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Financial Environment for Derivatives: Growth and New Dimensions for Financial Derivative Market in Pakistan; A Case Study

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Abstract
This financial market structure shapes the neatness and certain stability of the marketplace. In the last decade, the financial market in Pakistan has become more volatile than it before. The Objective of this paper is to highlight the significance of derivative market in emerging economies like Pakistan with reference to its growth and new dimensions. The study further explains that the use of interest rate derivatives as a tool to solve their financial risk management problems along with its significance of development and financial market structure. To achieve research objective, emerging Asian economies have been taken to analyze financial performance and need of Financial derivative market with derivative instruments trading volume. The study concluded that the development of derivative market is prerequisite in the current financial environment and supportive financial environment is essential for promoting and growth of financial market in Pakistan.
Key words*:* Financial Derivatives, Over-The-Counter, Interest Rate Risk and Financial Growth.

1. Introduction:

The Financial market around the world is complicated institutions with their specific economic and organizational structure. It is a complex share in defining about how prices are discovered for their trade. This financial market structure shapes the neatness and certain stability of the marketplace. The fundamental variation in the financial environment all over the world has contributed towards rapid growth in derivative market (Chui, 2011).

The derivative as financial instrument is a contract which takes place between two parties for some future date. The value of derivative contract is designed based on the value of an underlying asset like Commodities and Equity etc. The notional principal amount is the value of the underlying assets. The derivative contracts are traded in two main type of market; Organized exchanged and Over-the-counter (OTC). In over the counter market trades are contracted and price agreed bilateral e.g. between a couple of single seller and one buyer, either immediately or by the intimidation of broker through electronic communication system.

According to International Swap and Derivative Association survey, to manage business and financial risk exposure, 94% of world largest corporations used derivative products (ISDA, 2009).

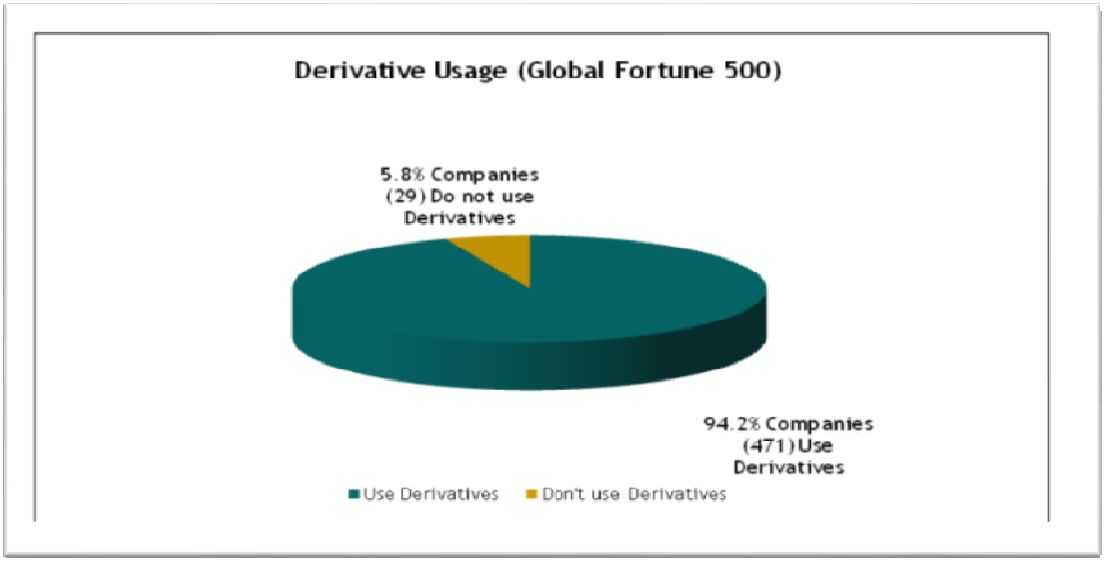

Figure.1 DERIVATIVES USAGE BY THE WORLD'S LARGEST COMPANIES
ISDA Survey 2009.

