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# A Derivative Is a Risk Hedging Tool from Investor Perspective

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## **Abstract**

Derivatives products provide certain important economic benefits such as risk management or redistribution of risk away from risk-averse investors towards those more willing and able to bear the risk. Derivatives also help price discovery, i.e., the process of determining the price level for any asset based on supply and demand. These functions of derivatives help inefficient capital allocation in the economy; at the same time, their misuse also poses a threat to the stability of the financial sector and the overall economy. In the mid-1990s, India started reviving the exchange-traded commodity derivatives market. It introduced a variety of instruments in the foreign exchange derivatives market, while exchange-traded financial derivatives were introduced in 2001. Given India's experience in informal derivatives trading, the exchange-traded derivatives were quick to pick up substantial volumes. This paper presents the concept of derivatives and types of derivative products and how the investor perceives the derivative instrument as a risk-hedging tool in shivamooga city. The study is selected 70 respondents and used percentage analysis. The result obtained from the study reveals that the investor prefers a derivative as a risk-hedging tool.

Keywords: Hedging, Speculation, Risk Shifting and Investor.

#### Introduction

A derivative instrument broadly is a financial contract whose payoff structure is determined by the value of the underlying commodity, security, interest rate, share price index, exchange rate, oil price, or the like. So a derivative is an instrument that derives its values from some underlying variable /asset. A derivative instrument by itself does not constitute ownership. It is, instead, a promise to convey property. All derivatives are based on some 'cash' products. Today, derivative contracts exist on a variety of commodities such as corn, wheat, silver, etc.



Besides commodities, derivatives contracts also exist on a lot of financial underlings like stocks, interest rates, and exchange rates, etc. Derivatives are the financial instruments, which derive their value from some other financial instruments, called the underlying. The foundation of all derivatives markets is the underlying market, which could be a spot market for gold, or it could be a pure number such as the level of the wholesale price index of a market price.

# **Objectives of the Study**

- To seek a positive and negative opinion from the investor towards the derivative market
- To know the various types and strategies of derivatives.
- To suggest suitable measures based on the major findings.

# Methodology

#### **Sources of Data**

Primary data has been collected by distributing a structured questionnaire to the respondents and also used the interview method to collect information. Secondary data has been collected through journals, books, official websites.

## **Scope of the Study**

The scope of the present study is to examine the opinion of respondents about derivatives as a risk-hedging tool, and this study mainly concentrated on derivative aspects, the geographical area for this study is restricted to shivamogga city only.

## Sample Design

**Population:** The investors of derivative instruments

**Sample Technique:** Convenient sampling method is used for this study.

**Size of the Sample Size:** The size of sample size is 70 respondent selected from shivamogga city

**Tools and Analysis:** the collected data is analyzed and presented with the help of tables charts and percentages.

# **Types of Derivatives**

**Option:** The concept of options is not a new one. An options contract is an agreement between a buyer and a seller. Such a contract confers on the buyer a right but not an obligation to buy or sell a specified quantity of the underlying asset at a fixed price on or up to a fixed day in the future on payment of a premium to the seller. The premium paid by the buyer to the seller is the price of an option contract



**Forwards:** A forward is an agreement between two parties to exchange an agreed quantity of an asset at a specified future date at a predetermined price specified in the agreements. The parties concerned agree on the settlement date and price in advance. The promised asset may be a currency, commodity, instrument, etc. It is the oldest type of all the derivatives. The party who promises to buy but he specified asset at an agreed price at a fixed future date is said to be in the 'Long position, and the party who promises to sell at an agreed price at a future date is said to be in 'short position.'

**Futures:** It is similar to the forward contract in all respect. A future is a standardized form of the forward contract. A future is a contract or an agreement between two parties to exchange an asset/ currency or commodity at a certain future date at an agreed price. The trader who promises to buy is said to be in a 'long position' and the party who promises to sell is said to be in a 'short position'. Futures contracts are contracts specifying a standard volume of a particular currency to be exchanged on a specific settlement date. A futures contract is an agreement between a buyer and a seller. Such a contract confers on the buyer an obligation to buy from the seller and the seller an obligation to sell the buyer a specified quantity of an underlying asset at a fixed price on or before a fixed day in the future. Such a contract can be for the delivery of an underlying asset.

The difference between a forwarding contract and the future is that future is a standardized contract in terms of quantity, date, and delivery. It is traded on organized exchanges. So it has secondary markets. A futures contract is always settled daily, irrespective of the maturity date, which is called a marking to the market.

