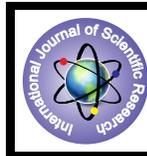


The Framework of Financial Derivative



Commerce

KEYWORDS: Arbitrage, Derivatives, Futures, Forwards, Hedging.

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ABSTRACT

Derivatives are financial instruments whose value depends upon the values of other more basic underlying variables or assets. The underlying asset could be a stock-index, a foreign currency, a commodity or an individual stock.

Forward contract is known as the most ancient form of derivatives. It goes on to take complex forms like futures, swaps, options and exotics. A primary economic function of futures markets is to hedge, i.e. buy and sell futures contract to offset the risk of changing cash-market prices. The purpose of this paper is to introduce to the readers regarding the broad framework of financial derivatives, their types and their objectives. There are great many risks associated with derivative management. Management development programs on financial derivatives have not taken off as most B-School and corporate wait for bigger market volumes to spur demand in this area.

Introduction:

The Indian economy has been facing a paradigm shift since 1991 due to adoption of the policy of open arms and go-global slogan. Gone is the closed economy characterized by protected environment and everything under government scanner. As the government also leaned towards laissez-faire regime and privatization became the hallmark of this open economy. For this purpose, SAP (Structural Adjustment Program) was undertaken and financial sector also became an open area. Such reforms pertained to banking sector, Capital money markets and removal of controls over capital issues and issue pricing. SEBI replaced CCI and through it has proved to be a toothless tiger, still it has come up with many effective laws & guidelines for mutual funds, permission being granted to certain select companies to raise capital from abroad with tax benefits. Allowing FDI (Foreign Direct Investment) etc. Now the Indian Stock Market, despite being insulated the world market from the world markets is marked by clear-cut price volatility. Speculation extends to non-specified shares too and we very well know that speculative dealings are supposed to be settled on a cash basis, before these are listed in the exchange. The investors in the stock markets suffer heavy losses due to 'Area Market Operations'.

So what we gather from the above background discussion is that most organizations and individuals face financial risk. Change in stock market prices, interest rates and exchange rates can have great significance. It is therefore not surprising at all that financial instruments for the safeguard of all such risks have developed. These instruments are known as Financial Derivatives.

What are Derivatives:

Derivatives are financial instruments whose value depends upon the values of other more basic underlying variables or assets. The underlying asset could be a stock-index, a foreign currency, a commodity or an individual stock.

A primitive form of derivatives is the forward contract which is known as the most ancient form of derivatives. It goes on to take complex forms like futures, swaps, options and exotics. A primary economic function of futures markets is to hedge, i.e. buy and sell futures contract to offset the risk of changing cash-market prices.

In Stock Markets:

the major benefit of investing in stock index futures (a product based on the stock market index) is that it helps in diversifying risk. If you buy a futures contract, your risk is spread across all the stocks that form the index. For instance an NSE 50 contract the risk would be spread over all 50 stocks.

In Currency Markets:

To guard against a change in the value of rupee, you could take

a forward cover e.g. if a company is scheduled to pay \$ 10m, 3 months from now and fears that rupee may depreciate (say from Rs. 47.16 to Rs. 49.50) entailing a higher cash outflows, it could prevent this by buying \$ 10m at current prices plus a forward premium 3 months from now. In other words take a forward cover. If the spot price of dollar 3 months later forward covers, your company will have gains.

So Financial derivatives are financial investments whose prices are derived from prices of other financial instruments. Derivatives get their values from an underlying assets e.g. equity share itself is a derivative. Since it derives its value from the firm's underlying assets. -If a person takes an insurance policy against the property covering all risks is also a derivative instrument on the property.

Forwards, Futures, Swaps and Options--- as the Subsets of Derivatives: Various types of contracts are in vogue in markets for commodities and financial instruments. In India, the FCRA (Forward Contracts (Regulation) Act 1952 classifies different types of contracts as follows-

i) Ready Delivery Contracts (RDC): which provide for delivery of goods/instruments and payment of a price therefore either immediately or within 11 days after the time of contract. It leads to spot or cash transactions which takes place at current commodity price or interest rate or exchange rate and so on.

ii) Forward Contracts (FC): it is a contract for delivering goods in future. Also known as specific delivery contract (SDC), forward transaction are spot transactions which are postponed for execution to a future to a fix date. The FC or FDC is specifically of two types: **a) NTSDC called non-transferable specific delivery contracts:** in these the rights and liabilities mentioned in the contracts are not transferable. **b) TSDC called transferable specific delivery contracts:** are those in which the rights and liabilities mentioned in the contracts are transferable.