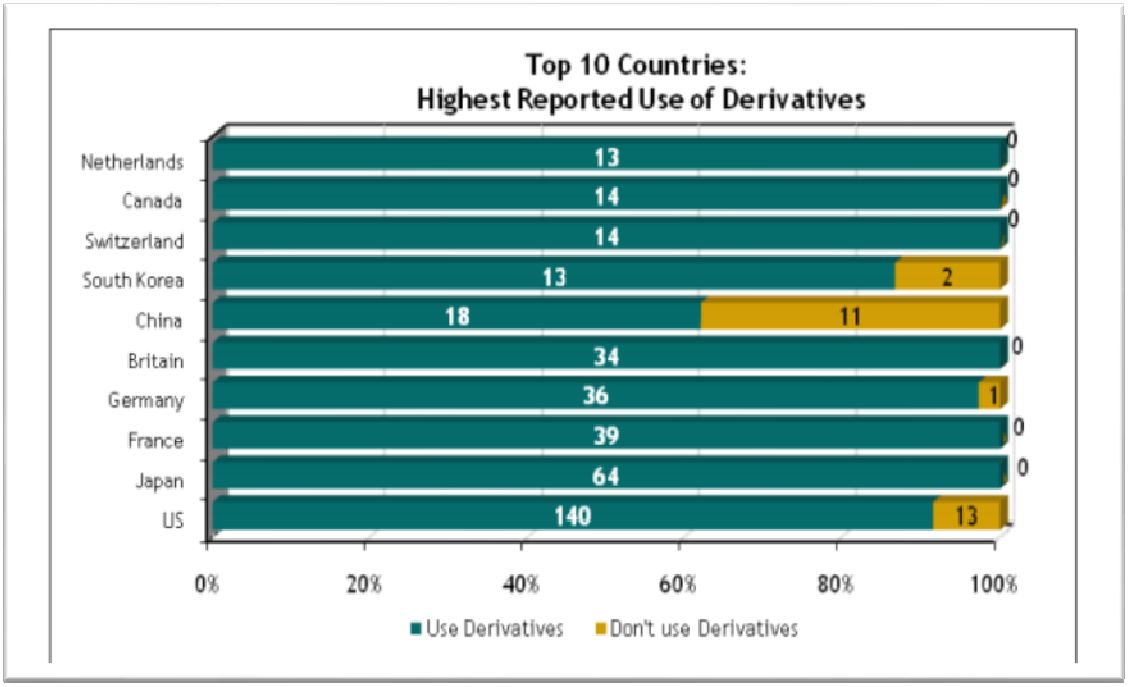

Figure. 2 Highest Reported Use of Derivatives (Top 10 Countries)
ISDA Survey 2009.

The ISDA in 2009 surveyed in 10 countries with the largest 500 corporations. According to survey all firms based in Switzerland, Canada, Japan, Britain, France and Netherland using derivative products. Whereas 92% of US firms and 97% of German corporations used derivatives. Furthermore, chinses firms and firms in South Korea account for 62% and 87% respectively in the head of using derivative products to mitigate their financial as well as business risk.

Table 1. Derivative Usage by the World's Largest Companies (By Sector)
ISDA Survey 2009

Sector Name	Total	% Using Derivatives	% Using Interest Rate	% Using Forex	% Using Commodity	% Using Credit	% Using Equity
Basic materials	86	97%	70%	85%	79%	0%	6%
Consumer goods	88	91%	81%	84%	39%	1%	9%
Financial	123	98%	94%	96%	63%	76%	80%
Health care	25	92%	80%	72%	8%	4%	20%
Industrial goods	49	92%	86%	86%	37%	2%	20%
Services	40	88%	75%	85%	35%	3%	13%
Technology	65	95%	86%	92%	15%	6%	15%
Utilities	24	92%	92%	88%	83%	0%	8%
Total	500	94%	83%	88%	49%	20%	29%

