concerted joint efforts will help the market to popularize the derivative products and to gain prominence among the investors in general and derivative investors in particular.

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