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A Conceptual Framework of Derivatives Market in Bangladesh

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Abstract:
Derivatives are considered to be extremely versatile financial instruments, as they help to manage risks, lower funding costs, enhance yields and diversify portfolios. The contributions made by derivatives have been so great that they have been credited with having 'changed the face of finance' in the world. Derivatives markets are successful institutions because they make financial markets more efficient. Derivatives markets are an integral part of capital markets in developed as well as in emerging market economies. This paper is descriptive in nature and based on the secondary data. This study attempts to discuss the theoretical aspects regarding derivatives market. Here researchers focus the various types of future contracts, how a futures contract works, participants in the derivatives market, the terminology used in derivatives market and the role of derivatives market. The paper aims to look a framework of derivatives market in Bangladesh and present the preconditions of a derivatives market, basis for derivatives in Bangladesh, some risks associated with derivatives market. Furthermore, some useful recommendations are provided for creating derivatives market.

Keywords: *Derivatives, Financial instruments, Capital market, Futures*

1. Introduction

Derivatives are financial instruments that have no intrinsic value; their returns are linked to, or derived from, some other product or underlying asset. Derivatives are financial instruments that do not confer ownership, but rather a promise of ownership, Hird and Lott (1996). The International Monetary Fund (2001) defines derivatives as "financial instruments that are linked to a specific financial instrument or indicator or commodity and through which specific risks can be traded in financial markets in their own right. The value of a financial derivative derives from the price of an underlying item, such as an asset or index. Unlike debt securities, no principal is advanced to be repaid and no investment income accrues."

Derivatives have in recent times been a major feature of financial development worldwide. The establishment and growth of financial derivatives markets has been major development trend in financial markets over the past thirty-five years. Financial innovation and increased market demand led to a rapid growth of derivatives trading. Development of financial derivatives was speeded up by the globalization of business, the increased volatility of foreign exchange rates, and increasing and fluctuating rates of inflation. Financial derivatives are generally used as an instrument for risk management, more precisely to hedge financial risks, such as interest rate risk, security and commodity price risk, currency risk, interest rate risk, credit risk, etc., but derivatives can also be used for speculative purposes.

The market can be divided into two; exchange traded derivatives and over the counter (OTC) derivatives. With the help of technology and financial innovation, the market has experienced an impressive growth in the last decade. According the Bank for International Settlement Statistics, notional outstanding amount of over-the-counter derivatives climbed to US$ 1,356 trillion in 2011. Nearly 85% of the world's outstanding derivatives are traded on OTC markets, ICSA (2012). OTC derivatives often comprise privately negotiated contracts, where only the participants have detailed information. Main market participants are professionals, including banks, investment firms, insurance companies and corporations. The growth of derivatives turnover in emerging markets remains more rapid than in advanced economies. The largest emerging market derivatives markets are now located in Korea, Brazil and the two Asian financial centres of Hong Kong and Singapore. In Bangladesh there is no Future and Forward Market yet. But as an emerging market there is immense opportunity for Future and Forward Market.

This paper aims to build up a conceptual framework of derivatives market in Bangladesh. For this, at first we generalize the theoretical concepts about derivatives securities, contracts, markets and about its benefits. Then, the rational for creating derivative markets and some prerequisites for building a derivatives market in Bangladesh are presented. Some guidelines and

recommendations are also provided for sound derivatives market in Bangladesh. This study is important in that it takes an overall view of the derivatives market, which has been part of world trade for many years but is still a new concept towards Bangladesh.

2. Literature Review

Over the past three decades many different studies on financial derivatives use by non-financial firms were published, covering different aspects of derivative markets. Some most influential early studies describing the use of derivatives by non-financial firms were ones done by the following authors: Block and Gallagher (1986), Dolde (1993), Judge (1995), Berkman and Bradbury (1996); Bodnar and Gebhardt (1997), Hakkarainen et al., (1997), Bodnar et al.(1998), Alkeback and Hagelin (1999), etc.