As per ISDA survey 2009, the largest companies of the world extensively using foreign exchange

derivative instruments that is around 88% of total usage of derivative among selected firms. Meanwhile 83% of the firms used interest rate derivatives to manage and hedge their financial risk exposure. Although all sector multinational firms widely used forex exchange derivative and interest rate derivative products but additionally, Equity, Commodity and Credit derivative product are used by specific industries. Utilities firms are more likely used commodity derivatives around 83%, Firms that are based on basic materials used 79% of commodity derivatives furthermore 63% financial firms used commodity derivatives. Business and financial risk are inherent in financial sector so that equity and credit derivative products are commonly used by financial services firms that are approximately 80% and 76% respectively.

2.0. Exchange-Traded and Over-the-counter Derivative Market:

Derivative contracts which are traded in exchange-traded market are standardized with define delivery date with some specific terms of settlement of trade. Traditionally, the negotiation between the traders was taken place by shouting on the trading floor. Now, around the world electronic trading system has replaced it in many exchanges. The exchange-traded trades are openly reported and cleared in the clearing house. The clearing house facilitates the trader if the seller is default.

The clearing house protects traders by marking all market positions on daily basis through a margin system. On the contrary, in Over-the-counter (OTC) the derivative trades are bilateral in nature. All terms of settlements like quality, quantity, location, date and price are negotiable between the trading parties. The transactions price cannot be reported openly and can be placed by any means of communication such as telephone etc. The principal differences between both the markets are Standardization and Customization. This leads towards a critical discrepancy. When the parties are traded with each other the contract terms are standardized and by reason of clearing house facility the other party is also liable to execute his part of contract obligations. In OTC's customized product there is no clearing house guarantee between the parties to force them to perform their part of obligation.

Table 2. The OTC Derivative Market 1998- 2011 (USD bill.)
Source: The Bank of International Settlements.

	Dec.1998	Dec.2001	Dec.2004	Dec.2007	Dec.2008	Dec.2009	Dec.2010	Dec.2011
Total contracts	**80,309**	**111,178**	**258,628**	**585,932**	**598,147**	**603,900**	**601,046**	**647,762**
FX Contracts	**18,011**	**16,748**	**29,289**	**56,238**	**50,042**	**49,181**	**57,796**	**63,349**
Forwards/FX swaps	12,063	10,336	14,951	29,144	24,494	23,129	28,433	30,526
Currency swaps	2,253	3,942	8,223	14,347	14,941	16,509	19,271	22,791
Options	3,695	2,470	6,115	12,748	10,608	9,543	10,092	10,032
Interest rate contracts	**50,015**	**77,568**	**190,502**	**393,138**	**432,657**	**449,875**	**465,260**	**504,098**
Forward rate agreements	5,756	7,737	12,789	26,599	41,561	51,779	51,587	50,576
Interest rate swaps	36,262	58,897	150,631	309,588	341,128	349,288	364,377	402,611
Options	7,997	10,933	27,082	56,951	49,968	48,808	49,295	50,911
Equity-linked contracts	**1,488**	**1,881**	**4,385**	**8,469**	**6,471**	**5,937**	**5,635**	**5,982**
Forwards and swaps	146	320	756	2,233	1,627	1,652	1,828	1,738
Options	1,342	1,561	3,629	6,236	4,844	4,285	3,807	4,244
Commodity contracts	**408**	**598**	**1,443**	**8,455**	**4,427**	**2,944**	**2,922**	**3,091**
Gold	175	231	369	595	395	423	397	521
Other commodities	233	367	1,074	7,861	4,032	2,521	2,525	2,570
Forwards and swaps	137	217	558	5,085	2,471	1,675	1,781	1,745
Options	97	150	516	2,776	1,561	846	744	825
Credit default swaps			**6,396**	**58,244**	**41,883**	**32,693**	**29,898**	**28,633**
Single-name instruments			5,117	32,486	25,740	21,917	18,145	16,881
Multi-name instruments			1,279	25,757	16,143	10,776	11,753	11,752
of which index products							7,476	10,466
Unallocated	10,387	14,384	26,613	61,387	62,667	63,270	39,536	42,606

