Opportunity to Create Financial Derivative Market in Bangladesh

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Abstract
Derivatives are an important class of financial instruments that are central to today's financial and trade markets. They offer various type of risk protection and allow innovative investment strategies. In spite of these opportunities, Bangladesh has no organized Derivatives Exchange Market yet. However Bangladesh has more opportunity or possibility to establishment this market. This study discusses several aspect of Derivative Market in Bangladesh based on the finding of some already published articles on this matter. At the beginning of the article I have discussed the fundamentals and participants about Derivative Market. Then I have shown the opportunities of possible areas where we can use derivative product in Bangladesh. This paper explains the basic reason for the emerging need for derivatives market in Bangladesh. Furthermore, some useful recommendations are provided for creating derivatives market.

Keywords: Derivatives, Derivatives Exchange Market, Risk Management.

1. INTRODUCTION

Derivatives were first instruments developed to secure the supply of commodities and facilitate trade as well as to insure farmers against crop failures, overtime, derivatives started to serve in addition other purpose such as a source of finding but also the search for quick profits. The history of derivatives also provides evidence that the first derivatives markets were "over the counter" (OTC) - Derivatives exchanges came later.

In ancient Greece, the Athenians used shipping contracts for trading which resemble forward contracts, with a twist. The buyer would borrow the money up front, prior to trading voyage, an entrepreneur (buyer) looking to profit on a trade of commodities would make an agreement with a merchant who would finance the voyage. They would draw up a contract. The contract would state the amount of money loaned and required interest the entrepreneur would pay the merchant upon return. Since these voyages were risky, the merchants demand a high return in the rage of 30%. The similarity to a forward contract can be seen since the factors of price, commodity, and time are stipulated in the shipping contract.

The development of the derivatives market has long been a topic of interest among researchers, policy makers, and financial agencies. It directly plays a vital role in a financial system and greatly contributes to various aspects of an economy as a whole. Lien and Zhang (2008) summarize the roles and functions

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of the derivatives market in emerging economies, in both theoretical and empirical studies. Derivatives market offers an effective mechanism that facilitates the sharing of price risks for commodities traded on the market, helping producers deal with price volatility. Also, it serves as a key role in smooth hedging and risk management by enhancing capital inflows in emerging and developing countries, but it has a negative impact on financial systems by introducing more unpredictable crisis dynamics and is a driver of contagion. It is widely accepted that the derivatives market functions as a channel of risk reduction and redistribution, a means of price discovery and a price stabilizer. Various derivative instruments appear to suit the risk preference of different agents, such as hedgers or spectaculars. The derivatives market is expected to increase information flows in the market. Information about future prices is more likely to reflect future demand, thus influencing production and storage decisions and eventually reducing spot price volatility. Atilgan et al. (2016) offer an updated survey on the literature on derivatives in emerging countries, dividing empirical studies into groups according to the function of the derivatives market. In addition to updating the function of the derivatives market on hedging and risk management as well as price discovery in the spot market, they explore issues regarding market structure and efficiency, as well as risk and price measurement.

Over the last three decades, the capital market of Bangladesh has witnessed a haughty growth which is not in line of development in the real sector of the economy. Although, the Bangladesh Securities and Exchange Commission (BSEC) has tried to correct the irregular behavior observed in the market, very often it is argued that lack of proper and firm decisions from the regulator's side has contributed to make the market more unstable rather than to reduce it. The capital market of Bangladesh is passing through a period of extreme volatility, uncertainty and grave crisis. The bust of the bubble in 1996 and 2010, the market has lost values in terms of all major indicators. Investors not only invested in actual stock market but also in index options and futures markets. Option and future market are called derivatives as the value derives due to change of stock prices. The reasons of the crash found that the failure of stock markets and derivatives markets to operate in sync was an important factor that contributed to the severity of the crash.

The main theme of the study are introduced as, the perceived benefits of financial derivatives, the factors that might affect the development of the derivatives market and the measures that need to be enforced for a successful derivatives market. In addition the researcher gives an outline of the benefits of the research to government, investors, listed companies on the Stock exchanges and scholars. The research was carried out in January, 2024.

