

## A CONCEPTUAL FRAMEWORK AND APPLICATION OF INVESTORS PERCEPTION FOR FINANCIAL DERIVATIVES

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### **Abstract**

This paper attempts to review research done in the area of financial derivatives published in journals of repute from the year 2000 to 2021. The paper and the study is conceptual. The paper discusses the basic need and application of derivatives with their evolution, role, types, and challenges encountered by investors, managers, and the market as a whole. The review of the literature attempts to examine the various outcomes by applications of tools of derivatives at various levels. The study concludes that there is still a vacuum that exists wherein the application of derivatives needs to study more.

**Keywords:** Derivatives, Hedging, Risk Management.

### **Introduction**

Various financial theories propose that risk management comprises certain strategies to raise the firm value in event of bankruptcy and a crash of markets. Over the past few decades with the evolvement of globalization and the rise of new firms, the area of derivatives has gained importance and concern for individuals, corporates, working professionals, and various business houses. In the Indian financial market, Derivatives play a very vital role in holistic development. In India introduction of derivatives was done with the utility of multiple benefits. Generally, it has been seen that the introduction of derivative lead to an increase in volatility by having a high degree of leverage.

The current paper discusses the historical background of the use of derivatives and substantiates the purpose of the current paper. The paper attempts to review and examine the need and application of derivatives for the industry as a whole and also discusses the various parties associated with the usage and adoption of derivatives.

### **Review of Literature**

Generally, the use and application of derivatives by investors are done for speculation and hedging. Derivatives are used and applied to manage risks by offering offsetting compensation in the case of an unwanted event. In the mechanism of derivatives, one party can transfer the right of risk to another or its counterparty (Smith and Stulz, 1985; Norden, Silva Buston, and Wagner, 2014; Bartram, 2017). The stakeholders avoid distress through the application of derivative tools (Froot, Scharfstein, and Stein, 1993; Deng, Elyasiani, and Mao, 2017). The use of derivatives is also done of speculation, investors use derivatives to speculate the value of an underlying asset (Choi and Elyasiani, 1997; Minton, Stulz, and Williamson, 2005; Li

and Marinč, 2014). The literature support that derivatives are used to mitigate risk but on the other hand some studies state that derivatives are the ways to reform risk and not eliminate risk (Smith & Stulz (1985), Duffee (1996)).

Ashraf. et al (1997) investigate the factors of the purpose of credit derivatives amongst a sample of 336 large US Bank holding companies. Yong et al (2005) survey the revelation ways amongst the Asia Pacific banks concerning derivatives and assume that established nations have greater degrees of revelation as equated to developing nations. Broccardo et al (2014) examine the extent of management of derivatives by banks and examine the distinction between users and non-users, and the fundamental motives to make use of them. Many researchers have found banks' certain balance sheets varying and theorized their correlation with the usage of derivatives. The previous investigation gives recognized the significance of size in banks' use of futures (Koppenhaver, 1990), and swaps (Koppenhaver, 1993). Broadly it may be expected that bigger banks may have may partake in derivatives signifying a constructive correlation between derivative usage and the size of banks. Derivatives decrease the probability of financial distress by reducing the flexibility in firm value, thus decreasing the likely costs of financial distress (Smith and Stulz, 1985; Mayers and Smith, 1987).

Sinkey Carter (2000) offers comparable proof of the physical characteristics of banks that accept risk management using derivatives which suggest that smaller banks are more than likely to hedge. On the further hand, several studies argue that large firms need more sources to set up a circumventing program and employ personnel with knowledge in derivatives than do small firms and hence are more likely to use derivatives (Hoyt, 1989; Colquitt and Hoyt, 1997); (Cummins et al. 1997; Cummins et al., 2001). In connection with the size and informational economies argument, Sinkey and Carter (2000) argue that associated banks have access to the assets needed to be effective derivative users. Froot et al. (1993) partake initiate that the practice of derivatives will lower the panorama of financial anguish for a given debt ratio. Debt ratio shows an important role in determining the quantum of derivatives usage. Studies have designated that there is a positive association between financial distress and the practice of derivatives. Financial distress is more likely when leverage rises and the interest coverage ratio is summary. In such a scenario hedging with derivatives is practical as it can steady the cash flows and support the worth of the business. Winata and Heaney (2005) also provide the opinion that there is a fundamental relative between debt level and derivatives practice.