Table showed that the over-the-counter (OTC) derivative market from the period 1998 to 2011. The above table showed rapid growth of derivative market during this period. The total volume of derivative contracts growing very fastly from $80,309 bill. to 647,762 throughout the period. Every segment of OTC derivative market exhibit positive sustainable growth during this period. The market in December 2011 was more than 8 times the total notional outstanding in December 1998. The compound annual growth rate expirenced escalating by 17%. The interest rate derivative volume growing tenfold, Commodity derivative eightfold and equity derivative fourfold (Sundaram, 2012).

Table 3. The Exchange Traded Derivative Market 1998- 2011 (USD bill.)
Source: The Bank of International Settlements.

	Dec.1998	Dec.2001	Dec.2004	Dec.2007	Dec.2008	Dec.2009	Dec.2010	Dec.2011
Futures	**8,355**	**9,675**	**18,902**	**28,051**	**19,508**	**21,738**	**22,312**	**22,930**
Interest rate	8,031	9,270	18,165	26,770	18,732	20,628	21,013	21,724
Currency	32	73	114	180	125	144	170	221
Equity index	291	332	624	1,101	651	966	1,128	985
North America	3,527	5,909	10,459	14,469	10,138	10,721	11,864	13,107
Europe	2,894	2,437	5,972	9,013	6,507	8,054	6,345	6,534
Asia and Pacific	1,677	1,240	2,290	3,942	2,466	2,408	3,169	2,344
Other Markets	257	88	181	627	397	555	935	945
Options	**5,620**	**14,081**	**27,619**	**51,037**	**38,236**	**51,380**	**45,635**	**35,402**
Interest rate	4,623	12,493	24,604	44,282	33,979	46,429	40,930	31,581
Currency	49	27	61	133	129	147	144	88
Equity index	948	1,561	2,954	6,622	4,128	4,804	4,560	3,733
North America	3,868	10,278	17,073	28,024	19,533	23,875	24,353	19,786
Europe	1,503	3,704	10,336	21,554	18,116	26,323	19,247	14,285
Asia and Pacific	205	68	133	1,021	219	310	383	350
Other Markets	44	31	77	438	368	872	1,651	982

Table expressed the total Exchange traded derivative market volume during 1998 to 2011. According to data, since December 2011 the total volume stood at $ 58,332 (Future = 22930, Options = 35402). The trading volume was at its peak in 2007 at $ 79,088 but it trimmed down hastily in 2008 onward due to global financial crisis in 2007 – 2008. The future outstanding volume mostly consists of Interest rate derivative around 90% of the total. The equities constitute second largest segment of the exchange traded derivative market volume. The Currency market volume was extremely small share in trading volume. In spite of the fall in the market size during 1998 since then, the market, demonstrated a compound annual growth rate that is around 11% (Sundaram, 2012).