➤ **Futures:** A financial future is a notional commitment to buy or sell on a specified future date, a standard quantity of financial instrument as a price determined in the present time. This is called the future price. It is very rare for a futures contract to be used for the exchange of financial instruments in fact many contracts have no facility for the exchange of the financial instrument. Instead of that financial futures markets are independent of the underlying cash markets. Although operating parallel to that market. For example currency futures are different instruments from the currencies themselves. But currency futures prices move in the same way that are related to the movements in currency prices. However since futures markets are independent of the markets in the underlying instruments, so this relationship is less than perfect. And this is possible for futures

prices to exhibit changes that have no parallel in the underlying currency markets. The main economic function of futures is to provide a means of hedging. A hedger seeks to reduce an already existing risk. This risk reduction could be achieved by taking a futures position that would tend to show a profit in the event of a loss on the underlying position and vice versa (Means a loss in the case of a profit on the underlying position).

➤ **Forwards:** Forward Contracts (FCs) or forwards have survived throughout many decades and centuries in many countries including India. They can be termed as the forerunners of the future. The contractual provision and the obligations of trading parties greatly resemble in case of both futures and forwards. They are virtually identical in concept and intended use. But there are important differences also between them which must be noted:

	Futures	Forwards
1.	Futures are standardized instruments.	Forwards are customized instruments.
2.	Futures are smaller in size.	Forwards are larger in size.
3.	Futures are traded only on organized stock exchanges.	Forwards can be traded on OTC markets and unorganized changes.
4.	Only 5% futures are settled by actual delivery.	More than 90% of the forwards are settled by actual delivery.

➤ **Options:** Options are contracts between option writer (sellers) and buyers. The seller has to deliver and entitle the latter without obligation to buy stated quantities of assets with stated qualities at some future dates at today's contracted prices which are called exercise prices or strike prices. When the buyers have right to receive the delivery of assets, they are known as "Call Options" and when they have right to receive the payment by handling over the assets they are known as "Put Options". "Roughly speaking call = buy and put = sell".

The date on which the buyers actually exercise the option is called The Exercise Date, while the last day by which the option has to be exercised is called The Expiry Date. The options in whose case the two dates can be different are known as American options whereas those in whose case the two dates are the same are called European options.

Many types of options have been of recent origin e.g. stock index options and currency options. Stock index options enable investors to trade on general stock market movement. Another recent addition to options market has been the foreign currency exchange or foreign exchange or currency options. Which act as vehicles to protect against adverse exchange rate fluctuations?

➤ **Swaps:** Swaps are agreements between two parties to exchange assets for a specified period of at a predetermined interval. These include both spot and forward transactions in one agreement and are generally customized transactions. A party can reverse or unwind a swap position before the end of the term by cancelling the agreement and delivering the final difference payment to the counter party. Alternatively it can write a mirror contract to exactly offset the original swap in the secondary swap market. The forerunner of the swap was "Parallel Loans" which helped companies to reduce their exposure to fluctuating foreign exchange rate. In a parallel loan the following thing shall happen: e.g. an American company would give a loan denominated in dollars to the UK company and simultaneously, the UK company give a loan of equivalent amount denominated in pound sterling to the American company, thereby avoiding the problems of unfavorable fluctuations in foreign currencies. Parallel loan have been now largely substituted by currency swap.

Conclusion

As it has been empirically observed that capital markets in India are highly sensitive as well as inefficient. So there is a dire need for the corporates to aggressively protect their required returns by shifting the uncontrollable financial risks. So in this context, derivatives are an important risk management apparatus. The risks are considerably reduced by hedging through derivative instrument has shown by the above example. The derivatives have the objectives of hedging, speculation, price discovery, allocation of resources and transactional efficiency. The derivatives provide several advantages such as increased volumes, lower cost of transactions, hedging against risks and others.

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