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 derivative. 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. 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. Mishkin (2006) is even more adamant that derivatives are new financial instruments that were invented in the 1970s. He suggests that an increase in the volatility of financial markets created a demand for hedging instruments that were used by financial institutions to manage risk. Kamara (1982) shows that introduction of commodity futures trading generally reduced or at least did not increase cash price volatility. Bose (2007) finds that the Indian stock markets are more volatile as compared to developed markets and Indian Commodity Futures markets are going through many ups and downs.

There are few researches available regarding derivatives market in context to Bangladesh. Sultana et al. (2014) analyze the benefits, risks and opportunities of financial derivatives in Bangladesh. Rahman and Hasan (2011) stated that, due to recent catastrophic fall capital market, rapidly declining FDI and scarcity of investment opportunities in an equity centric economy, investors of Bangladesh is crying out for an innovative and versatile financial product such as derivative securities for hedging and market expansion.

3. Methodology

This study is descriptive in nature. It is mainly based on secondary data. Secondary data were collected from Journals, Magazines and related websites. Various books and articles related to financial derivatives were also the valuable sources. Besides these, some discussions with the finance experts, members of Bangladesh Securities Exchange Commission (BSEC) and experts of Stock exchanges were made which provide some important information regarding derivatives market.

4. Theoretical Aspects Regarding Derivatives Market

4.1. Types of Contracts

4.1.1. The Spot Contracts

The spot contracts are sale contracts that take place, theoretically, immediately after closing them. They are executed between 24 hours and 10 banking days, and they must deliver the merchandise. The strike price of the contract is set at the time of closing the deal.

4.1.2. Forward contracts

Once the exchanges appeared, the sellers and the buyers had the possibility to reduce the uncertainty of the prices through a forward cash sale. A forward cash sale or a forward contract represent a private negotiation in which the seller and the buyer agree upon a price of the merchandise that is going to be delivered in the future. At forward cash contracts, the merchandise could not be sent until the pre established delivery date. There are some advantages of forward contracts.

4.1.3. Future Contracts

The futures contract is a standardized agreement among two partners – a seller and a buyer – to sell and to buy a certain asset, at a price set at the point of closing the transaction and with the execution of the contract at a future date called deadline. In other words, by this kind of contract, the seller commits himself to sell, and the buyer to buy the asset from the contract at a future date (deadline), but at a price set at the point of closing the deal.

- How a Futures Contract works

There are two parties to every futures contract - the seller of the contract, who agrees to deliver the asset at the specified time in the future, and the buyer of the contract, who agrees to pay a fixed price and take delivery of the asset.