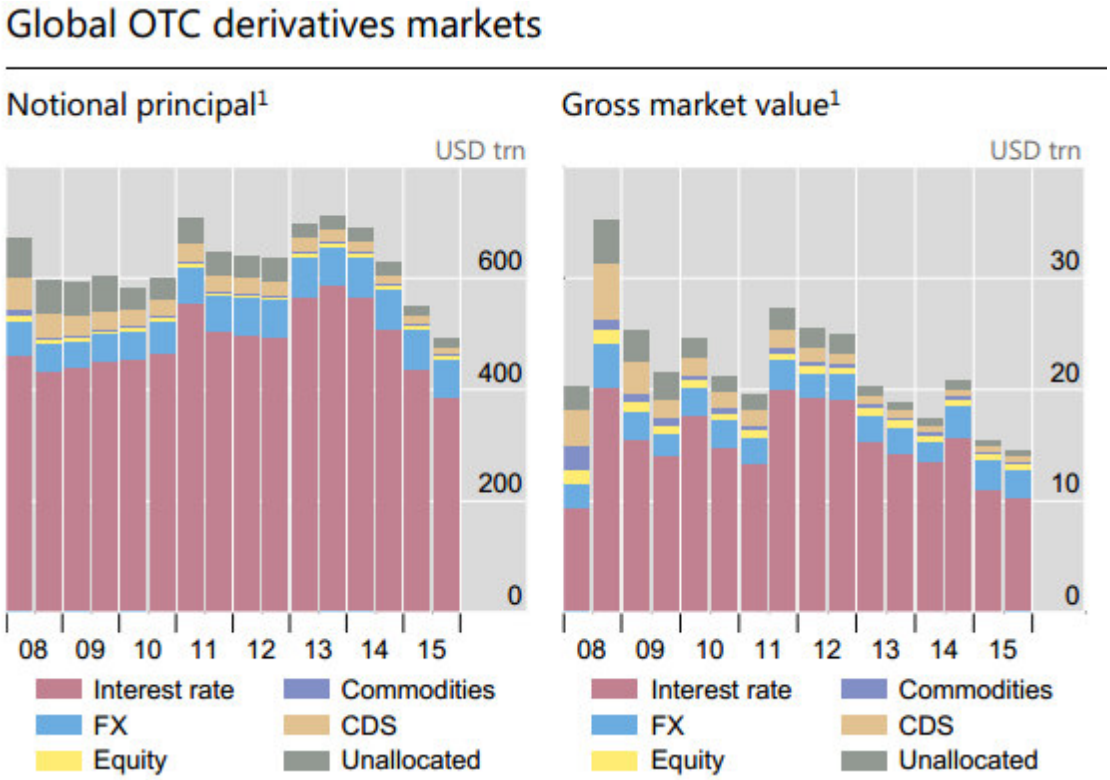

Figure 3. Global OTC Derivative Market

The BIS statistics on the OTC derivative market show that notional amount outstanding totaled $ 693

trillion at the end of June 2013. Notional amount increased substantially in the first quarter of 2013, up from 632 trillion at the close of 2012. In contrast to notional amount the gross market value of OTC derivatives that is the cost of replacing all outstanding contracts at current market prices, decline between ending June 2013 from 24 trillion to 20 trillion. Interest rate contracts are the largest segments in the global OTC derivative market with notional amount totaling $ 561 6trillion at end June 2013.

The table futher disclosed that majority of OTC derivative trades are consist of Interest rate derivatives. The notional amount of outstanding explains the contractual payment and one of the indicator of derivative position. According to table (Left hand segment), the notional amount declines by almost 12% between December 2014 to June 2015. This decline likely be caused by narrowing the gap between interest rate on the reporting date and the rates at the time of initiating of contract. According to grapgh, Interest rate derivative trading vlume was $384 trillion at end of December, 2015 which coverd the 78% of global OTC derivative market volume. The notional principal of interest rate derivatives had been declined since its peak of $.189 triliion at end of December, 2008. The volume further declined from $. 61 trillion at June, 2015. The FX derivatives is the secound major part of the global OTC derivative market in june, 2015. Its accounts for 13% of total OTC derivative market volume. The continuos reduction in credit derivative has been experinced from 1st quarter of 2014 to June, 2015.

2.1 Global OTC interest rate derivative market:

Different market players extensively use the interest rate derivatives all over the world, such as banks, corporations, insurance companies, fund managers, govt. individuals, and the financial services industry. They use interest rate derivatives as a tool to solve their financial risk management problems. According to OTC derivative statistics at June 2015 the interest rate derivatives accounts for greater part of the trading activities in the OTC market. At the end of June 2015, the total trading volume for OTC derivative market was $553 trillion, in which interest rate derivative contracts consist of $435 trillion that is 79% of the global OTC derivative volume.