**Swap:** A Swap is an agreement between two parties to exchange one set of financial obligations with others. It is widely used throughout the world but is recent in India. The swap may be an interest swap or currency swap. Swaps give companies extra flexibility to exploit their comparative advantage in their respective borrowing markets. Swaps allow companies to focus on their comparative advantage in borrowing in a single currency in the short end of the maturity spectrum vs. the long end of the maturity spectrum.

#### **Function of Derivatives**

Derivatives play the following important roles in every economy where they are traded.

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## **Price Discovery and Planning**

Prices of an organized derivatives market reflect the combined views and perception of buyers and sellers, not only of the current demand and supply but also of their expiration. At the time of expiration, the prices of derivatives converge with the price of the underlying assets. This process of price discovery applies to both futures and options. The information generated by futures trading through the price discovery process helps in the planning of all users at every stage.

# **Risk Shifting**

The derivative market allows and facilitates risks to be transferred from those who have them but may not want them. The risk in the case of derivatives is primarily priced risk. This risk represents a cost, which must be borne by someone if the dealer, lender, borrower, merchant, or middleman has to assume risk, and then they will pay the opposite party less or charge them more or a combination of the two. If the risk is assumed directly by the dealer or merchant, they are compensated for bearing the risk. Numerous general economic benefits flow from the risk-shifting of the hedging function. These include reduced finance charges in carrying an inventory of all kinds, including a portfolio of investments. The larger banks that finance producers, distributors, and processors give their best terms for the value of the inventory that is fully protected by an adequate hedge.

#### **Enhance Liquidity in the Underlying Markets**

Derivatives due to their inherent nature are linked to the underlying cash markets. It has been observed the world over that introduction of derivatives increases the trading volume in the underlying. Markets players reluctant to participate due to the absence of a risk-shifting mechanism can now participate in the cash market. The interplay between the underlying derivatives market generates additional activity in the underlying market, increasing liquidity in the underlying.

#### Shifts the Speculative Trading to a more

#### **Controlled Environment**

In the absence of an organized derivatives market, speculators operate in the underlying cash markets. This acts as an establishing factor for the underlying marker since the underlying market act also as a proxy futures and options market. Margining, monitoring and surveillance of the activities of the various participants are difficult in these kinds of mixed markets. The



derivatives market provides a mechanism for the speculators to be identified separately, and surveillance of these participants and their positions can be done in a better manner. This reduces the imbalance in the underlying markets.

Thus the derivatives markets will help in controlling the activities of speculators and reduce the risks now prevalent in the underlying securities market in India.

# **Data Analysis and Interpretation**

**Table-I Showing the Demographic Profile and Opinion of Investors** 

OPINION	RESPONDENT	PERCENTAGE (%)
Based on Age		·
Below 20 Years	18	25.71
26-40 Years	26	37.14
41-60 Years	22	31.43
Above 60 Years	4	5.71
Total	70	100
Based on Occupation		·
Businessmen	32	45.72
Government Employee	13	18.57
Professional	25	35.71
Total	70	100
Based on Monthly Income of In	nvestor	•
Lessthan 10000	18	25.71
10000-30000	23	32.86
30000-50000	19	27.14
Above 50000	10	14.29
Total	70	100
Showing Type of Investor		
Long-term	40	57.14
Short Term	23	32.86
Daily Trader	20	28.57
Total	70	100
Percentage of Investment in De	rivative	
Less than 20	28	40
20 to 40	24	34.29
40 to 60	18	25.71
Total	70	100
The instruments Traded in Deri	vatives	
Future	52	74.29
Option	18	25.71
Total	70	100



Types of Contracts Entered		
Index future	15	21.42
Stock future	28	40
Stock option	12	17.14
Currency future	15	21.44
Total	70	100
Reasons for Investment in Deri	vative Instrument	·
Hedging	48	68.57
Speculations	22	31.43
Total	70	100
Most Favoured Derivative Instru	ıment	
Stock Index Futures	35	50
Stock Index options	3	4.3
Future on Individual option	30	42.9
Option on Individual stock	2	2.9
Total	70	100
Strategies Used for hedging		
Long & Short Futures	28	40
Short Stock and Long Futures	10	14.2
Long and Shot Call	5	14.2
Short Stock & Long Call	8	11.4
Long Stock & Long Put	7	10
Short Stock & Short Put	5	7.14
Long Index Futures and Short Ste	ock 4	5.71
Short Index Futures & Long Stoc	ek 3	4.28
Total	70	100
Strategies used for hedging in a	bullish market	
Long Index futures	25	35.7
Long Index Call		
Long Call		
Long Future		
Total	70	100
Strategies used in a bearish mar	ket	
Short Futures	22	31.4
Short Call	26	37.14
Short Index future	14	20
Short Index call	10	14.28
Total	70	100

Source: Primary data

Table-I reveals that out of 70 respondents 25.71% are below 25 years, 37.14% are 26-40 years, 31.43% are coming between 41-60 years, and 5.71% investor is above 60 years. Majority



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of the businessmen invested in derivative compared to other occupation, and the majority of investors are earning monthly income between 10000-30000, Out of the 70 investors 57.14% are a long-term investor who has an investment of three months or more than three months, 14.29% are short term investor whose period in between one to three months and 28.57% are a day trader who buys and sell on the same date.

