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Benefits, Risks and Opportunities of Financial Derivatives in Bangladesh

Ayrin Sultana[1], Abu Sayed Mohammod Nazmul Haque[2], Mohammad Jashim Uddin[3]

[1](*Finance & Banking, University of Information Technology and Sciences, Bangladesh)*
[2](*Finance & Banking, University of Information Technology and Sciences ,Bangladesh)*
[3](*Finance & Banking, Comilla University, Bangladesh)*

Abstract: *The paper explains the essence of derivatives and identifies the different types of that exist. The article examines the technologies of credit derivatives application in the financial markets, especially the most common ones, credit default swaps. Both positive and negative aspects of their application to risk management have been revealed. Moreover, the grounds for their considering to be responsible for the global crisis aggravation have been identified. The prospects of CDS utilization in the development of a new global financial order have been illustrated. The paper briefly explains how derivative activity level can be monitored and then takes a look at the benefits, risks and opportunities of derivative in Bangladesh.*

Keywords: *hedge funds, credit default swaps (CDS), swaps, new financial order.*

I. Introduction

One of the most significant events in the securities markets has been the development and expansion of derivatives. The world's largest financial market today is therefore without doubt the derivative market. Martin Taylor, former Group Chief Executive of Barclays, compare risk with energy; "Risk is neither created, nor destroyed, merely passed around." This is where the speculators play an important role in the derivatives market. In this research paper furnish the details about – Derivatives and Terminology of Derivatives - regulatory requirements for derivatives- application of derivatives- risk management- trading futures – valuation of future - pay off futures –theoretical model for future pricing- trading options– valuation of option- option strategies- determination of option prices- derivatives trading on exchange- settlement of derivatives - settlement of futures market to market settlement- final settlement for futures- settlement of options- daily premium settlement- exercise settlement - accounting and taxation of derivatives, Global equity derivatives- cause and effect of global financial crisis and how it affect the derivative market- Introduction about Bangladesh capital market-derivatives in Bangladesh-milestones in the development of Bangladesh derivative market- benefits, risks and opportunities of derivatives in Bangladesh.

II. Literature Review

According to Greenspan (1997) "By far the most significant event in finance during the past decades has been the extraordinary development and expansion of financial derivatives..."

Avadhani (2000) stated that a derivative, an innovative financial instrument, emerged to protect against the risks generated in the past, as the history of financial markets is replete with crises). Events like the collapse of the fixed exchange rate system in 1971, the Black Monday of October 1987, the steep fall in the Nikkei in 1989, the US bond debacle of 1994, occurred because of very high degree of volatility of financial markets and their unpredictability. Such disasters have become more frequent with increased global integration of markets.
Sahoo (1997) opines "Derivatives products initially emerged, as hedging devices against fluctuation in commodity prices and the commodity-linked derivatives remained the sole form of such products for many years. Marlowe (2000) argues that the emergence of the derivative market products most notably forwards, futures and options can be traced back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. It is generally stated that regulation has an important and critical role to ensure the efficient and smooth functioning of the markets.

According to Sahoo(1997) the legal framework for derivatives trading is a critical part of overall regulatory framework of derivative markets. The purpose of regulation is to encourage the efficiency and competition rather than impeding it.

Hathaway (1998) stated that, while there is a perceived similarity of regulatory objective, there is no single preferred model for regulation of derivative markets. Derivatives include a wide range of financial contracts, including forwards, futures, swaps and options. Forward contract is an agreement between two parties

calling for delivery of, and payment for, a specified quantity and quality of a commodity at a specified future date.

The price may be agreed upon in advance, or determined by formula at the time of delivery or other point in time" .Just like other instruments, it is used to control and hedge currency exposure risk (e.g. forward contracts on USD or EUR) or commodity prices (e.g. forward contracts on oil).

Patwari and Bhargava (2006) explain it in simple words and further add that one of the parties to a forward contract assumes a long position and agrees to buy the underlying asset at a certain future date for a certain price and the other agrees to short it. The specified price is referred to as the delivery price. The parties to the contract mutually agree upon the contract terms like delivery price and quantity."A Futures Contract is a standardized contract, traded on a futures exchange, to buy or sell a certain underlying instrument at a certain date in the future, at a pre-set price. The future date is called the delivery date or final settlement date. The pre-set price is called the futures price. The price of the underlying asset on the delivery date is called the settlement price. The futures price, naturally, converges towards the settlement price on the delivery date".

Sirisha (2001) explain the Types of Futures which are as follows: Foreign Exchange Futures Currency Futures Stock Index Futures Commodity Futures.