Furthermore, Interest rate swap grasp leading share of the interest rate derivative segment that is around $320 trillion, FRAs volume was $75 trillion and interest rate options hold $40 trillion volume of the total global derivative volume. Table 1 , shows the differnet segments of OTC derivative market where interst rate derivatives contributes nearly 81% in the global OTC derivative market.As interst rate deeply influnce the performance of both financial and non financial firms, the size of market for derivatives facilitate their hedges. Due to this OTC interst rate derivatives such as swaps and forward rate agreement has expended at a more moderate pace as before. Forigen exchange and credit defult swap contracts are contributed 10.5% and 3.5 % respectivly.Equity and coXmmodity contracts are far behind with 1% and 0.5%(see figuer 1) till june 2013.

3.0. Developing Derivative markets: Case of Emerging Asian Economies

The trading turnover of derivative transactions has developed more speedily in emerging market than in developed economies. In the late 70s, the use of financial derivative instruments has considered most effective tool to improve rate of return and curtail the risk in portfolio management. Financial derivative instruments enhance the supply and demand of capital on qualitative and quantitative basis with healthier business environment that ultimately boost up employment opportunities (Kozarević et al, 2014). As the same time when the global economies get into touch with financial centers, emerging Asia was the matter of concerned for all developed nations.

Although derivative instruments are very essential tools in the western economies to exchange risk with counterparty, but these instruments are unexpectedly growing in several developing economies as well. Ersen and Karagozoglu (2003) investigated the inclination of emerging markets for the organization of derivatives trading. They found in their study that during 1989-2000, 183 derivatives contracts were set up by 10 different exchanges in emerging countries. They further added that mostly contracts consist of futures contracts on financial (equity, exchange rate and interest rate) assets.

China and India are two economies whose economies are anticipated to play vital role in the 21st century (Hull, 2008). In china, the china securities Regulation Commission (CSRC), the China Bank Regulatory Commission and the People's Bank of China are all involved to make regulations for derivative market in China. The regulations for financial market are played very essential role for their market growth. However, stringent regulations can exploit growth thus; individuals and corporations are reluctant to trade in derivatives (Hull, 2008).

The financial system of China has shown tremendous growth along with speedy economic growth with employed world best practices internationally. The financial derivative has much attention in China. According to Yan (2010), several RMB derivative types used, and the RMB derivatives market has already reached a mature stage in China. While in 2000, the derivative trading developed rapidly in India. The National Stock Exchange in Mumbai (NSE) and The Bombay Stock Exchange (BSE) started trading in index futures, Stock futures, stock options and index options. The Over- the -counter (OTC) market is active in India, Particularly in

interest rate and Swap products (Hull, 2008).

