A STUDY ON FINANCIAL DERIVATIVES AND ITS RELEVANCE WITH SPECIAL REFERENCE TO SWAPS & OPTIONS

Abstract

The development of the economy cannot proceed without the presence of derivatives markets. Derivatives markets feature risk management approaches. The value of a marketplace can be derived from an underlying asset through the use of what are known as derivative markets. On the market for derivatives, there are three types of participants: hedgers, speculators, and arbitragers. Speculators are individuals who try to make a profit by making risky bets. Financing derivatives are the instruments that are utilized most frequently in the financial sector. Hedging is the most important purpose that derivatives serve. Utilizing the futures or options markets in hedging helps to reduce overall market risk, The market for derivatives is expanding at a quicker rate in India than it is everywhere in the world. There are two types of marketplaces for derivatives: regulated exchanges and over-the-counter markets (OTC). The four most common kinds of derivative contracts are known as forwards, futures, options, and swaps respectively. The use of leverage, which is common in financial instruments such as derivatives, enhances the potential for both risk and return. In recent years, derivatives markets have become increasingly significant as a direct result of the important role they play in the expansion of the economy.

Keywords: Derivatives, Forwards, Futures, Swaps & Options

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I. INTRODUCTION

Stock futures trading began on the NSE and BSE in 2000 in the Indian derivatives market. Derivatives trading were allowed in India until May 1, 2001, when the Securities and Exchange Board of India granted full authorisation for the practice. In India, the two most major stock exchanges are the NSE in New Delhi and the bourse in Mumbai (BSE). The British Stock Exchange (BSE) began trading equity derivatives on June 9, 2000. (index futures-SENSEX). Forwards, futures, options, and swap agreements are examples of derivative contracts. Stocks, bonds, and commodities are examples of underlying assets that can be used to create derivatives. To put it another way, the value of a derivative is influenced by its connection to other assets. In England and France, forward trading may have taken place as early as the 12th century. While trading rice in Osaka in the 17th century, Japan created a highly regulated sector known as Cho-at-Mai (rice trading on the book), The Tokugawa Shogun ate was aware of this market as far back as 1730. Dojima rice futures were established on a regulated exchange when the market was first introduced. A derivative product's value is contractually used to determine the value of an asset. Any type of asset can be used to build an option, including equity, cash, commodities, or anything else.

1. “Securities Contracts (Regulation) Act, 1956 (SCR Act) defines “derivative” a risk instrument, contract for differences, or other form of security.
2. A contract whose value is derived from the prices of the underlying securities”.

II. FEATURES OF FINANCIAL DERIVATIVES

1. **Financial derivatives is a contract:** It is referred to as a derivative since it is a future contract between two parties.

2. **Derives value from underlying asset:** Derivatives can be valued using commodities, metals, financial assets, intangible assets, and more.

3. **Direct or exchange traded:** Financial futures contracts, for example, are derivative contracts that are traded on a specific exchange. Exchange-traded derivatives are more liquid and cheaper to transact than custom contracts.

4. **Delivery of underlying asset not involved:** It is not uncommon for underlying transactions to be resolved by the delivery of underlying assets in derivatives trading.

5. **May be used as deferred delivery:** Future payment instruments or "delayed delivery" instruments are other names for derivatives. This shows that derivatives are more straightforward to short or long than other types of assets or securities.

6. **Secondary market instruments:** Only warranties and convertibles are primary market instruments for derivatives.

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III. FUNCTION OF FINANCIAL DERIVATIVES

1. **Risk management functions:** Risk is transferred from the buyer of a derivative product to the seller of that product through derivatives. In terms of reducing risk, they're excellent.

2. **Price discovery function:** The Derivative Market is a great place to find out about the current market pricing conditions. The derivative contract sets the price of the underlying asset. It is possible to predict the price of a commodity by using commodity futures and forward contracts.

3. **Liquidity function:** Derivative markets are more accessible than the spot market because of their greater liquidity. Liquidity is increased by using derivatives contracts.

4. **Portfolio management function:** The art and science of picking a set of investments to satisfy long-term financial goals is known as portfolio management. As a result, it aids in the effective administration of a portfolio.

IV. OBJECTIVES

The main objectives of this study were:

1. To provide an overview on Indian derivative market.
2. To Study the relevance of Swaps and Options.
3. To Study the recent Development of Derivative Markets in India.