III. Methodology

This report contains information gathered from secondary sources. Most of the information was collected from different web sites, some economic journals. A series discussion and conversation with the members and officials of the Dhaka Stock Exchange Ltd., some teaching professionals of Finance Department of Dhaka University as well as a few expertises in the capital market also provides some information about the derivatives. Practical work exposures at different departments and relevant file study in the Dhaka Stock Exchange Ltd. also provided strong base platform for preparing this report. Secondarily, various books and articles regarding Derivatives have been used in designing the report format.

IV. Objective Of The Study

1. To have a look on the evolution of various derivative products.
2. To find out the trading mechanism of different derivative products.
3. To examine the various issues in the Bangladeshi derivative market and future prospects of this market.

V. History Of Development Expansion And Characteristics

The first exchange for trading derivatives appeared to be the Royal Exchange in London, which permitted forward contracting. The celebrated Dutch Tulip bulb mania was characterized by forward contracting on tulip bulbs around 1637. The first 'futures' contracts can be traced to the Yodoya rice market in Osaka, Japan around 1650.

In 1922 the federal government of U.S. made its first effort to regulate the futures market with the Grain Futures Act. In 1936 options on futures were banned in the United States. In 1975 the Chicago Board of Trade created the first interest rate futures contract, one based on Ginnie Mae (GNMA) mortgages. In 1975 the MERC responded with the Treasury bill futures contract. This contract was the first successful pure interest rate futures. In 1977, the CBOT created the T -bond futures contract, which went on to be the highest volume contract. In 1982 the CME created the Eurodollar contract, which has now surpassed the T -bond contract to become the most actively traded of all futures contracts. In 1982, the Kansas City Board of Trade launched the first stock index futures, a contract on the Value Line Index. The Chicago Mercantile Exchange quickly followed with their highly successful contract on the S&P 500 index.

The 1980s marked the beginning of the era of swaps and other over-the-counter derivatives. The first swap agreements were executed by the Salomon Brothers in London in 1981. Since Exchange traded financial derivatives were introduced in India in June 2000 at the two major stock exchanges, NSE and BSE. There are various contracts currently traded on these exchanges.

VI. Classification Of Derivatives

In broad terms, there are two distinct groups of derivative contracts, which are distinguished by the way they are traded in market:

1.**Over-the-counter (OTC)** derivatives are contracts that are traded (and privately negotiated) directly between two parties, without going through an exchange or other intermediary.

2.Exchange-traded derivative contracts (ETD) are those derivatives instruments that are traded via specialized derivatives exchanges or other exchanges.

The major classes of derivatives contracts are:

3. Forward Contract A contract to buy or sell a specified amount of a designated commodity, currency, security, or financial instrument at a known date in the future and at a price set at the time the contract is made.

4.Futures Contract A contract to buy or sell an asset at a specific time in the future at a set price while the contract is made.

5.Option Contract A contract that offer to the buyer or seller the right without an obligation to buy or sell an asset a stipulated price, called the strike price.

6.Swap Contract The most common type of swap is the "plain vanilla" interest rate swap, in which the first party agrees to pay the second party cash flows equal to interest at a predetermined fixed rate on a notional principal. The second party agrees to pay the first party cash flows equal to interest at a floating rate on the same notional principal.

VII. The Role Of Derivatives

Derivatives have played an increasingly important and often inter-related role in the context of the stock market.

Thus the derivatives are used by investors to:

- provide leverage (or gearing), such that a small movement in the underlying value can cause a large difference in the value of the derivative;
- speculate and make a profit if the value of the underlying asset moves the way they expect (e.g., moves in a given direction, stays in or out of a specified range, reaches a certain level);
- hedge or mitigate risk in the underlying, by entering into a derivative contract whose value moves in the opposite direction to their underlying position and cancels part or all of it out;
- obtain exposure to the underlying where it is not possible to trade in the underlying (e.g., weather derivatives);

VIII. Strategies Of Derivatives

Derivatives can be used to mitigate the risk of economic loss arising from changes in the value of the underlying.

The basic derivative strategies are:

Hedging

In finance, a hedge is a position established in one market in an attempt to offset exposure to price fluctuations in some opposite position in another market with the goal of minimizing one's exposure to unwanted risk. If you're hedging, you'd buy derivatives as a kind of insurance policy.

Speculation

Some individuals and institutions will enter into a derivative contract to speculate on the value of the underlying asset, betting that the party seeking insurance will be wrong about the future value of the underlying assets. Speculation is a different side of dealing in derivatives.

Arbitrage

Individuals and institutions may also look for arbitrage opportunities, as when the current buying price of an asset falls below the price specified in a futures contract to sell the asset.

Valuation of Derivatives-Pricing

Prices of derivatives are commonly referred to in two different ways: market price and arbitrage-free price.