2. LITERATURE REVIEW

The first modern organized futures exchange began in 1710 at the Dojima Rice Exchange in Osaka-Japan (a futures market in rice was developed to protect rice producers from bad weather or warfare). In 1848, the Chicago Board of Trade (CBOT) facilitated trading of forward contract on various commodities. [The first contract (on corn) was written on March 31, 1851.] In 1865,the CBOT went to step further and listed the first "Exchange traded" derivative contract in the US. There contracts were called "further contracts" [standardize futures contracts were introduced]. The Chicago produce Exchange was established in 1874, renamed the Chicago Butter and Egg Board in 1898 (a spin-off of CBOT) and then reorganized into the Chicago mercantile Exchange (CME) in 1919. Following the end of the post ware international gold standard, in 1972 the CME formed a division called the International

Monetary Market (IMM) to offer futures contracts in foreign currencies: British pound, Canadian dollar, German Mark, Japanese Yen, Mexican Peso, and Swiss franc.

The London Metal Market and Exchange Company (London Metal Exchange) was founded in 1877, but the market traces its origins back to 1571 and the opening of the Royal Exchange, London. Before the exchange was created, business was conducted by traders in London coffee houses using a makeshift ring drawn in chalk on the floor. At first only copper was traded. Lead and Zinc were soon added but only gained official trading status in 1920. The exchange was closed during world war II and did not re-open until 1952. The range of metals traded was extended to include aluminum (1978), nickel (1979), tin (1989), aluminum alloy (1992), steel (2008), and minor Metals cobalt and molybdenum (2010). The exchange ceased trading plastic in (2011). The total value of the trade is around us 11.6 trillion annually.

Around 30 years ago, the organized derivatives market was small and domestic. Since then it has grown impressively around 24 percent per year in the last three decade into a sizeable and truly global market. Some most influential early studies describing the use of derivatives by firms were ones done by the following authors : Chiara Oldani, (2005), John C. Hull (1988), Dolde (1993), Judge (1995), Berkman and Bradbury (1996), Bodnar and Gebbardt (1997), Hakkarainen et al, (1997) Bodmar et al (1998), Alkeback and Hayelin (1999) etc. According to some authors-

1988	John C.Hall	A derivative can be defined as a financial instrument whose value depends on (or derives from) that value of other, more basic underlying variable.
1995	BIS	A control whose value depends on the price of underlying assets, but which does not require any investment of principle in those assets.
1997	Greenspan	The most significant event in finance during the past decades has been the extraordinary development and expansion of financial derivative.
1997	Sahoo	The legal framework for derivatives trading in a critical past of overall regulatory framework of derivative markets. The purpose of regulation is to encourage the efficiency and competition rather than impeding it.
1998	Hathaway	Stated that, while there is a perceived similarity of regulatory objective, there is no single preferred model for regulation of derivatives markets.
2000	Marlowe	Argues that- The emergence of the derivative market products must 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 is asset prices.
2005	Li Tian	Establishing derivative market will improve the capital structure and profit-making ability of commercial banks, strengthen the effect of monetary policies and absorb more inter nation capital into a country, thus accelerating economy's future growth.
2006	Mishkin	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.
2007	Bose	Finds that the Indian Stock Markets are more volatile as compared to developed markets and Indian commodities futures markets are going through many ups and downs.

There are few researches available regarding derivatives market in context to Bangladesh. Rahman, Saif and Hassan, M. Kabir (2011) in a detailed study showed how and why financial derivatives market in Bangladesh is necessary. They 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 Jabur, Saleh (2012) showed Financial Derivative Market in Bangladesh: Lessons from Asia. He showed the essential of derivatives, Economic function, Financial derivative exchanges and their products in the world and in Asia and also shows cases- Derivative functional practices in India, Malaysia and Japan. Sultana et al. (2014) analyze the benefits, risks and opportunities of financial derivatives in Bangladesh. Rahman & Das (2015) showed- Necessity of the Establishment of a Financial Derivatives Market in Bangladesh.

3. METHODOLOGY OF THE STUDY

This research article 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 discussion 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.

3.1 OBJECTIVES OF THE STUDY

The indispensable of this article is to draw attention about "Financial Derivative Market" in Bangladesh and its opportunities. Moreover there are some other subordinated as well as principal objectives regarding the functions and management of this matter as revealed below:-

- To know about financial derivatives and its types.
- To know about purpose and benefit of derivatives.
- To show various opportunities.
- Identifying some reasons for the emerging needs for an organized derivative markets in Bangladesh.