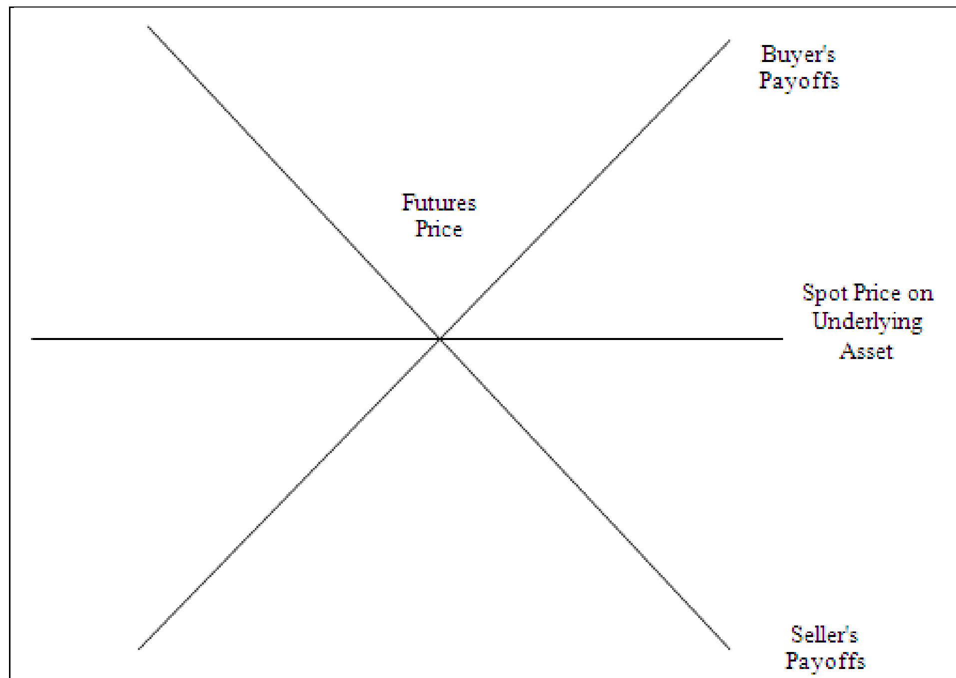

Figure 1: Cash Flows on Futures Contracts
Source: Hull J. (1995). Introduction to Futures and Options Market

While a futures contract may be used by a buyer or seller to hedge other positions in the same asset, price changes in the asset after the futures contract agreement is made provide gains to one party at the expense of the other. If the price of the underlying asset increases after the agreement is made, the buyer gains at the expense of the seller. If the price of the asset drops, the seller gains at the expense of the buyer.

4.1.4. Option Contracts

An option contract represents a right, but not an obligation to buy (an option CALL) or to sell (an option PUT), a financial asset (a share, a futures contract, etc.) at a future moment and at a price set in the present (called strike price). The buyer of the option contract can decide if he will exert or not the option of buying or selling the asset, relating his own interests and projections. For this right of option, the buyer must pay the seller at the point of closing the deal a sum of money called a bonus. So, the buyer's loss is limited at the bonus that he is paying to the seller of the contract.

- Futures and Forward Contracts versus Option Contracts

While the difference between a futures and a forward contract may be subtle, the difference between these contracts and option contracts is much greater. Figure 2 summarizes the differences in payoffs on the two types of contracts in a payoff diagram.

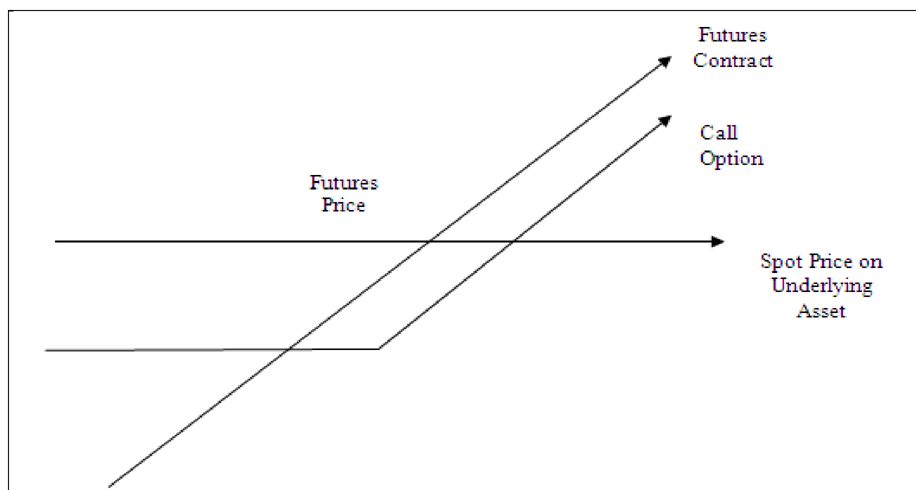

Figure 2: Buying a Futures Contract versus Buying a Call Option
Source: Hull J. (1995). Introduction to Futures and Options Market.