Market price, i.e. the price at which traders are willing to buy or sell the contract.

Arbitrage-free price, meaning that no risk-free profits can be made by trading in these contracts; see rational pricing.

IX. Global Derivatives-Cause & Effect

The International Swaps & Derivatives Assn. recently estimated the worldwide market at $ 105 trillion. The Office of the Comptroller of the Currency (OCC) says U.S. commercial banks held $ 56 trillion of derivatives at the end of 2002, and by comparison the GDP of the US was estimated to 10.4 trillion the same year.

The notional outstanding value of Global OTC derivatives contracts rose by 40% from $298 trillion at end-2005 to $415 trillion at end-2006. Average daily global turnover rose by two-thirds, from $1,508bn to $2,544bn between April 2004 and April 2007.

US: Figures below are from SECOND QUARTER, 2008

- Total derivatives (notional amount): $182.2 trillion (SECOND QUARTER, 2008)
  - Interest rate contracts: $145.0 trillion (80%)
  - Foreign exchange contracts: $18.2 trillion (10%)
  - 2008 Second Quarter, banks reported trading revenues of $1.6 billion
- Total number of commercial banks holding derivatives: 975

According to various distinguished sources including the Bank for International Settlements (BIS) in Basel, Switzerland -- the central bankers' bank -- the amount of outstanding derivatives worldwide as of December 2007 crossed USD 1,144 Quadrillion, ie, USD 1,144 Trillion. The main categories of the USD 1,144 Quadrillion derivatives market were the following:

1. Listed credit derivatives stood at USD 548 trillion;

2. The Over-The-Counter (OTC) derivatives stood in notional or face value at USD 596 trillion and included:

a. Interest Rate Derivatives at about USD 393+ trillion;
b. Credit Default Swaps at about USD 58+ trillion;
c. Foreign Exchange Derivatives at about USD 56+ trillion;

Let us think about the invisible USD 1,144 quadrillion equations with black swan variables – i.e, 1,144 trillion dollars in terms of outstanding derivatives, global Gross Domestic Product (GDP), real estate, world stock and bond markets coupled with unknown unknowns or "Black Swans". What would be the relative positioning of USD 1,144 quadrillion for outstanding derivatives, i.e. what is their scale:

1. The entire GDP of the US is about USD 14 trillion.
2. The entire US money supply is also about USD 15 trillion.
3. The GDP of the entire world is USD 50 trillion. USD 1,144 trillion is 22 times the GDP of the whole world.
4. The real estate of the entire world is valued at about USD 75 trillion.
5. The world stock and bond markets are valued at about USD 100 trillion.
6. The big banks alone own about USD 140 trillion in derivatives.
7. Bear Stearns had USD 13+ trillion in derivatives and went bankrupt in March. Freddie Mac, Fannie Mae, Lehman Brothers and AIG have all 'collapsed' because of complex securities and derivatives exposures in September.

Possible large losses

The use of derivatives can result in large losses due to the use of leverage, or borrowing. However, investors could lose large amounts if the price of the underlying moves against them significantly. There have been several instances of massive losses in derivative markets, such as:

- The need to recapitalize insurer American International Group (AIG) with $85 billion of debt provided by the US federal government. An AIG subsidiary had lost more than $18 billion over the preceding three quarters on Credit Default Swaps (CDS) it had written. It was reported that the recapitalization was necessary because further losses were foreseeable over the next few quarters.
- The loss of US$6.4 billion in the failed fund Amaranth Advisors, which was long natural gas in September 2006 when the price plummeted.
- On December 6, 1994, Orange County declared bankruptcy, from which it emerged in June 1995. The county lost about $1.6 billion through derivatives trading. Orange County was neither bankrupt nor insolvent at the time; however, because of the strategy the county employed it was unable to generate the cash flows needed to maintain services.

X. Benefit Of Derivatives

Derivatives are a primary aspect of risk management, because they offer financial planners and risk managers to hedge business risk. The main use of derivatives is to minimize risk for one party while offering the potential for a high return (at increased risk) to another.

Nevertheless, the use of derivatives also has its benefits:

- Derivatives facilitate the buying and selling of risk and many people consider this to have a positive impact on the economic system.
- Derivatives offset the risks of changing underlying market prices. Thus it helps in reducing the risk associated with exposures in an underlying market by taking counter- positions in the futures market.

- Derivatives are highly leveraged instruments; hence the investor is required to pay a small fraction of the value of the total contract as margins.
- Incentive to make profits with minimal amount of risk capital.
- Derivatives market is lead economic indicators.
- Former Federal Reserve Board chairman Alan Greenspan commented in 2003 that he believed that the use of derivatives has softened the impact of the economic downturn at the beginning of the 21st century.