In principle, companies can cope with their risk coverage in other ways instead than derivatives. Certain companies, for instance, think about having a real hedge from earnings in foreign exchange that may ultimately balance the variations in their global debts. Corporate bonds may also act as a hedge against the risk of interest rates. Corresponding to Antoniou et al. (2009), managers can immunize the firm value compared to fluctuations in interest rates, to a certain extent, merging the understanding of its assets and obligations to be of interest rate risk through active risk management of the profit rate market. Thus, if the company employed other forms of hedging products will, then, be executing a trade-off among the costs of an alternate system for fencing and the cost of developing derivatives.

### **Need and Application of Financial Derivatives**

Over the decades the derivative market has gained importance and significance. Instruments such as futures, and options are very dynamic in many exchanges. The business of the

derivative market stands at more than \$ 3 trillion a day with growth of more than 14 percent annually. In the current scenario, the role and application of derivatives have been for both on and off the counter. At present, the know-how of use and application of knowledge is a must and essential for every financial practitioner.

The origin of derivatives started in 4000 BC in western Europe, in the ear of the 17<sup>th</sup> century, the same became mature. In the year 1865, a standardized agreement was introduced by the "Chicago grain exchange" in context to future contracts replaced in the year 1851.

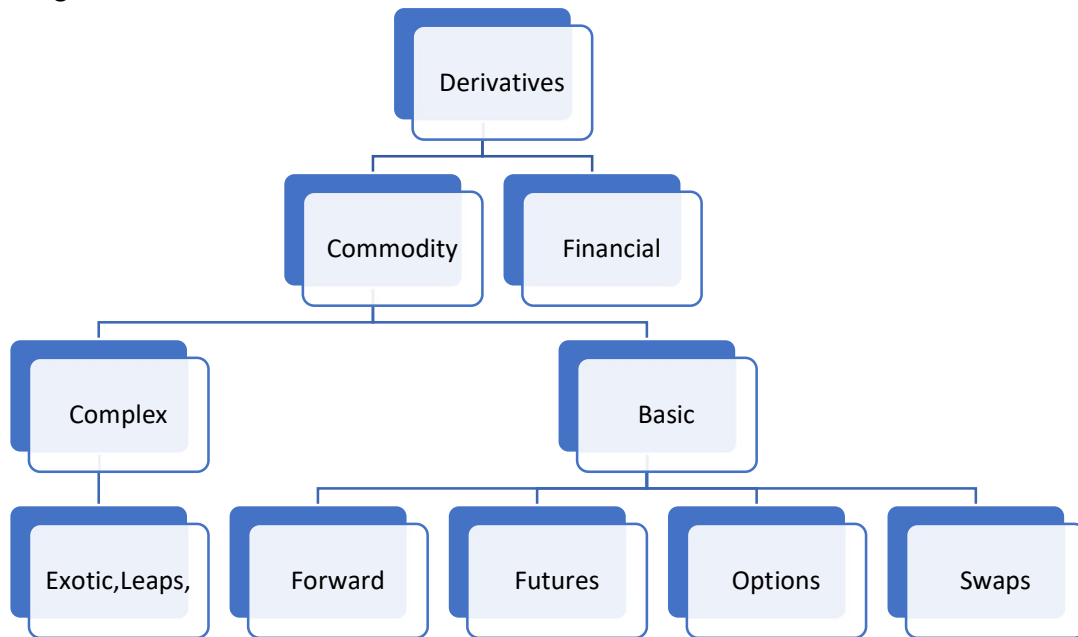
The current paper aims to answer the following questions:

1. What are the major types of Derivatives?
2. What are the various types of risk in the companies?
3. How are the tools applied to mitigate various types of risk?

There are various advantages and applications of exchange contracts to solve financing problems, broaden the issues and problems of financing channels, and mitigate risks due to capital turnover. While future contracts are applied and used to resolve issues such as the price volatility of Exim products to reduce and avoid foreign exchange risk.