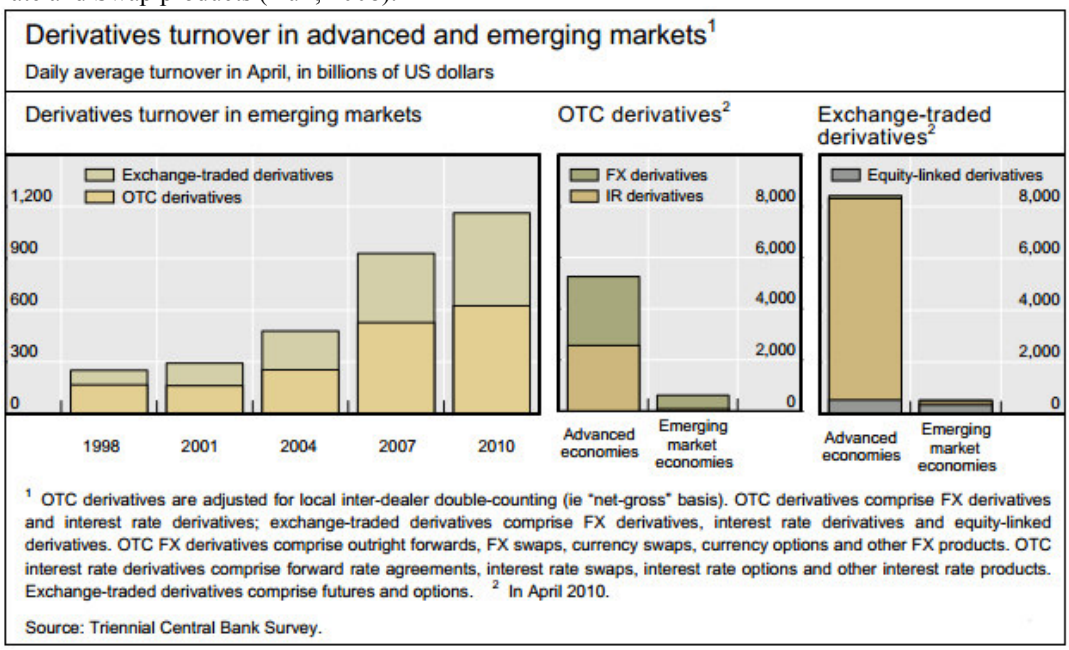

Figure 4. Derivative Turnover in Advance and Emerging Market

The table has described daily derivative turnover in emerging market and Advance economies in 2010 with respect to market size and market composition. According to table, The EM, grew very faster during the period of 2001-2010 that was 300% as campared to AE that was arround 250% (BIS, 2010). The data revealed that around 62% of AE derivative turnover consist of Exchanges and 38% for OTC markets (See left hand graph). In EM economies, derivatives were used as to hedge or speculate against exchange rate risk and interest rate risk. AE 50% total turnover was relied on FX derivative contracts and remaining was interest rate contracts (See middle graph).