Introduction of Future

A future contract is one where there is an agreement between two parties to exchange any assets or currency or commodity for cash at a certain future date, at an agreed price.

The characteristics of future contracts are:

- Futures were designed to solve the problems that existed in the forward markets.
- Futures contracts are standardized forward contracts that are traded on an exchange.

- To facilitate liquidity, exchange specified standard features for the contract
  Quantity and quality of the underlying
  Date and month of delivery
  Units of price quotation and min. price change
  Location and mode of settlement

Futures Terminology

Future contracts have some terminologies:

- Spot price : Price at which asset trades in the spot market.
- Futures price : Price at which futures contracts trade in the futures market.
- Contract cycle : The period over which a contract trades.
- Expiry Date : Last date of the contract.
- Cost of Carry: Relationship between futures and spot price is determined by cost of carry. For financial assets it is interest cost.

- Initial margin : Amount deposited initially to trade futures.

- Marking to Market: Reflection of change in value of market. A futures portfolio based on the futures closing price

Margins

Initially, investors have to maintain minimum margin requirements with their brokers. These initial margin requirements are based on 99% value at risk over a one day time horizon. This is also known as SPAN Margin. The Mark to Market Margins is calculated at the end of the day.

Daily Mark to Market Settlement

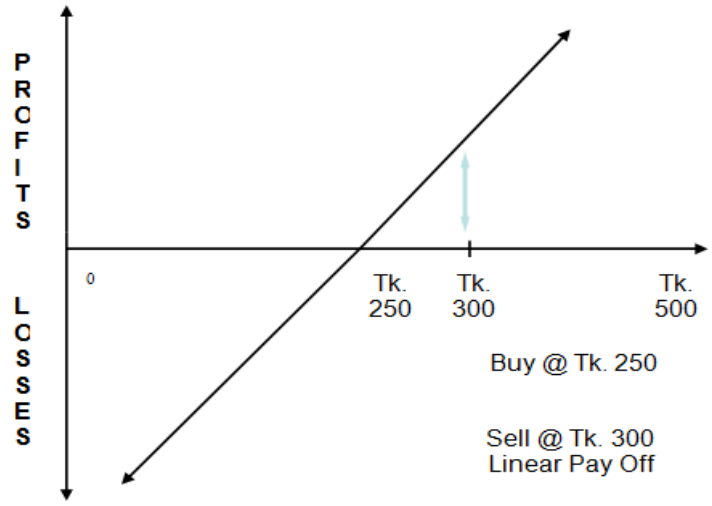
Spot Price of Underlying is @ Tk. 490	Mr. Raju Buys Futures @ Tk. 510	MTM Gain / Loss (Tk.)	Mr. Ajay Sells Futures @ Tk. 510	MTM Gain / Loss (Tk.)
500	512	+ 2	512	- 2
510	520	+ 8	520	- 8
495	510	- 10	510	+ 10
505	515	+ 5	515	- 5
515	525	+ 10	525	- 10

Futures Payoff

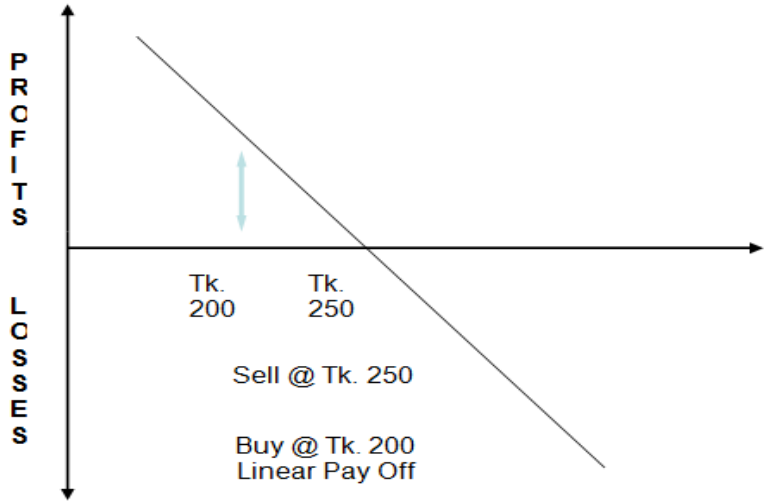
A payoff is the likely profit or loss that would accrue to a market participant with change in the price of the underlying asset.

Futures have a linear payoff, i.e. the losses as well as profits for the trader of futures contract are unlimited.