In an options contract, the buyer is not obligated to fulfill his side of the bargain, which is to buy the asset at the agreed upon strike price in the case of a call option and to sell the asset at the strike price in the case of a put option. Consequently the buyer of an option will exercise the option only if it is in his or her best interests to do so, i.e., if the asset price exceeds the strike price in a call option and vice versa in a put option. The buyer of the option, of course, pays for this privilege up front. In a futures contract, both the buyer and the seller are obligated to fulfill their sides of the agreement. Consequently, the buyer does not gain an advantage over the seller and should not have to pay an up front price for the futures contract itself.

4.1.5. Swaps

A swap is an agreement whereby two parties (called counterparties) agree to exchange periodic payments. The cash amount of the payments exchanged is based on some predetermined principal amount, which is called the notional principal amount. The cash amount each counterparty pays to the other is the agreed-upon periodic rate times the notional amount. The only cash that is exchanged between the parties are the agreed-upon payments, not the notional amount.

4.2. Participants in the Derivatives Market

Patwari and Bhargava (2006) stated that there are three broad categories of participants in the derivative market. They are: Hedgers, Speculators and Arbitrageurs.

- A Hedger is a trader who enters the derivative market to reduce a pre- existing risk. In India, most derivatives users describe themselves as hedgers (Fitch Ratings, 2004) and Indian laws generally require the use of derivatives for hedging purposes only
- Speculators buy and sell derivatives to book the profit and not to reduce their risk. They wish to take a position in the market by betting on future price movement of an asset. Speculators are attracted to exchange traded derivative products because of their high liquidity, high leverage, low impact cost, low transaction cost and default risk behavior.
- Arbitrageur is basically risk-averse and enters into the contracts, having the potential to earn riskless profits. It is possible for an arbitrageur to have riskless profits by buying in one market and simultaneously selling in another, when markets are imperfect. Arbitrageurs always look out for such price differences.

4.3. The Terminology Used in Derivatives Market

- Actuals Financial instruments that exist in one of the four main asset classes: interest rates, foreign exchange, equities or commodities. Typically, derivatives are used to hedge actual exposure or to take positions in actual markets.
- A bull market or the markets under the sign of the bull represent the market in which the prices are increasing. When a market is called bullish, there is a perspective that the prices will increase.
- A bear market or the markets under sign of the bear represent the market in which the prices are decreasing. Therefore, a bearish market gives a pessimist perspective and the operators consider that the prices are decreasing.
- The long position: If a futures contract is bought, the buyer has a long position. The operator initiates long positions when a future increasing of the futures price is expected. The hedger will initiate long positions when it is exposed to the increasing of the price of the asset.
- The short position: Somebody who will sell futures contracts that he didn't previously have is short, or he has open short positions. The operator initiates short positions when he anticipates the decreasing of the futures price. The hedger initiates short positions when he is exposed to the decreasing of the price of the merchandise or of the asset.
- Price Limits: Futures exchanges generally impose 'price movement limits' on most futures contracts. If the price of the contract drops or increases by the amount of the price limit, trading is generally suspended for the day, though the exchange reserves the discretion to reopen trading in the contract later in the day.
- Marking to Market: One of the unique features of futures contracts is that the positions of both buyers and sellers of the contracts are adjusted every day for the change in the market price that day.
- The appeal in margin: The situation in which the sum from the margin account decreases under the level existing in the account, the holder of the account receives an appeal in margin for the difference between the initial level of the margin and the sum existing in the account.

4.4. Role of Derivatives Market

The Derivatives market performs a number of economic functions which are listed below:

- Management of risk: This is most important function of derivatives. Risk management is not about the elimination of risk rather it is about the management of risk. Financial derivatives provide a powerful tool for limiting risks that individuals and organizations face in the ordinary conduct of their businesses.
- Price discovery: The important application of financial derivatives is the price discovery which means revealing information about future cash market prices through the future market. Derivative markets provide a mechanism by which diverse and scattered opinions of future are collected into one readily discernible number which provides a consensus of knowledgeable thinking.
- Efficiency in trading: Financial derivatives allow for free trading of risk components and that leads to improving market efficiency. Traders can use a position in one or more financial derivatives as a substitute for a position in the underlying instruments. In many instances, traders find financial derivatives to be a more attractive instrument than the underlying security. This is mainly because of the greater amount of liquidity in the market offered by derivatives as well as the

lower transaction costs associated with trading a financial derivative as compared to the costs of trading the underlying instrument in cash market.