V. METHODOLOGY OF STUDY

The present study, which is based on a descriptive form of research and secondary data, is frequently the alternative that is both the most convenient and the most cost-effective. Secondary sources, such as literature reviews, research papers, and journal articles, were used to compile the information for this work. The data comes from a variety of sources, including websites run by various governments.

1. **Derivatives:** To define a derivative, we must first describe an asset and how it might be utilized to calculate the value of a financial instrument. A stock, a bond, or even a mutual fund might serve as the underlying asset. Derivatives are often known by other names, such as deferred delivery and future payment. Various financial products fall under the umbrella term "derivatives," including debt instruments, stock and bond holdings as well as loans, both secured and unsecured; risk instruments; and futures and options contracts. Derivatives are contracts whose value is based on the price of the underlying security or an index of those prices. Derivatives in finance and commodities Commodity markets were among the first to employ derivatives as a risk management strategy. Commodities serve as the foundation for commodity derivatives.

   Commodities such as wheat, soy beans, rapeseed, and cotton, as well as precious metals such as gold and silver, are examples. To use the word "financial derivatives" is to

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describe a wide range of financial products, including futures contracts and interest rates. This class teaches students about futures, forwards, options, swaps, and other financial derivatives. One of the most important forms of derivatives, futures contracts, was formed as quickly as possible. Financial derivatives can be created using cash market and other financial derivative instruments. The vast majority of financial derivatives are simply repackaged versions of other derivatives or ordinary cash market instruments. Depending on the context, the underlying asset can be financial or nonfinancial. The underlying asset can be approached in a variety of "ways:

- Commodities including grain, coffee beans, orange juice;
- Expensive metals like gold & silver & Foreign exchange rates or currencies;
- Marketable securities such as stocks and warrants of publicly listed firms.
- Short term securities such as Treasury Bills

VI. THE NEED FOR A DERIVATIVES MARKET

A wide range of economic functions are served by the derivatives market:

1. They help in transporting risks.
2. They discovery of future and existing market pricing.
3. They enhance your long-term savings and investment.
4. To explore the new investment opportunity.
5. It performs the price discovery function.

VII. PARTICIPANTS IN DERIVATIVES MARKET

1. **Hedgers:** Risk can be reduced or eliminated through the use of derivatives. Almost everyone who works in the derivatives market has this mindset. Derivatives are used by hedgers to lessen the volatility of a stock's price. And a hedger is one who does so. A "hedger" enters the futures market to lower an existing risk.

2. **Speculators:** They leverage their bets on asset price changes by using futures and options contracts. In a speculative venture, derivatives can be employed to raise prospective profits as well as potential losses. For profit, they buy and sell derivatives, not to reduce their risk. In addition, speculators contribute to the effectiveness of market data. A market is said to be information efficient if its prices accurately reflect all relevant information.

3. **Arbitrageurs:** Profiting from price differences between comparable or competitive assets in different markets drives their behavior. Market consistency allows arbitrage traders to earn from less risky purchases on one market and less risky sales on another. There's no downside to it at all.

VIII. OPTIONS CONTRACTS

At any point before to the expiry of an options contract, investors may exercise their right, but not their responsibility, to buy and sell the underlying securities for a preset price. A

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call or put contract can theoretically be based on virtually any underlying security. Stock options are just one sort of non-equity option; there are also options on government bond prices, currencies, stock indices, and precious metals like gold and oil. Commodities like food grains and metals and financial assets like forex, time deposits and treasuries can all be the subject of option contracts for trading. The options available are called calls and puts. At that price and by that deadline, clients are under no obligation to buy anything. They have that option, though, if they want it. If you want to buy a put, you do not have to sell any of the underlying assets at a certain price before a certain date.
The following are the key "characteristics" of options :

1. "Options holders do not receive any dividend or interest.
2. Option yield only capital gains.
3. Options holder can enjoy a tax advantages.
4. Options are traded on OTC and in all recognized stock exchanges.
5. Options holders can control their rights on the underlying assets.
6. Options create the possibility of gaining a windfall profit".

1. **Swaps contracts:** A swap occurs when one financial asset is traded for another. The contract specifies the date and time of this transaction. Exchanging one thing for another is known as "swapping," which is also known as "bartering." In a swap deal, two parties agree to exchange cash flows. A swap is an agreement between two parties that is specially tailored to the interests of each party and is based on a predetermined formula on a notional principal. It is possible to reduce the risk by using a swap.