Payoff diagram for futures



Payoff diagram for futures



Pricing of Futures

Pricing of futures:

- Futures price = Spot Price + Cost of carry
- Cost of carry = interest rate*
- At expiry : Futures price = Spot price

*for financial futures

Thus Futures Price is

- F = S + C
- F = S(1 + r) ^ t

Example: If index is at 1000, Int. is @ 6% p.a., a 1 month futures would cost

- F = 1000 * (1 + 0.06) ^ (31/365)
- F = 1005

Futures price when there is a dividend yield:

Futures Price is

– $F = S(1 + r - q) \wedge t$

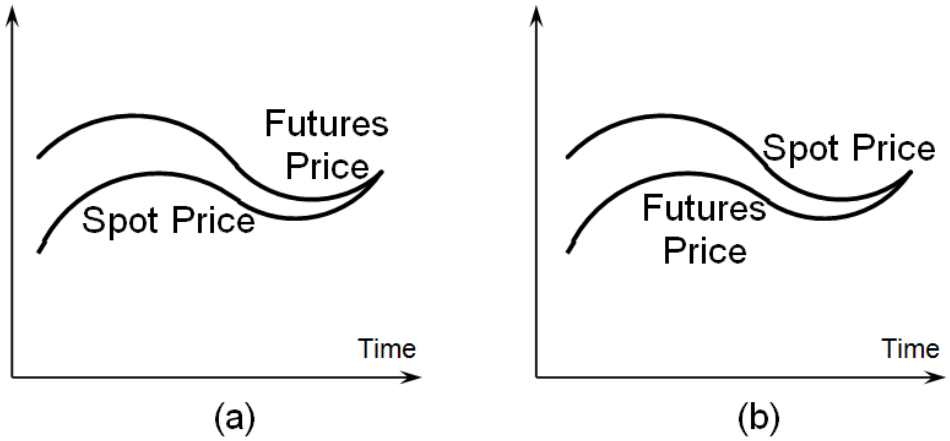
Where F = Futures price, S = Spot index value, r = Cost of Financing, q = Expected dividend yield, t = Holding period.

Example: If Nifty trades at 1200, cost of financing =15%, dividend yield = 2% annualized, a two month Nifty futures will trade at:

$F = 1200 (1 + 0.15 – 0.02) \wedge (60/365)$

$= 1224.35$

Final Settlement – convergence of Futures to Spot:



Introduction to Options

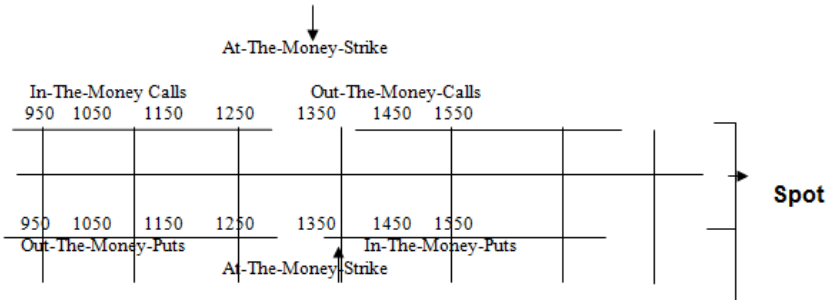
Options on equities began trading on the Chicago Board Options Exchange (CBOE) in 1972; custom options available Over the Counter (OTC) since the 1920s. **Options on currencies and bonds** traded OTC among banks in the late 1970s. **Exchange-traded options** on currencies began on Philadelphia Stock Exchange in 1982. **Interest rate options** began trading on the CME in 1985.

Terminology of Options

Terminologies of options are

- **Index options:** Have index as the underlying
- **Stock Options:** Have stock as the underlying
- **Option buyer:** Buys the option by paying premium and gets the right to exercise options on writer/seller.
- **Option seller/writer:** Sells/writes the option and receives the premium and is hence under obligation to buy/sell asset if the buyer exercises option.
- **Option premium:** Price paid by the buyer to seller to acquire the right. Comprises of Intrinsic Value and Time Value.
- **Strike / Exercise price:** Price at which the underlying may be purchased or sold.
- **Expiry date:** The date when options to be exercised/ traded. Options cease to exist after expiry.
- **In the money options**
  It is an option that will lead to a positive cash flow to buyer when exercised.
  Call option is in the money when CMP is higher than strike.
  Put option is in the money when CMP is lower than strike.
- **At the money options**
  It is an option that will lead to a zero cash flow to buyer when exercised.
  Options are at the money when CMP is equal to strike.
- **Out of the money options**
  It is an option that will lead to a negative cash flow to buyer when exercised, however OTM options can never be exercised / assigned.
  Call option is out of money when CMP is lower than strike.
  Put option is out of money when CMP is higher than strike.

Certain Concepts **In the money**- positive cash flow if exercised immediately.
At the money - zero cash flow if exercised immediately.
Out of the money - negative cash flow if exercised immediately.