- Develop the complete markets: It is observed that derivative trading develop the market towards “complete markets”. Complete market concept refers to that situation where no particular investors be better of than others, or patterns of returns of all additional securities are spanned by the already existing securities in it, or there is no further scope of additional security.
- Encourage competition : The derivatives trading encourage the competitive trading in the market, different risk taking preference at market operators like speculators, hedgers, traders, arbitrageurs etc. resulting in increase in trading volume in the country. They also attract young investors, professionals and other experts who will act as catalysts to the growth of financial market.
- Other roles: Derivatives market catalyzes entrepreneurial activity. They also increase savings and investment in the long run Advertisement.

5. Results and Discussion

5.1. Derivatives Market in Bangladesh

Derivative is the new buzz word in the financial sector of Bangladesh. Some local and international experts are continuously telling about the importance of introducing a derivatives market to mitigate investment risks in a developing country like Bangladesh. The BSEC also seems interested to introduce derivatives in the country's financial market soon. They said that, at present the complete focus of individual investors, institutions and corporation are on stock exchanges. This put a limitation for different investors to choose investment options. If there is any future and forward market beside stock exchange it can provide an opportunity for the investors to get away from incurring losses. The economy of Bangladesh is emerging economy and still growing. In order to allow the economy to grow it is essential to spread out different branches to create new investment opportunities. Stock markets and other derivatives market of any country is one kind of indicator which tells the strength of that country’s economy. It also needed for Bangladesh. As the economy is raising, the country will also looking toward derivatives market for other investment opportunities beside the stock exchange. This will leads the concept of establishing a derivatives market in Bangladesh. But there is still a question mark regarding the readiness of Bangladesh's financial market to bring derivatives into play. Sophisticated instruments like derivatives need sound institutional set-up and efficient regulatory framework. Well-organized and full functioning market for securities and other commodities from which the value of derivatives is derived is the fundamental requirement for introducing derivative.

5.2 Preconditions of a Derivatives Market

For an exchange to be truly effective, however, certain preconditions must be met. These include well functioning cash markets, a large number of traders and speculators, a legal structure that includes a system of property rights and enforceable contracts, well-functioning credit institutions, the support of the government and policymakers, adequate financial resources (particularly for the clearinghouse), and the absence of competing derivatives products and exchanges, Leuthold (1992).

Regulatory operations in emerging markets need to be improved to ensure prompt financial disclosure, which is essential for investors to make informed decisions. This involves the use of internationally recognized accounting standards (commonly called Generally Accepted Accounting Principles, GAAP) and credit rating agencies. All material information should be available to investors at the time of offering, and investors should be well informed of any material changes in a company’s status. As capital markets in emerging markets develop there should be minimum standards and registration systems for market professionals, securities issuers and investment companies (Inter American Development Bank 1995). Before the establishment of a derivatives exchange, local currency debt and equity markets should be promoted in order to encourage growth of the local organized stock exchange, Inter American Development Bank (1995).

Fratzscher (2006) identified three critical issues that must be considered before introduction of derivatives in his paper titled 'Emerging Derivative Market in Asia'. These are: (i) a deep liquid cash market supported by market-determined prices, (ii) how much regulation is needed in derivative markets and (iii) what infrastructure is necessary.

Derivatives exchanges can own their own clearinghouse, or other exchanges or financial institutions, such as banks, can own it. Derivatives exchanges also need to be able to self-regulate by monitoring trading activities, ensuring contract execution, resolving disputes, enforcing rules and sanctions, and promoting professional conduct in order to increase investors’ confidence Van der Bijl (1997).