3.2 LIMITATIONS OF THE STUDY

The limitations of this article are in the followings:

- Despite the importance of the derivative markets, few outsiders have a compre4hensive perspective on its size, structure, role and segments and on how it works.
- During the preparation of the article, there are some specific drawbacks encountered by as regarding the collections of data, source of information’s regarding the financial as well as economic situation of Bangladesh.
- Unavailability of quality and accurate data was a major limitation.

4. RESULT AND DISCUSSION

4.1 Fundamentals of Derivatives

4.1.1 Concepts

Derivatives are totally different from securities. They are financial instruments that are mainly used to protect against and manage risks, and very often also serve arbitrage or investment purpose, providing various advantages compared to securities. Derivatives come in many varieties and can be differentiated by how they are traded, the underlying they refer to and the product type.

Derivative is a contract or a product whose value is derived from value of some other asset known as underlying. Derivatives are based on wide range of underlying assets. These include Metals (Gold, Silver, Aluminum, Copper, Zinc, Nickel, Tin, Lead); Energy resources (Oil, Gas, Coal, Electricity); Agro Commodities (Wheat, Sugar, Coffee, Cotton, Pulses); and Financial assets (Shares, Bonds and Foreign exchange)

Derivative is a contract between a buyer and a seller entered into today regarding a transaction to be fulfilled at a future point in time. The life of a derivative contract, that is the time between entering into the contract and the ultimate fulfillment or termination of the contract, can be very long in some cases more that ten years. Derivatives transactions are now common among a wide range of entities, including commercial banks, investment banks, central banks, fund managers, insurance companies and other non-financial corporations. Commonly used derivatives are: Forward Contracts, Future Contracts, Option and Swap.

4.1.2 Purposes and Benefits of Derivatives

Toady's sophisticated international markets have helped foster the rapid growth in derivative instruments. In the hands of knowledgeable investors, derivatives can derive profit from:

- Changes in interest rates and equity markets around the world
- Currency exchange rate shifts
- Changes in global supply and demand for commodities such as agricultural products, precious and industrial metals, and energy products such as oil and natural gas

Adding some of the wide variety of derivative instruments available to a traditional portfolio of investments can provide global diversification in financial instruments and currencies, help hedge against inflation and deflation, and generate returns that are not correlated with more traditional investments. The two most widely recognized benefits attributed to derivative instruments are price discovery and risk management.

4.1.3 Price Discovery

Futures market prices depend on a continuous flow of information from around the world and require a high degree of transparency. A broad range of factors (climatic conditions, political situations, debt default, refugee displacement, land reclamation and environmental health, for example) impact supply and demand of assets (commodities in particular) - and thus the current and future prices of the under lying asset on which the derivative contract is based. This kind of information and the way people absorb it constantly changes the price of a commodity. This process is known as price discovery.

- With some futures markets, the underlying assets can be geographically dispersed, having many spot (or current) prices in existence. The price of the contract with the shortest time to expiration often serves as a proxy for the underlying asset.
- Second, the price of all future contracts serve as prices that can be accepted by those who trade the contracts in lieu of facing the risk of uncertain future prices.
- Options also aid in price discovery, not in absolute price terms, but in the way the market participants view the volatility of the markets. This is because options are a different form of hedging in that they protect investors against losses while allowing them to participate in the asset's gains.

As we will see later, if investors think that the markets will be volatile, the prices of options contracts will increase. This concept will be explained later.

4.1.4 Risk Management

This could be the most important purpose of the derivatives market. Risk management is the process of identifying the desired level of risk, identifying the actual level of risk and altering the latter to equal the former. This process can fall into the categories of hedging and speculation. Hedging has traditionally been defined as a strategy for reducing the risk in holding a market position while speculation referred to taking a position in the way the markets will move. Today, hedging and speculation strategies, along with derivatives, are useful tools or techniques that enable companies to more effectively manage risk.

4.1.5 Derivatives Improve Market Efficiency for the Underlying Asset

For example, investors who want exposure to the S&P 500 can buy an S&P 500 stock index fund or replicate the fund by buying S&P 500 futures and investing in risk-free bonds. Either of these methods will give them exposure to the index without the expense of purchasing all the underlying assets in the S&P 500. If the cost of implementing these two strategies is the same, investors will be neutral as to which they choose. If there is a discrepancy between the prices, investors will sell the richer asset and buy the cheaper one until prices reach equilibrium. In this context, derivatives create market efficiency.