Classifications of Options

Generally options are of two types:

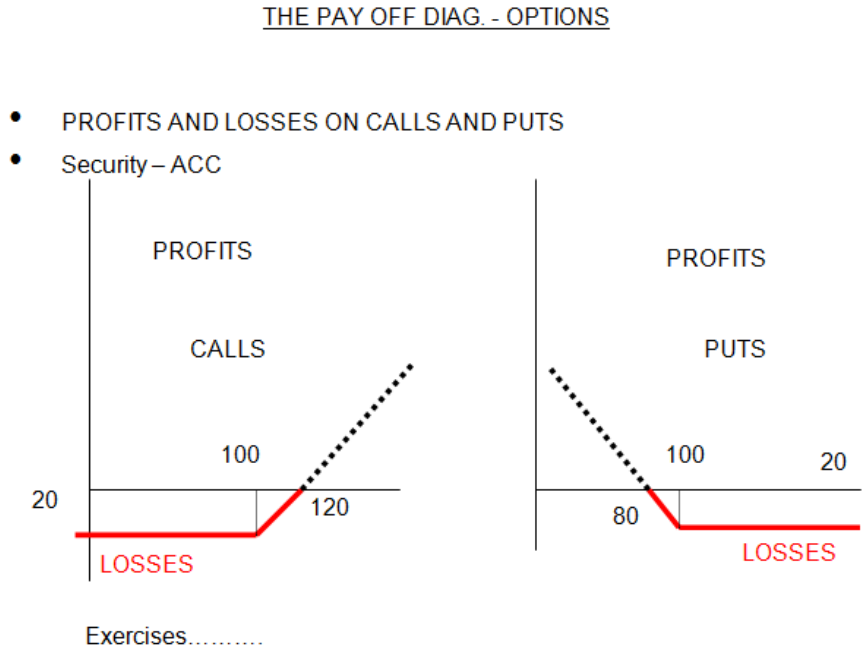
CALL: It gives the buyer the right but not the obligation to buy.

PUT: It gives the buyer the right, but not the obligation to sell.

Options can be classified in to two categories by Exercise style:

- EUROPEAN Option is an option that can be exercised only on its expiration date.
- AMERICAN Option is an option that can be exercised any time up until and including its expiration date.

Options Payoff



Options Pricing

The price of a put or call option depends upon the market behavior of the equity that underlines the option. Generally the price at which the stock under option may be put or called is the contract price. The contract price remains fixed during the life of the contract.

The amount the buyers pay for the option privilege in purchasing an option is called the premium. Sometimes, it may be called as the option money.

Pricing of options:

Intrinsic Value (IV)

Difference between spot and strike

ITM has IV, ATM and OTM have zero IV

Time Value (TV)

Difference between the premium and intrinsic value
ITM have both IV and TV, ATM and OTM have only TV
Longer the expiry more the TV, on expiry TV is 0

Example: Black and Scholes Model Pricing:

- C = S * N (d1) - X * e- rt * N (d2)
- P = X * e- rt * N (-d2) - S * N (-d1)

where : d1=[ln(S/X)+(r+σ2/2)*t]/σ*sqrt(t)
d2=[ln(S/X)+(r-σ2/2)*t]/σ*sqrt(t)
= d1 - σ * sqrt(t)

C=price	of	a	call	option
P=price	of	a	put	option
S=price	of	the	underlying	asset
X=Strike	price	of	the	option
r=rate		of		interest
t=time		to		expiration

σ = volatility of the underlying

N represents a standard normal distribution with mean = 0 and standard deviation = 1 in represents the natural logarithm of a number. Natural logarithms are based on the constant e(2.71828182845904).

XI. Introduction Of Derivatives In Bangladesh

In Bangladesh there is no Derivatives Market yet. But there is enormous opportunity for Derivatives Market. There are actually three types of investors exist in the Derivatives Market.
Speculators, take position to gain from the expected fluctuation in the price of derivatives contracts over time.
Hedgers, take position to reduce their probability of movements of interest rate or stock price in future. And
Arbitragers, who makes profit from short term price fluctuations. Derivatives Market is an organized market place where derivatives contracts are traded.
From a purely Bangladesh stock market perspective, derivatives are important as they are part and parcel of market development.