Savre and Tachon (1992) describe the important factors for developing a successful derivatives market.

- Conditions for creating a future markets (legal, regulatory, political and economic)
- Conditions for creating a future contract (price volatility, underlying assets risk, large cash market, maturity of the spot market and existence as well as involvement of dealer community.)
- Conditions for future contract success (future market environment, well designed contract and exchange perseverance)

The success of a derivatives exchange depends, in part, on the choice of products to be traded. The main types of commodities traded include interest rates, currencies, individual stocks, and stock indices. The more common derivatives used for these products are options and futures, which are almost non-existent in the Caribbean. These products need to have the following characteristics to be traded: a sufficiently high level of price volatility to attract hedgers or speculators; a significant amount of money at risk; a significant number of domestic market participants; a large number of producers, processors, and banks interested

in using derivatives contracts; and a weak correlation between the price of the underlying asset and the price of the already-traded derivatives contract(s) in other exchanges, Tsetsekos and Varangis (2000).
However, in a country like Bangladesh dominated by native investors with limited knowledge of global investment products, along with improving governance of market participants and for self regulation of the exchanges, there must be vigilant regulatory oversight over derivatives over derivatives to maintain financial stability, Rahman and Hasan (2011).

5.3. Basis for Derivatives in Bangladesh

5.3.1. Present Capital Market Condition and the Emerging Needs for Derivatives Market
Capital market is one of the most important sectors of the financial system of any country as it has a direct impact on the development of the country. Risk is the main feature of any capital market as well as commodity market. The complex nature of financial structuring has exposed corporate to newer types of risks such as exchange risk, interest rate risk, market risk, inflation risk etc. Business activities are increasing day by day and are resulting in increase magnitude and frequency of above mentioned risks.
On April 28, 1954 the DSE was first incorporated as the East Pakistan Stock Exchange Association Limited. However, formal trading began in 1956 with 196 securities listed on the DSE with a total paid up capital of about Taka 4 billion, Chowdhury (1994). On June 23, 1962 it was renamed as Dhaka Stock Exchange (DSE) Limited. After 1971, the trading activities of the Stock Exchange remained suppressed until 1976 due to the liberation war and the economic policy pursued by the then government. The trading activities resumed in 1976 with only 9 companies listed having a paid up capital of Taka 137.52 million on the stock exchange, Chowdhury (1994). As of 30th June, 1999 there were 230 Securities listed on the DSE with a market capitalization of Taka 50,748 million. The Dhaka Stock Exchange (DSE) is registered as a Public Limited Company and its activities are regulated by its Articles of Association and its own rules, regulations, and by-laws along with the Securities and Exchange Ordinance, 1969; the Companies Act, 1994; and the Securities and Exchange Commission Act, 1993 (DSE, 1999). 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. 149 registered organizations are the owners of Chittagong Stock Exchange and 238 registered companies are the owners of Dhaka Stock Exchange.
Most of the countries' stock markets have confronted the taste of collapse at least once. In 2000, London Stock Exchange and American Stock Exchange encountered the collapse. Economic recession all over the world caused the share market collapse in America and Europe. The stock market of Bangladesh was bullish before 2010. But in 2010, the market become bearish as there was a market crash. This situation turned millions of investors as bankrupt. The investors blamed the government for this crash as they believed that the crash was caused artificially to benefit some group of investors at the expense of some big players of the market. They lost their confidence on the fairness of the market. As a result, the market continued to fall. The following factors led to this persistent crisis in the stock market