4.1.6 Participants and Their Function in Derivatives Markets

Derivatives markets have attracted many different types of traders and have a great deal of liquidity. When an investor wants to take one side of a contract, there is usually no problem in finding someone that is prepared to take the other side. Patwari and Bhargava (2006) stated that there are three broad categories of participants in the derivative market. They are: Hedgers, Speculator and Arbitrageurs.

- **Hedgers-** Hedgers use derivatives to reduce the risk that they face from potential future movements in a market variable. Hedgers can reduce their risks with forward contracts and options. There is a fundamental difference between the use of forward contracts and options for hedging. Forward contracts are designed to naturalize risk by fixing the price that the hedger will pay or receive for the underlying asset, option contracts, by contrast provide insurance. They offer a way for investors to protect themselves against adverse price movements in the future while still allowing them to benefit from favorable price movements.
- **Speculators:** Speculators may be persons or institutions who are betting that the price will go up or price will go down in the future. Whereas hedgers want to avoid exposure to adverse movements in the price of an asset, speculators wish to take a position in the market. Speculators can be used futures and option contract for speculations. Futures and options are similar instruments for speculators in that they both provide a way in which type of leverage can be obtained. However, there is an important difference between the two. When a uses futures, the potential loss as well as the potential gain is very large. When options are used, no matter how bad things get, the speculators loss is limited to the amount paid for the options.
- **Arbitrageurs:** Arbitrageurs are a third important group of participants in futures, forward, and options markets. Arbitrage involves locking in a risk less profit by simultaneously entering into transaction in two or more markets.

4.2. OPPORTUNITIES

Derivatives have become an integral part of the financial system in the world's leading economies. There are about 55 organized derivatives exchanges in the world. In Bangladesh there is no organized derivatives exchange market yet. But there is enormous opportunity for this market. Li Tian (2005) in his article named "Research on necessity of the establishment of financial derivative market in China", described some key facts that indicated the crucial need of derivative market for the financial stability and economic growth. Rahman& Das (2015)in their article named "Necessity of the Establishment of a Financial Derivatives Market in Bangladesh", describe some important facts, that may prove the establishment of financial derivative market in Bangladesh as an imperative decision for the sustainable growth and development like them I am also point out some important facts and as following discusses the opportunities prospects and advantage of derivative market in Bangladesh from different point of view in below:

4.2.1 From the Authority's (BSEC) Point of View

As we know in Bangladesh security Exchange commission (BSEC) is the authority under which a Derivative market will establish and taken case off. As per BSEC's view point they said that today the complete focus of individual investors, institutions and corporations are on stock Exchange. This put a limitation for different investor to choose investment options. If these in any future and forward market beside stock exchange it can provide an option for the investors to get away from incurring losses. In the year 2016, BSEC issue a directive for the derivative markets and its operational guidelines. It includes, different types of derivative products, product design, contract specification, trading platform, basic of trading, entities in the trading system, custody, clearing and settlement, risk management, client broker relationship inn derivative segment, professional or investor education, approval and issue, preconditions etc.

4.2.2 From the Investments Point of View

The investors are willing to have more options for their investment. Derivative market can be the solution for them. Different aspects regarding this matter discussed below:

- 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 be can gain in the hedging for that product market.
- Countries which have unstable economic condition like Bangladesh forward and future contract can be useful. Because of unstable economy price fluctuation in common in our country. Future and forward market can reduce problems rise due to unpredictable price condition.
- Derivative 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).
- Cost of investing in Derivatives is significantly lower. That mean if one (investor) composes the cost of gaining exposure to less liquid assets such as real estate, the cost differential between the derivative and the direct investment in the underlying is even significantly higher.
- Derivatives also allow investor to take positions against the market if they expect the underlying asset to full in value. Typically, investors would enter into a derivatives contract to sell an asset (such as single stock) that they believe in overvalued, at a specified future point in time. This investment in successful provided the asset falls in value. Such Strategies are extremely important for an efficiently functioning price discovery in financial markets as they reduce the risk of assets becoming excessively under overvalued.