Benefits of Derivatives in Bangladesh:

Benefits of derivatives are broadly discussed earlier in this research paper. In addition, now we discuss the benefits, prospects and advantages of Derivatives in Bangladesh from different stakeholders view points:
As we know in Bangladesh, SEC (Securities & Exchange Commission) is the authority under which a Derivatives Market will establish and taken care off. As per SEC's view point they said that today the complete focus of individual investors, institutions and corporations are on Stock Exchange. But awareness among investors, journalists and professionals is essential," Referring to Indian experience, they address that the total volume of trade in derivatives is much higher than equity products on the National Stock Exchange of India.
Like any one (investor) who invested both in stock exchange and an index market of securities. Its an hedging based on index. So, now the investor may incur loss in share market but he can gain in the hedging for that product market. Derivatives Market is a place for all kind of investors. Those, who want to take risk (Speculators), who want to avoid risks (Hedgers) and who want to utilize short term price fluctuations (Arbitragers).

XII. Risks Of Derivatives In Bangladesh

Certainly there are some drawbacks as well as risks to establish a Derivatives Market in Bangladesh. There are some fundamental problems that contribute to derivatives' negative image:

- Stories in the press of our country tend to focus on the illegitimate abuse of derivatives rather how they are used legitimately.
- Investors' misinformed perceptions and uninformed opinions.

As a developing nation we do not have enough investors who are having bulk amount of monetary reserve. Whereas a Derivatives Market needs a strong number of investors whose investment will run as blood of the market and keep it alive.

XIII. Opportunities Of Derivatives In Bangladesh

Derivatives especially financial derivatives have revolutionized mathematical and practical finance. The 1973 seminal paper of F Black and M Scholes has created, within a few decades, what is literally a multi-trillion dollar derivatives market. Derivatives play a key role in optimizing the utilization of assets, minimizing risks and maximizing returns on investments. So, if derivatives are introduced in Bangladesh, a lot of opportunities are there.

To show the relevance of derivatives to a developing country, consider Bangladesh's economy where the textiles is the main industry — and more specifically with the focus being on the manufacturing of garments. The garments sector has a worldwide rate return given by G. The reason Bangladesh has concentrated on producing garments is because, as a country, it has a comparative advantage. In practice, this means that the Bangladeshi garment producers have a rate of return, say G+D that is higher than the world average on garments.

A swap derivative is non-invasive and needs no permanent construction or facilities; rather, it is a reversible financial arrangement that can be switched on and off without interfering with the real economy. Swaps, properly employed, add substantial amounts of value to the underlying real economy.

XIV. Importance Of Derivatives In The Recent Capital Market Crash Condition In Bangladesh

The capital market is the engine of growth for an economy, and performs a critical role in acting as an intermediary between savers and companies seeking additional financing for business expansion. Today, with a $257 billion economy and per capita income of roughly $641 in 2010 if purchasing power parity (PPP) is taken into account, Bangladesh should really focus on improving governance and developing advanced market products, such as derivatives.

It is encouraging to see that the capital market of Bangladesh is growing, albeit at a slower pace than many would like, with market development still at a nascent stage. The market has seen a lot of developments since the inception of the Securities and Exchange Commission (SEC) in 1993. After the bubble burst of 1996, the capital market has attracted a lot more attention, importance and awareness that have led to the infrastructure we have in the market today. Now a days it is said that still our capital market is undeveloped. Expertise of the capital market emphasis on the way to find out the right path to create a stable and matured market for our country. Some urges that if derivatives were introduced in our country, that might be able to protect the market.

XV. Capital Market In Bangladesh

Dhaka Stock Exchange (DSE), the frontline organization on for capital market development of Bangladesh was first incorporated On April 28, 1954 as the East Pakistan Stock Exchange Association Limited which started formal trading in 1956 at Narayangonj with 196 listed securities amounting a total paid up capital of about Taka 4 billion. Subsequently, on June 23, 1962 it was renamed as Dhaka Stock Exchange (DSE) Limited after the shiftiness of Dhaka in 1958. Dhaka Stock Exchange suspended its trading and all administrative activities in 1971 and the trading activities of the prime bourse remained suppresses until 1976 due to liberation war and economic policy pursued by the then government. Trading resumed at DSE in 1976 with only 9 companies listed having a paid up of Taka 137.52 million. Gradually the capital market in Bangladesh has been developing and another capital market named Chittagong Stock Exchange (CSE) in Chittagong, the commercial city of Bangladesh, started operation in 1995. It is also a self-regulatory non profit organization. Now both the markets are automatically operated. The number of listed securities in DSE started with only 9 in 1976 which has gradually increased and now reached 500 in October, 2011. The growth pattern of listed securities and market cap was rather slow during early 1990s but recently its improvement is worth mentioning.

The Bangladesh capital market continued to rally handsomely in 2010 even though U.S and European market had to recover from recession effect. The market capitalization to GDP ratio has been increased over the year from 30% to 50%. However, it is expected that PE ratio may be reduced to sustainable level considering earnings growth of the listed companies and steady growth of the overall economy.