- A monetary contraction and so the rising borrowing costs caused investors to deleverage. As the liquidity crisis further deepened in the financial sector, investors' ability to borrow and invest in shares rapidly declined and remained constrained.
- Many investors who had invested in shares in pre-crisis time got trapped. Market value of their investment has decreased to one-third to one-fourth of the cost of the investment. Their investment thus tuned out to be largely illiquid. The ability of the merchant banks and brokerage houses to create fresh loans rapidly decreased.
- Direct investment by banks and other financial institutions in stock markets has rapidly decreased in the aftermath of the crisis. Several regulatory changes notably including limiting defacto exposure of banks to capital market, debasing of exposure from total liabilities to equities, and redefining singe exposure limit seriously constrained the financial sector to supply credit to investors.
- Moreover Security & Exchange Commissions was not capable to monitor the market conditions properly. Due to the poor monitoring & market surveillance share prices of Z Category Companies and small companies increased dramatically. Moreover, some initiatives taken by SEC were not effective and changed directives frequently such as; it changed directives of margin loan ratio 19 times, Raisa (2011)

Sultana et al. (2014) states the Reasons for the urges of derivatives are

- 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.
- 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.

5.3.2. Commodity Exchanges and Derivatives Trading
A commodity exchange is an exchange where various commodities and derivatives products are traded. Even though the concept of commodity exchange market is new to us, it has long been in practice in the western countries. Recently this concept is gaining popularity in many of the Asian countries such as India and China, who are already accustomed to this market and have been in operation since 1993 and 2002 respectively. The main purpose of this market is to establish a dynamic, efficient, and orderly marketing system that stabilizes volatility in daily commodity market and helps set up a better functioning domestic market. While ensuring transparency, setting up an agro-based commodities exchange market in Bangladesh will protect the farmers from price drops and the buyers from price hikes. The purpose of establishing this market in Bangladesh is many folds. This type of market is supposed to help the government effectively monitor the movement of prices of essential commodities and lubricate the supply chain. Another major objective is to create competitiveness and bring efficiency in market mechanism. It is also helpful in protecting drastic price fall after bumper harvest. In our country it is usually observed that after a bumper harvest, the prices of agricultural commodities like paddy and potato fall drastically. The commodity exchange market can protect this severe fall by selling the product in future market.

5.3.3. Investors Viewpoints
The investors are willing to have more options for their investment. The derivatives market can be solution for them. For example, investor who invested in stock exchange and index market of securities, its an hedging based on index. So, if the investor may incur loss in share market but he can gain in the hedging for that product market. Countries which have unstable economical condition like Bangladesh, forward and future contract will be useful. Future and forward contract can reduce problems arise due to unpredictable price situation. Derivatives market is the place for all kind of investors. Those, who want to take risk (Speculator), who wants to avoid risks (Hedgers), who want to utilize short term price fluctuations.

5.4. Risks in Derivatives Market
The danger in derivatives usage comes from the interaction of three factors. The first is leverage. Derivatives are highly levered instruments. Leverage creates the potential for large gains but also large losses if the market moves in the wrong direction. The second is volatility; Market volatility compounds the effect of leverage. As volatility in the price of the underlying increases and unexpectedly large price movements occur, the impact of leverage gets exacerbated leading to potentially larger losses on the downside. The third is liquidity. Periods of market turmoil are often accompanied by not only higher volatility but also liquidity drying up selectively. Almost every major derivatives-related corporate debacle can be traced back to a combination of these factors.
Besides these, another risk is that one party may default on the contract, which is called credit risk. Credit risk is not much of a problem for derivatives traded on organized exchanges, since these exchanges are designed in such a way that their contracts are almost always honored. Credit risk is much more of a problem in the OTC market, where two parties negotiate a derivative contract specific to their needs.

6. Recommendations
The following recommendations are proposed to build up a derivatives market in Bangladesh

6.1. Enhance Education and Knowledge Among All Market Participants
The most efficient self-regulating mechanisms of derivatives markets are the education and confidence enhancing strategies. There should be promotion of attaining 'professional expertise' in derivatives by the Central Banks of the region, by financial institutions and by end users. Basic knowledge of investors and participants about derivatives is a must for an effective derivative market. In Bangladesh where investors cannot even understand the easy concept like mutual funds, it can be said without any confusion that the investors will be surely in puzzle if complex financial instruments like derivatives are introduced now. Without ensuring proper training for potential investors and other parties including brokerage houses introducing derivatives will not be a wise decision.