4.2.3 From the Financial Market Point of View

Modern economy is essentially running with the deepening of financial market, which is considered by some economists as the nucleus of the macro economy system. The capital market of Bangladesh is still in primary stage in respect of development. This market is so much volatile in nature. Big traders can easily manipulate the market with forming syndicate. Two major collapses, one in 1996 and another in

2010-2011, according to reports of prove-committee, were the evidence of such syndication and manipulation. The lack of deepening of market, which might be with increasing the substantial number of instruments and participators, is the prime cause of syndication, manipulation and ultimate collapses. So for deepening of financial market of Bangladesh, there is no alternative to increase the number of financial instruments as well as participators in the market. If general investors find the derivative instruments to shift their risk, they will obviously be interested to come in the market with their small amount of savings. Actually people want to come in the market. But Bangladesh hasn't able to make a good platform to motivate the small investors, who can be called as the nucleus of the financial market like ours. So the establishment of a financial derivative market would bring some new instruments in the market such as: forward, futures, options and swaps that innately own the risk-shifting characteristics. In this way, the number of instruments as well as the participators would be increased substantially. That would ultimately deepen the market.

4.2.4 From the Economic Point of View

Derivative Markets perform many economic functions. Some of the salient economic functions of the derivative market include:

a. Prices in a structured derivative market not only replicate the discernment of the market participants about the future but also lead the prices of underlying to the professed future level. On the expiration of the derivative contract, the prices of derivatives congregate with the prices of the underlying. Therefore, derivatives are essential tools to determine both current and future prices.
b. The derivatives market relocates risk from the people who prefer risk aversion to the people who have an appetite for risk.
c. The intrinsic nature of derivatives market associates them to the underlying Spot market. Due to derivatives there is a considerable increase in trade volumes of the underlying Spot market. The dominant factor behind such an escalation is increased participation by additional players who would not have otherwise participated due to absence of any procedure to transfer risk.
d. As supervision, reconnaissance of the activities of various participants becomes tremendously difficult in assorted markets; the establishment of an organized form of market becomes all the more imperative. Therefore, in the presence of an organized derivatives market, speculation can be controlled, resulting in a more meticulous environment.
e. A significant accompanying benefit which is a consequence of derivatives trading is that it acts as a facilitator for new Entrepreneurs. The derivatives market has a history of alluring many optimistic, imaginative and well educated people with an entrepreneurial outlook, the benefits of which are colossal.

In a nutshell, there is a substantial increase in savings and investment in the long run due to augmented activities by derivative Market participant.

Mostly investments are based on the stock Exchange and due to this; it become a very sensitive sector. Fall of which can create economic disaster. And that in why there should be parallel market which can help the economy to get heal if there any economic catastrophe especially because of stock market.

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 in one kind of indicator which tells the strength of that country's economy. It also desired for Bangladesh. As the economy in going beside Stock Exchange the country will also looking for other investment opportunities. This will leads the concept of establishing a Derivative market in Bangladesh.

4.2.5 From the Export & Import Point of View

Derivatives are risk shifting devices. Initially, they were used to reduce exposure to changes in foreign exchange rates, Interest rate, or stock index. For example, if a Bangladeshi company expects payment for a shipment of goods in U.S. Dollar, it may enter into a derivative contract with another party to reduce the risk that the exchange rate with the Bangladeshi Taka will be more unfavorable at the time the bill in due and paid. Under the derivative instrument, the other pasty in obligate to pay the company the amount due at the exchange rate in effect when the derivative product, the company has shifted the risk of exchange rate movement to another party. Multinational corporations use forward contracts to hedge their imports. They can locks in the rate at which they obtain a currency needed to purchase imports, so they do not have to worry about fluctuations in the spot rate until the time of their future payments. So corporations that have open positions in foreign currencies can consider purchasing or selling future contracts to off net their positions. That means the purchasing of futures contracts locks in the price at which a firm can purchase a currency.

4.2.6 From the Corporate Sectors Point of View

Mutual fund managers, corporate treasurers or pension fund administrators can use derivative in different investment strategies. These investment managers may decide that it is more "beneficial to assume a specific "risk' characteristics of a security. For instance, several derivative products may be created based on debt securities that represent an interest in a pool of residential income mortgages. One derivative product may provide that the purchaser receives only the interest payments made on the mortgages while another product may specify that the purchaser receives only the principal payments. These derivative products, which react differently to movements in interest rates, may have specific appeal to different investment strategies employee by investment manages.

