

Financial Derivatives Markets in India— Some Glaring Issues

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INTRODUCTION

The concept of derivative is as long as people have been trading with one another. Traders entered into contracts with one another for future delivery of specified amount of commodities at specified price. The basic purpose for pre-arranging a buyer or seller for a stock of commodities in early forward contracts was to minimise the possibility that large swings would inhibit marketing the commodity in future.

Derivatives are recognized as a way of hedging risks in commercial and financial transactions. A Derivative is a financial instrument derived from some other asset; rather than trade or exchange of the asset itself, market participants enter into an agreement to exchange money, assets or some other value at some future date based on the underlying asset. A simple example is a futures contract: an agreement to exchange the underlying asset (or equivalent cash flows) at a future date. The exact terms of the derivative (the payments between the counterparties) depend on, but may or may not exactly correspond to, the behaviour or performance of the underlying asset. The underlying asset can be equity, forex, commodity or any other asset.

According to the IMF, "Derivatives are financial instruments that are linked to a specific financial instrument or indicator or commodity and through which specific financial risks can be traded in financial markets in their own right. The value of a financial derivative is derived from the price of a underlying item, such as an asset or index. Unlike debt securities, no principal is advanced to be repaid and no investment income accrues."

Financial derivatives are essentially devised as a hedging device of a business from risks over which a business has no or little control. Where there are risks, there are derivatives to strip the risk and transfer it. The need for derivatives is for protecting the interests of the investors. The derivatives are viewed by the investors- both the individual and institutional as the hedging mechanism i.e., ways and means of minimising the risks associated with the volatile financial market fluctuations. To reduce the risk, the concept of derivatives comes into the picture. Besides being used as a hedging mechanism, derivatives are likely to facilitate speculative buying and selling resulting in the trading volume of derivatives being much higher than the values of the underlying asset. The main reasons for the growth of financial derivatives includes innovations in the derivatives markets, improved communication facilities, increased volatility in financial market and globalisation of financial markets.

TYPES OF FINANCIAL DERIVATIVES

Derivatives are wide array of financial contracts, which include *forwards, future, swaps* and *options*.

Forwards

A forward contract is a customized contract between two entities, where settlement takes place on a specific date in the future at today's pre-agreed price. Forwards are used for covering currency risks, commodity prices fluctuations etc.

Futures

A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future at a certain price. Futures contracts are special types of forward contracts in the sense that the former are standardized exchange-traded contracts

Swaps

Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They can be regarded as portfolios of forward contracts. The two commonly used swaps are:

- **Interest rate swaps:** These entail swapping only the interest related cash flows between the parties in the same currency.

- **Currency swaps:** These entail swapping both principal and interest between the parties, with the cash flows in one direction being in a different currency than those in the opposite direction.

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Options

These are the contracts between two parties- one who creates an option and obligates to sell and the other who is the buyer who gets entitled without obligation to buy a particular asset at a contracted price within a specified period. Options are of two types - calls and puts. Calls give the buyer the right but not the obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date. Puts give the buyer the right, but not the obligation to sell a given quantity of the underlying asset at a given price on or before a given date.

PARTICIPANTS IN THE DERIVATIVES MARKET

There are three broad categories of participants trade in the derivatives market - *Hedgers, Speculators and arbitrageurs*.

Hedgers

They use futures or options markets to reduce or eliminate the risk associated with price of an asset.

Speculators

They use futures and options contracts to get extra leverage in betting on future movements in the price of an asset. They can increase both the potential gains and potential losses by usage of derivatives in a speculative venture.

Arbitrageurs

They are in business to take advantage of a discrepancy between prices in two different markets. If, for example, they see the futures price of an asset getting out of line with the cash price, they will take offsetting positions in the two markets to lock in a profit.

DERIVATIVE MARKET FUNCTIONS

The following are the various functions, which are performed by the derivatives market :-

- ☐ The derivatives market help to transfer risks from risk averse people to risk oriented people.
- ☐ The derivatives market helps to increase savings and investment in the long run.
- ☐ Derivatives help in discovery of future as well as current prices since the prices in an organised derivatives market reflect the perceptions about the future.
- ☐ Derivatives enhance the volume traded in market because of participation of risk averse people in large numbers.
- ☐ Derivatives also act as a catalyst for new entrepreneurial activities. They often energize others to create new businesses, new products and new employment opportunities.