### Types of financial derivatives

Derivatives are generally classified into two main broad categories and further have subcategories. The below figure 1.1 illustrates the types of derivatives with categories and sub-categories.



### Participants of the Derivative Market

There are three prime participants in the derivative market:

1. **Hedgers:** These are those which apply and use derivatives to minimize and remove risk related to the price of an asset. This category comprises of majority of the players and participants.
2. **Speculators:** These are the ones who transact in options and futures to get extra leverage in the cost/price of an asset. These are the ones that can lead to increment in both, potential gain and potential loss by application of derivatives in any speculative venture.

3. **Arbitrageurs:** Their conduct is driven by the yearning to get the benefit of an inconsistency among costs of more or less the same assets or contending assets in various markets.

**Application of Derivatives:**

Some of the applications of financial derivatives are stated below:

1. **Managing Risk:** Management of risk of mitigation risk is one of the foremost important functions of derivatives. The use and adoption of derivative tools are done mainly to minimize risks rather than eliminate risks. This process requires a complete understanding of the application of derivative tools to minimize loss and increase returns.
2. **Gaining efficiency in trading:** The use and adoption of financial derivatives help in increasing market efficiency. In many cases, traders discover financial derivatives to be a more alluring instrument than fundamental security. This is primarily because of the larger quantity of liquidity in the market extended by derivatives as well as the lower transaction costs coupled with trading a financial derivative as equated to the costs of trading the underlying instrument in the cash market.
3. **Speculation:** One of the use and application of derivatives is speculation. This is not the most significant and only application area. The use and adoption of a financial derivative are one risky instrument in financial management, mismanagement of the same can result in heavy losses.
4. **Price stability Function:** One more significant purpose of derivatives is price detection which means disclosing info about future cash market prices over the futures market. The market of derivatives offers a method by which all the information is encompassed in such a way that the needed data is ready to be used for application which helps in making prices stable.

**Forward Contract:**

It is a contract agreement among parties to sell or purchase an asset for a specified point of time in the future. In the contract, the price to be paid is decided at the point of entering into the contract. A forward contract is one of the simplest forms of derivative contract.

**Future Contract:**

Future is a standard type of forward contract used to purchase or sell an asset at a specific price for a specific time via a specific exchange. The future contracts are traded through exchanges that act as seller and buyer for the counterparty. The standard terms are set by the exchange such as quantity, price, and date of delivery.

**Options**

In future contracts, the parties have a certain obligation to perform and honor, but in the case of an option, it is right but not the obligation. There are broadly two types of options, generally known as "CALL" and "PUT".

### **Role of Derivatives in the current scenario:**

The derivative considers the surplus of the social as the appropriate foundation for recent demands and desires that form the political sphere. The derivative positions to the methods in which finance, which looked to be absolute self-expanding quantity, of money-making money, also exhibits the core relationships of socializing labour through com-modify construction. If the derivative plays such a double-up meeting of the community; of excess value and an extra of the social itself, then the policy of debt would comprise reshaping these two flashes. One is wherever debt is rejected to make up a statement upon it. One more where debt is accepted to be argued by the plentiful sociality that eventually chooses what the wealth of a given society could be if it is to be a "society of the producers." Re-aligning and re-valuing the relative between abundance and surplus would possibly open the horizon of the socialism that the derivative sets.

### **Summary & Conclusion**

Innovative applications of derivatives in the current times have changed the entire picture of the financial industry all across the globe among all financial products and services. Derivative tools are broadly used and applied for managing/mitigating risk. These tools help and support the decision of all stakeholders. Derivatives offer an opportunity to transfer risk from one party to another, depending upon the risk-bearing capacity. If examined thoroughly, the net turnover NSE-India has surpassed the entire turnover of the market. The meaning of a derivative is deceptively simple. It is a financial contract whose price is obtained from something different. Though, the capitalist marketplace tosses up a puzzling display of 'somethings'. The worth of the derivative financial agreement might be contingent on whatever after the price of copper, to the price of a specific fiscal safety (a bond or an equity), to the temperature, to evasion on a reimbursement, to the value of additional derivative-contract (as in the case of an option on a futures contract). Or the derivative contract's price may signify the cost of various other financial assets, or even other includes that will affect its value.

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