So Derivatives can be used by corporate treasurers who wish to take advantage of favorable interest rate in the management of corporate debt without the expense of issuing new debt securities. For example, if a corporation has issued long term debt with an interest rate of 7 percent and current interest rates are 5 percent, the corporate treasurer may choose to exchange (i, e. swap) interest rate payments on the long term debt for a floating interest rate, without distributing the underlying principle amount of the debt itself.

4.3 BASIC REASONS FOR THE EMERGING NEEDS FOR DERIVATIVES MARKET IN BANGLADESH.

In the article named, "The potential of Derivatives market in Bangladesh" (Rahman & Hassan-2011), & the article name, "Necessity of the Establishment of a Financial Derivative Market in Bangladesh" (Rahman & Das). These have been described elaborately the importance of derivatives market in Bangladesh. They showed some key reasons, explained in below, for what the derivatives market in very essential for Bangladesh.

4.3.1 To Maintain Financial Market Stability

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. The capital market of Bangladesh is so much volatile in nature. A good number of academic papers investigated the nature and performance of Bangladesh stock market.

Example	Year	Examines	Suggest Result
Hassan & Chowdhury	2008	The efficiency of stock market of an emerging market. They employ a batter of test including variance ratio tests to examine the efficiency issue of Bangladesh stock market.	Portfolio results suggest that the DSE is weak form efficient, but that DSE is weak form inefficient. They suggest that individual firm returns are influenced by non-synchronous trading and firm specific and market micro structure effects.
Syed Basher, M. KabirHanan and Anisul M. Islam	2007	The time varying risk return relationship and impact of institutional factors such as circuit breaker on volatility for the emerging equity market of Bangladesh [namely The Dhaka Stock Exchange DSE] using daily and weekly stock return	The DSE equity returns showed negative skewness, excess kurtosis and deviation for normality. The return display significant serial correlation suggesting stock market inefficiency. The results also shown a significant relationship between conditional volatility and stock returns, but the risk-return parameter is found to be sensitive to choice of samples and frequencies of data. Overall, the coefficient of the risk return parameter is negative and statistically significant.
Hassan and Maroney	2004	This paper examiners efficiency of Dhaka Stock Exchange (DSE) by taking into consideration the problems of non-linearity, thin trading and structural change.	Results show that parameter uncertainty is a major consideration when developing any successful trading strategy in Bangladesh stock market.

So the researchers strongly believe that because of the internal characteristics of risk-shifting of derivative instruments, establishment of such markets in Bangladesh might be very right decision not only for reduction of volatility of capital market(i.e. by increasing the number of instruments and participants and deepening of markets) in Bangladesh but also for bringing financial market stability. Though, no sophisticated mechanism in this world can be secured against the man-made disaster.

4.3.2 Protection in Major Export Sector (Especially RMG) Sector

The readymade garments industry acts as the backbone of our economy and as a catalyst for the development of our country. We take pride in the sector that has been fetching billions of dollars as export earnings and creating jobs for millions of people (especially women) in the country. The country with its limited resources has been maintaining 6% annual average GDP growth rate. This has been possible with the top-most contribution of RMG sector. Now we envision Bangladesh achieving the middle-income country status by 2021. We firmly believe that our dream will come true within the stipulated time and the RMG industry will certainly play a crucial role in materializing the dream. RMG industry is now the single biggest export earner for Bangladesh. The sector accounts for 81% of total export earnings of the country. When the jute industry started losing its golden days, it is the RMG sector that replaced it. The apparel industry of Bangladesh started its journey in the 1980s, and has come to the position it is in today. Despite the epic growth of our RMG industry, and its bright prospects, challenges are still there. However, the RMG sector is export oriented in Bangladesh. Its export of final products as well as import of raw materials both are susceptible to exchange rate fluctuation. The incomes and costs of RMG sector changes highly due to the changes in exchange rate. In this context, the owners of garments can't protect themselves through hedging or other such strategy using any instrument like derivatives which have innate characteristics of risk-shifting.