The above table shows the percentage of investment in derivatives. As per the table, 41.4% of investors invest in less than 20% derivatives, around 34.29 % in investment in 20 – 40 and 25.71 % in 40 to 60 in derivatives.4.29 % of the investors have traded in the Futures segment, and around 25.71 percent of the traders traded in options. So investors are favoring futures over options, 21.42 invest in index futures 40% invest in stock future and 17.14 % in stock options, and 21.44% invest in currency future, 68.57 % of traders feel that Derivative is best for hedging than for speculation. Traders mainly want to make long-term gains by investing in Derivatives then using derivatives as an instrument to reduce their risk. Fifty percent of the investors favored index futures, and 42% of the investor went for futures on individual stocks. So it is obvious that options are still not favored by investors, 28 respondents prefer long and short futures hedging, 10 prefer short and long futures, five long and short call, eight short stock and long call, seven long stock and a long put, 5 in short stock and a short put, 4 in long index future and short stock, 3 in short index future and long stock. Among the strategies used for hedging, Short Stock and Long Call have been used as the most used strategy. Among the strategies used for hedging in a bullish market, Long Index Futures is being preferred by the majority of the respondent. In a bearish market, the most preferred strategy is Index Future short call, and its percentage is 37.14.

## **Findings**

- Around 40 percent of the investors invest less than twenty percent of their investment in derivatives. And around 34.29 percent allocate 20% to 40% into derivatives. So even normally, the derivative market transaction volume is four times the Spot market's volume the allocation into derivatives is less than the investment into the Spot market.
- When asked about the most favored derivative instruments, 25.71 percent of the investors favored index futures, and 50 percent of the investor went for futures on individual stocks. So it is obvious that options are still not favored by investors. The retail investors are reluctant to go by options, mainly due to the low liquidity in the Option's market.

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 More than fifty percent of traders feel that Derivative is best for hedging other than speculation. Out of 70 investors, 48 were favoring derivatives as a hedging instrument. Traders mainly want to make long-term gains by investing in Derivatives then using derivatives as an instrument to reduce their risk.

- One major finding is that investors do not know much about the various derivative strategies. They just come and invest in derivatives based on some analysis though many strategies help to reduce the market risk. Many are not aware of it.
- Only 40 percent have used this Long Stock & Short Futures Strategy in an undervalued spot market. And only 14.2 percent went for the Short stock & long futures strategy. And around 14.2 percent of the total respondents have used long stock & short call strategies, So traders are not interested in all of these strategies either due to less knowledge or because they are much interested in speculation than hedging. 11.14 percent of the respondents have applied the Short stock & Long call strategy.10 percent went through the long stock &long put strategy.
- Only 5.71 percent of the investors have used this Long index Futures and Short stock.
- Around 4.28 percent of the respondents have applied this short Index Futures and longterm future.
- In a bearish market, the most preferred strategy is Index Future short call, and its percentage is 37.14.

#### **Suggestions**

- This study reveals that among investors, the knowledge about the various Derivative strategies is limited, thereby not making an exact investment strategy that matches the financial goals of the investors.
- This study also focused on the effectiveness of hedging. In the recent market crash, those who have hedges their position had made only a limited loss or no losses give importance to the effectiveness of hedging.
- The usage of the options market should be adequate concerning the market conditions to protect the position from the market risk arising from market volatility.
- More retail participation would bring more liquidity into the system and make the Options market very aggressive.



#### **Conclusion**

Though trading in derivative instruments is riskier it is catching the attention of traders very rapidly due to its specialty such as margin payment system, short term nature, etc. There are many important functions done by these derivative instruments in the financial system of a country. Numerous studies have led to a broad consensus, both in the private and public sectors, that derivatives provide substantial benefits to the users. Derivatives are a low-cost, effective method for users to hedge and manage their exposures to interest By providing investors and issuers with a wider array of tools for managing risks and raising capital, derivatives improve the allocation of credit and the sharing of risk in the global economy, lowering the cost of capital formation and stimulating economic growth. Now that world markets for trade and finance have become more integrated; derivatives have strengthened these important linkages among global markets, increasing market liquidity and efficiency, and facilitating the flow of trade and finance. So now, within a short period, derivative instruments have become essential parts of investment even for medium-term investors.

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