   - **The advantages of swaps are as follows:**

     - Swapping is usually less expensive. It eliminates the need for an up-front fee and lowers overall transaction expenses.
     - Risk may be hedged over lengthy periods of time through swaps.
     - It is adaptable and retains informative benefits.
     - It has a larger time horizon than futures or options contracts. Forwards and futures are for the near future, while swaps are for the long term.

     When corporations use swaps, their obligations and revenues might be more aligned.

   - **The disadvantages of swaps are:**

     - A breakage fee may be incurred if the exchange is terminated early.
     - Lack of liquidity.
     - It is subject to default risk".

2. Features of Swaps:

- **Swaptions**
  - Swaptions is a combination between two words Swap and Option.
  - Swaptions are not systematize contacts and they are enjoys more elasticity.
  - Swaptions refers to an option to enter into an interest rate swap.
  - Swaptions carry major currencies USD, EUR etc.

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- **Equity swap:** An Equity Swap is defined as a derivative contract between two parties that involve the exchange of future cash flow.

  There are three main types of Equity Swap;
  - Pay-Fixed
  - Pay-Floating
  - Pay-Another Equity

  There are two legs of Equity Swap
  - An equity leg
  - A floating interest leg

- **Counter parties:** It involves the contract between two or more parties to exchange cash flows. Counter parties is between two parties:
  - Over the counter
  - Security financing transactions.

- **Facilitators:**

  - Facilitator is defined as Latin words which mean to make things easy.
  - Facilitators also create a positive environment

IX. RECENT DEVELOPMENT OF DERIVATIVE MARKETS IN INDIA

Due to the nature of the transaction, it does not have to be completed immediately but may be done at a later period. A derivative is a contract between two parties whose price is determined by the prices of other fundamental things. This kind of financial instrument is called a derivative. Derivatives include, but are not limited to, forwards, futures, options, and swaps. The Asia-Pacific region accounts for over 40% of the global derivatives industry. Almost a third of the global market's revenue was generated in North America. Some of the world's biggest derivatives companies include Goldman Sachs, Deutsche Bank, Citi, J.P. Morgan, and Morgan Stanley. The global derivatives market is predicted to increase from USD 17470 million in 2019 to USD 36070 million by 2021-2026, at a CAGR of 8.6%. Industry players in the global derivatives market might gain a competitive edge by using accurate analysis and high data integrity to find crucial opportunities. Buyers of this research will have access to verified and realistic market predictions, such as the overall revenue size of the global derivatives sector. Derivatives market players who wish to get an edge over their competitors and ensure long-term success on the global market will find this study to be an invaluable resource. Reliable sources have confirmed the accuracy of the report's findings, data, and content. For this analysis, the authors employed a unique research and analytical method to thoroughly examine global derivatives markets.

X. ORGANIZATION OF DERIVATIVE MARKETS IN INDIA

Derivatives markets in India have existed for quite some time. In 1875, the Bombay Cotton Trade Association launched the first futures trade in commodities. SEBI received final

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approval for derivatives trading in May 2001 following a recommendation by the L.C. Gupta committee. Index futures trading have been permitted by India's Securities and Exchange Board (SEBI). This means that an index can now be used to trade both options and individual stocks. Equity option trading began in July of 2001, while BSE Sensex option trading began in June of same year. Individual stock futures contracts were first offered in the U.S. stock market in November 2001. First traded on the NSE on June 12th, 2000, were the S&P CNX Nifty Index futures. Individual stock options weren't accessible for trading until June 4, 2001, when index options went live. Since then, investors have had the option of trading in single stock futures. S&P CNX serves as the basis for NSE index futures and options. In June 2003, the NSE issued interest rate futures, however they were eventually suspended because of a price issue.

XI. CONCLUSION

In contrast to the underlying cash asset, a derivative product or simply derivative is available. The typical cash market delivery terms apply to the purchase and sale of these assets. Financial derivatives have risen to prominence as a result of technological advancements. It is a tool that aids in the management of both risk and profit by the dealer. It helps to spread out the risk. In the Indian market, equity futures have been a great success. In recent years, derivatives have outperformed their global peers in terms of growth.

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