FINANCIAL DERIVATIVES MARKET IN INDIA

The first step towards introduction of derivatives trading in India was the promulgation of the Securities Laws (Amendment) Ordinance, 1995, which withdrew the prohibition on options in securities. SEBI set up a committee under the Chairmanship of Dr.L.C.Gupta on November 18, 1996 to develop appropriate regulatory framework for derivatives trading in India. The committee submitted its report on March 17, 1998 prescribing necessary pre-conditions for introduction of derivatives trading in India. The committee recommended that derivatives should be declared as 'securities' so that regulatory framework applicable to trading of 'securities' could also govern trading of securities. The committee was of the view that introduction of derivatives trading is an important component of modernising the capital markets. The trading in derivatives will provide a much needed hedge mechanism to the big players and institutional investors in the market. SEBI also set up a committee in June 1998 under the Chairmanship of Prof.J.R.Varma, to recommend measures for risk containment in derivatives market in India. The report, which was submitted in October 1998, worked out the operational details of margining system, methodology for charging initial margins, broker net worth, deposit requirement and real-time monitoring requirements.

The Securities Contract Regulation Act (SCRA) was amended in December 1999 to include derivatives within the ambit of 'securities' and the regulatory framework was developed for governing derivatives trading. Derivatives are securities under the Securities Contract Regulation Act, 1956, which defines derivatives to include: -

- A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security.
- A contract, which derives its value from the prices, or index of prices, of underlying securities.

The Act stated that derivatives shall be legal and valid only if such contracts are traded on a recognized stock exchange. Derivatives trading in India commenced after SEBI granted the final approval to this effect in May 2001. SEBI permitted the derivative segments of two stock exchanges, NSE and BSE. SEBI approved trading in index futures

contracts based on S&P CNX Nifty and BSE-30(Sensex) index. This was followed by approval for trading in options based on these two indexes and options on individual securities. The trading in BSE Sensex options commenced on June 4, 2001 and the trading in options on individual securities commenced in July 2001. Futures contracts on individual stocks were launched in November 2001. The derivatives trading on NSE commenced with S&P CNX Nifty Index futures on June 12, 2000. The trading in index options commenced on June 4, 2001 and trading in options on individual securities commenced on July 2, 2001. Single stock futures were launched on November 9, 2001.

TRENDS IN INDIAN DERIVATIVES MARKETS

The growth of derivatives trading in India is concentrated on the index and stock futures. The derivatives market in India is dominated by NSE with its share of over 99% in the turnover as well as the number of contracts. The trading volume in the BSE derivative segment has been decreasing since 2005. There are huge upward trends in the turnover of NSE segment. NSE turnover was Rs. 2365 crore in 2000-01 and in 2005-06 it was Rs. 4824251 crore (*See Table-I*).

TABLE - I

TURNOVER IN THE DERIVATIVE SEGMENTS AT BSE AND NSE (Rs. Crore)							
Year	Index future	Stock futures	Interest rate futures	Index options	Stock option	Total	Open interest at the end of the period
BSE							
2000-01	1673	-	-	-	-	1673	-
2001-02	1276	452	-	83.8	114	1922	-
2002-03	1811	644	-	1.4	21	2478	7
2003-04	6572	5171	-	0.0	332	12074	1
2004-05	13600	213	-	2297.2	03	16112	0
2005-06	05	0.48	-	3.20	0.09	8.77	0
NSE							
2000-01	2365	-	-	-	-	2365	-
2001-02	21482	51516	-	3765	25163	101925	2150
2002-03	43951	286532	-	9248	100134	439865	2194
2003-04	554462	1305949	20	52823	217212	2130649	7188
2004-05	772174	1484067	0	121954	168858	2547053	21052
2005-06	1513791	2791721	0	338469	180270	4824251	38469

SOURCE: NSE AND BSE.