XVI. The Share Scam 2010–The Recent Capital Market Crash Condition In Bangladesh

The calendar year 2010 was a unique year in the history of Bangladesh stock markets for more than one reason. While the markets managed to attract billions of FII inflows into Bangladeshi stock markets for the high rate of returns as the benchmark indices advanced by over 82 per cent in course of within a single year, yet the volatility noticed in the Bangladeshi stock markets was almost at its peak, due to several regulatory and monetary changes in the year. The Dhaka Stock Exchange (DSE) passed through an eventful year amid records

and ups and downs. However, the last few days of 2010 were quite reverse to its yearly trend when the DSE witnessed a shortfall of fund.

The country's main bourse suffered the worst ever single day fall of 552 points, or 6.72 per cent on December 19, reminding investors of a major collapse in 1996. Throughout the year, the market regulator's frequent changes in regulations and imposing abrupt directives attracted strong debate and criticism. Finally all the measures appeared to have failed when they were repealed on the wake of the free falls of DSE indices at the end of the year. It was a roller-coaster ride in last few weeks of the year, with the indices hitting a record high on 5 December, having climbed 80% since the start of the year. But on 8 December it nosedived, prompting protests in Dhaka and towns elsewhere. This was followed a strong fall of over 6.7% on December 19, which prompted many protests on street from investors.

After the Bangladesh stock market debacle in 1996, the market recovered gradually and had been growing steadily until 2008. In 2010, the share price index started rising and it became abnormally high in late 2010 creating an alarming situation and a concern among the experts. From the first week of December, there was repeated falls in the stock prices and in the process, many investors incurred huge losses and market is yet to be stable. Finally I find that derivatives the most dynamic and innovative instruments which is used all over the modern economy to mitigate the risks of capital market should be introduced in our country against the recent share scam.

XVII. Urges Of Derivatives In The Recent Share Market Crash In Bangladesh

In the financial markets, stock prices, bond prices, currency rates, interest rates and dividends go up and down, creating risk. If derivatives are available in our capital market, may be we can control the price fluctuations in the recent market crash.

Reasons behind for the urges of derivatives are following:

- The Increased volatility in the asset prices in the recent market conditions lead to urgency of derivatives after the market crash in 2010.
- There is increased integration of the global financial market and it drives to the necessity of introducing derivatives in our capital market.
- When there is marked improvement in the communication facilities and very sharp decline in the costs also tends to drive the introduction of financial derivatives after the market crash in last year.
- There is development of the best risk management tools, the same provides the economic agents to have a wider choice in the strategies of the risk management and the same leads to the growth of importance of derivatives in Bangladesh capital market.

XVIII. Recommendation

Though derivatives are very useful for managing various risks, there are certain inhibiting factors, which stand in their way. The authorities should keep in mind the following recommendations while implementing the derivatives contracts which are purely new concept in Bangladesh Capital Market . They are as follows:

- Misconception Of Derivatives:

There is a wrong feeling that derivatives would bring in financial collapse. Derivatives themselves cannot cause such mishaps. But the improper handling of these instruments is the main cause for this and one cannot simply blame derivatives for all these miss happenings.

- Leveraging:

There is no doubt that derivatives create leverage and leverage creates increased risk or return. At the same time, one should keep in mind that the very same derivatives, if properly handled, could be used as an efficient tool to minimize risks. Thus cautions should be taken to properly use of derivatives.

- Off Balance Sheet Items:

Invariably, derivatives are off balance sheet items. For instance, swap agreements for substituting fixed interest rate bonds by floating rate bonds or for substituting fixed rate interest bearing asset by floating rate interest paying liability. Hence, accountants, regulators and other look down upon derivatives very carefully.

- Absence Of Proper Accounting System:

To achieve the desired results, derivative must be strongly supported by proper accounting systems, efficient internal control and strict supervision. The policy makers might impose strong views in this regard.

- Inbuilt Speculative:

In fact all derivative contracts are structured basically on the basis of the future price movements over which the speculators have on upper hand. Indirectly, derivatives make one accept the fact that speculation is beneficial. It may not be so always.

- Absence of Proper Infrastructure:

An important requirement for using derivative instrument like, options, futures etc. is the existence of proper infrastructure. Hence, the institutional infrastructure has to be developed.

XIX. Conclusion

We are developing nation and our economy is growing day by day in order to compete with the world emerging economy. As a part of development we are expecting Future and Forward Market to enter in our economy as well as country. We surely benefited from it, if we can properly manage it. For the wellbeing of the economy we need to establish our Future and Forward Market in the country. As an observer of markets, I believe that these financial innovations may have contributed to favorable financial conditions in our country and thus to strong economic growth for Bangladesh. In turn, that stable macro environment has legitimately increased risk appetite and willingness to embrace leverage in Bangladesh.

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