6.2. Creating a Advisory Committee
Dr. L.C Gupta Committee constituted by the Securities and Exchange Board of India (SEBI) had laid down the regulatory framework for derivative trading in India. SEBI has also laid the eligibility conditions for Derivative Exchange and its Clearing Corporation/House. The eligibility conditions have been framed to ensure that Derivative Exchange & Clearing Corporation provide a transparent trading environment, safety & integrity and provide facilities for redressal of investor grievances. The policy makers and regulators of Bangladesh can take suggestion from these. Some of the important eligibility conditions are

i. Derivative trading to take place through an online screen based Trading System.
ii. The Derivatives Exchange should have online surveillance capability to monitor positions, prices, and volumes on a real time basis to deter market manipulation.
iii. The Derivatives Segment should have arrangements for dissemination of information about trades, quantities and quotes on a real time basis through at least two information vending networks, which are easily accessible to investors across the country.
iv. The Derivatives Exchange should have arbitration and investor grievances redressal mechanism operative from all the four areas of the country.
v. The Derivatives Exchange should have satisfactory system of monitoring investor complaints and preventing

irregularities in trading.
vi. The Derivative Segment of the Exchange would have a separate Investor Protection Fund.
vii. The Clearing Corporation shall perform full novation, i.e. the Clearing Corporation shall interpose itself between both legs of every trade, becoming the legal counterparty to both or alternatively should provide an unconditional guarantee for settlement of all trades.
vii. The Clearing Corporation shall have the capacity to monitor the overall position of Members across both derivatives market and the underlying securities market for those Members who are participating in both.
viii. The Clearing Corporation shall establish facilities for electronic funds transfer (EFT) for swift movement of margin payments.

6.3. Order Flow and Trade Execution

A distinct feature of design in a derivatives exchange is the form of order flow and trade execution. Depending on the automation and sophistication of the market, the order flow may be (a) face to face between the interested parties; (b) via telephone; or (c) via computer. Trading may be completed (a) through floor trading; (b) telephone trading; and/or (c) computer trading.

6.4. Introduce Derivatives Products That Can be Used to Manage Risks in Natural Gas Industries, and Other Commodity-Based Industries.

Bangladesh has a prospect in natural resources such as natural gas for export revenue, and risk managers in these industries can use derivatives to achieve certainty about the prices they pay and receive. Increasing pipeline capacity, increasing storage capacity, and making other physical and economic changes to the delivery system itself can reduce volatile price movements in these industries. But, derivatives can provide a less costly approach to manage price risk.

6.5. Other Recommendations

BSEC should conduct seminars regarding the use of derivatives to educate individual investors. 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. Central bank of Bangladesh should play a greater role in supporting derivatives.

7. Conclusion

The establishment of derivatives exchanges is driven by economic, financial reasons and, in some cases, also by national pride. The global deregulation of financial markets and market liberalization has created new investment opportunities and risks that require the development of new instruments. Derivatives markets are complementing developments in the stock markets in many countries. Also, the number of domestic companies listed has more than doubled. Derivatives exchanges have played a major role in these developments. They have contributed to more balanced allocation of resources, transfer of risk among agents in a country, and even contain risks across countries. Although there are concerns about the explosive growth of derivatives and the risks that they may create, it appears that these exchanges are increasing their business. However, Bangladesh has still a long way to go for ensuring a favorable condition for introduction of derivatives. Derivative market should be in our long-term plan and the short-term plan should include removal of existing problems of the capital market and the commencement of liquid bond market. Derivatives can surely assist in completing markets and can provide firms and individuals with new investment opportunities. Derivatives also provide information to financial market participants and may help reduce overall market volatility.

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