The turnover in the cash and F&O segment in NSE also gained a considerable growth. Derivative turnover as percentage of cash turnover was 0.2% in 2000-01, which was 307.4% in 2005-06 (*See Table-II*).

TABLE - II

TURNOVER IN THE CASH AND F&O SEGMENTS IN NSE			
Year	Cash segment (Rs. Crore)	Derivative segment (Rs. Crore)	Derivative turnover as %age of cash turnover
2000-01	1339510	2365	0.2
2001-02	513167	101925	19.9
2002-03	617989	439865	71.2
2003-04	1099534	2130649	193.8
2004-05	1140072	2547053	223.4
2005-06	1569558	4824251	307.4

SOURCE: SEBI BULLETIN.

Investor's interest in individual stock based products is higher than the products based on indices. The option segment is less popular in India compared to the futures. The contracts are settled through cash in the derivative segment in India. Physical settlement has not been introduced in Indian derivative market. India is the global leader in the single stock futures both in terms of the numbers of contracts traded (volume) and turnover. India ranked 9th in the overall turnover in February 2006 (*See Table-III*).

TABLE - III

INDIA'S POSITION IN GLOBAL DERIVATIVE MARKETS (FEBRUARY, 2006)			
Product	Rank	No. of Contracts (In lakh)	Notional Turnover (US\$ million)
Single stock futures	1	74.43	65283
Index futures	12	51.87	35355
Stock options	10	4.01	3452
Index options	10	10.66	7311
Total turnover	09	140.98	111401

SOURCE: World Federation of Stock Exchanges.

ACCOUNTING AND TAXATION ASPECTS OF DERIVATIVES

The Institute of Chartered Accountants of India (ICAI) has issued guidance notes on accounting of index futures contracts from the view point of parties who enter into such futures contracts as buyers or sellers. For other parties involved in the trading process, like brokers, trading members, clearing members and clearing corporations, a trade in equity index futures is similar to a trade in, say shares, and does not pose any peculiar accounting problems. The income tax Act does not have any specific provision regarding taxability from derivatives. The only provisions, which have an indirect bearing on derivative transactions, are sections 73(1) and 43(5). Section 73(1) provides that any loss, computed in respect of a speculative business carried on by the assessee, shall not be set off except against profits and gains, if any, of speculative business. In the absence of a specific provision, it is apprehended that the derivatives contracts, particularly the index futures which are essentially cash-settled, may be construed as speculative transactions and therefore the losses, if any, will not be eligible for set off against other income of the assessee and will be carried forward and set off against speculative income only up to a maximum of eight years. As a result an investor's losses or profits out of derivatives even though they are of hedging nature in real sense, are treated as speculative and can be set off only against speculative income.

RISKS ASSOCIATED WITH THE USE OF DERIVATIVES

All the derivatives derive its value from some other financial price, so they cannot introduce any new or different type of risk into the financial system. Basically, derivative is a facility for transferring the risks and concentrating their risk management into a few entities. However, the common risks associated with the derivatives are:- □ Risks to the economy from a breakdown of all the markets in the country. □ Risks to the individual users owing to the mistakes in their positions. □ Risks to the clearing house owing to large market fluctuations.

CONCLUSION

Financial derivatives have changed the face of finance by creating new ways to understand, measure, and manage risks. Capital market is the major resource of long term funding, and derivatives have vital role to play in enhancing the value of investors, potential to improve earnings and reducing the risks. Derivative market in India stimulated because of changes in interest rates and liberalisation process. The derivative market performs a number of important functions. There has been substantial progress with regard to the introduction of derivatives. India emerged as the global leader in the single stock futures, both in terms of the number of contracts traded and also the turnover. SEBI has prescribed an independent clearing mechanism for the purpose of clearing and settlement of trade in derivatives. SEBI has also prescribed risk containment measures to be complied with and to be implemented by the derivatives exchange/ derivatives segment of an exchange and the clearing corporation/ clearing house of an exchange. Financial derivatives should be considered part of any firm's risk-management strategy to ensure that value-enhancing investment opportunities are pursued.

"Derivatives are like prescription drugs. They can be beneficial when used appropriately but they may be habit-forming and carry the risk of unpleasant side effects." -David Litvack(2006).

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