Though, to mitigate exchange rate risk RMG exporting companies historically using two tools like selling the rights of Letter of Credit (LC) and forward contract over the exchange rate, these have some problems. "The transfer of LCs has its own disadvantage of high processing fees that can amount from 3% to 5% of the total LC amount. Again, forward contract on the foreign exchange often become hassling due to the rigidity of regulation of the central bank".(SaifRahman and M.Kabir Hassan,2011).They showed an example of how exporter can use the range forward contract to protect themselves against exchange rate risks. Suppose a Range Forward Booking processed in order to hedge the exchange rate risk during the period January to May 2015 for an amount of USD0.5 million. The amount is a limit and design of the contract allows exercising the right of converting certain amount of US dollar at the floor rate on exercise dates as long as the cumulative amount doesn't exceed 0.5 million.

A hypothetical transaction summary

Date	USD Volume	Spot Rate(SR)	Exercised Rate(XR)	BDT@SR	BDT@XR	Actual Information
31 Jan,15	100,000	78.25	78.28	7825,000	7828,000	7828,000
28 Feb,15	100,000	78.31	78.36	7831,000	7836,000	7836,000
31 Mar,15	100,000	78.44	78.42	7844,000	7842,000	7844,000
30 Apr,15	100,000	78.45	78.48	7845,000	7848,000	7848,000
31 May,15	100,000	78.52	78.49	7852,000	7849,000	7852,000
			Total:	**39197,000**	**Total:**	**392,08,000**
					Loss Avoided:	**13,000**

The summary shows that the company using Ranged Forward Contract has been able to avoid loss of BDT13000, which could have been much higher depending on the nature of volatility in the rate of exchanges. Hence derivatives can act as a protection in any major swing exchange rates.

4.3.3 Protection in Major Import Sector (Import of Petroleum) Sector

Petroleum is a principal commodity for Bangladesh. The national demand of this product is entirely met by import. Bangladesh's petroleum import in mainly consist of the refined oil products and comparatively a very little crude oil is imported as the country doesn't have an established industry of oil refining. Considering the entire national import of any given year, the petroleum product as well as the machinery and equipment are the highest contributors in the whole import amount. Petroleum commodities are highly price inelastic. Its price is so much volatile but demand is not. That's why every country is to bear the consequences of the rapid changes in price of this commodity. To hedge against such a risky trend in petroleum prices globally futures, options and swap contracts are used. Two major exchanges dealing with energy derivatives are New York Mercantile Exchange and London International Petroleum Exchange. (Rahman and Hossain, 2011).If Bangladesh could able to establish derivative market, it could have been able to use various customized derivative instruments to hedge import risks.

5. CONCLUSION & RECOMMENDATION

We are developing nation and our economy in growing day by day in order to compete with the world emerging economy. As a part of development we are expecting Derivative market to enter in our economy as well as country. We surely benefited from its, if we can properly manage it. We can have our minerals like natural has can be an underlying asset. We can easily reduce the price fluctuation mainly price increase in the daily goods like rice and other.

Starting something for the first time is always needed to face and overcome some obstacles. In order to establish a derivative market in Bangladesh we need some logistic supports. The following recommendations are proposed to build up an organized financial derivatives market in Bangladesh.

- First and foremost, the Security and Exchange Commission should form an advisory committee (Like Dr. L.E. Gupta committee) for preparing a comprehensive report on the feasibility of introducing exchange traded derivatives market in Bangladesh.
- Implementing stringent training and licensing mechanism. (For examples, National Institute of Securities Market (NISM) in India organized training program on Commodity Derivatives, Equity Derivatives & Currency Derivatives).
- Restructuring of Bangladesh Security Exchange Commission (BSEC) is required. Where, BSEC sets the rules and regulations pertaining to trading, eligibility, membership, clearing, settlement, margin maintenance, reporting and the electronic exchange (to begin with DSE) ensures stringent monitoring and ethical and efficient function, is suggested.
- Introduce simpler derivative products first the more sophisticated products should be launched and also introduce that products which can be manage risk.
- Developing of existing infrastructure and new system once the advisory committee has successfully completed its feasibility analysis and provided a regulatory framework, focus should shift on upgrading infrastructure to accommodate derivative trading. A deep and liquid market for the underlying (initially only DSE and CSE traded stock) is necessary for the development of an efficient derivatives market.
- Universities curriculum may be update in this concern. That is why they can understand about these types of market.

So, these are the recommendations from my analysis towards establishment of a derivative market in Bangladesh.

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