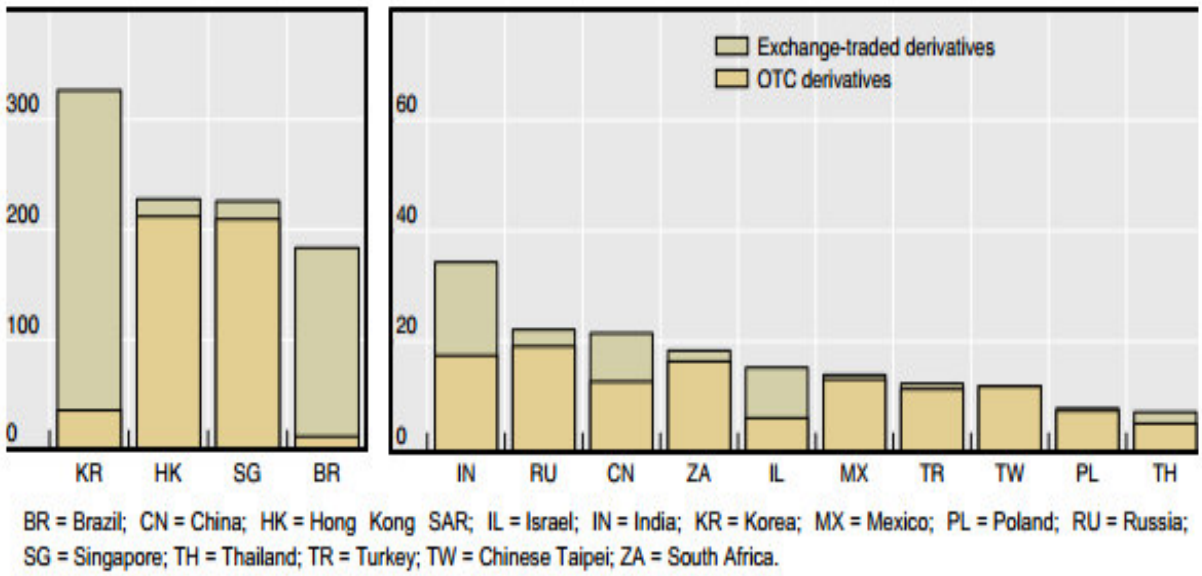

Figure 5. Gross Notional Amount for Derivative Trading in Emerging Markets

Table depicted the derivative turnover in emerging economies. The EM reflcted the 50-50% derivative share in total turnover. The four top EM economies is Hong kong, Singapore, Brazil and Korea. The Hong kong and Singapore have more turnover in OTC market whereas, in Brazil and Korea exchange traded derivative has dominante in total derivative turnover (Mihaljek and Packer, 2010). BR and KR account for around 90% turnover of all exchange –traded derivatives volume in emerging markets. Whereas, HK and SG derivative contracts were mostly traded in OTC derivative markets. Despite of these four EM economies, the remaining EM economies like India derivative trading volume were consist of 50-50% ratio of exchange-traded and OTC derivative market and Israel has around 70-30% ratio between Exchange traded and OTC derivatives. While, the Russia, South Africa, Mexico, Turkey, Chinese Taipei, Poland and Thailand were traded mostly in OTC

derivative market.

4.0. Need for Derivative Market in Pakistan:

The previous literature relating to this study also expressed a favorable argument that suggests that the most considerable incident in finance during the past decades has been the surprising expansion and growth of financial derivatives (Greenspan, 1997). Furthermore, Avadhani (2000) found that derivative as a pioneering financial tool, get away to safeguard from risk arisen from financial market crises. The crash of the Breton wood system of fixed exchange rates in 1971 increased the demand for hedging against exchange rate risk (Rahman et al., 2015). Because of intrinsic features of shifting the risk to the counterparty, the derivative instruments like financial future and forwards, options and swap, trade around the world's financial markets as well as over-the-counter (OTC) markets. The derivative financial market is a foremost segment of the country's fiscal system. Subsequently the 2008 global financial crisis, the financial hubs of the economy, attract more towards derivative market as they were earlier.

Owing to promising need, state and regulatory government agencies around the world are functioning to strengthening the regulation of trading derivative transaction in society to improve transparency and guard of the derivative trade and other financial instruments. In extension to the rising requirement for complex financial product, all domestic financial firms want to extend their product line according to their financial risk exposure. Financial derivatives are the foremost stop beside the road to developing complicated financial instruments.

Modifications in the international business environment and the increased volatility of interest rate movements have profound implication on the path in which commercial banks in Pakistan deal with their risk throughout the last several years. In the last decade, the financial market in Pakistan has become more volatile than in front. From the bank's perspective, interest rate risk is a crucial threat to its profitability and need to be properly handled. Interest rate risk exists with interest bearing assets (loan or bonds) to the possibility of change in the asset value due to variability of interest rates.

4.1. Emergence of Derivative Market in Pakistan:

Changes in the international business environment and the increased volatility of interest rate movements have profound implication on the way in which giant commercial banks in Pakistan deal with their risk. Since 1970, Derivatives have become important part of financial markets; future and option were traded actively in many stock exchanges within the world. (Hull 2006). Due to high volatility in financial securities, industries in that era created a demand for hedging instrument that is used by financial institutions to handle risk. At that period emergence of financial derivative is the most significant expansion in the financial sector.

The recent economic meltdown in Pakistan requires modern and superior way to tackle a high point of instability. Markets for derivatives started in Pakistan in the year 2003. The country first transaction was "cross currency swap" arranged and executed by National Bank of Pakistan (NBP) and Citibank of Rs 4.4 billion with Pak-Arab Refinery Company (PARCO). At that time, the market was slim and uneducated. Customers were not complicated enough to manage the transaction.

Under the cross-currency coupon swap transaction, PARCO has managed to hedge its interest rate exposure perfectly on both its assets and liabilities to the extent of the amount of this transaction. After PARCO, forward rate agreement took place in 2004 which were apparently termed as the first derivatives in the market done by UBL.2004 was the year in which State Bank of Pakistan focused on derivatives. SBP gave approval for FX options, interest rate swaps on a case-to-case basis. At that time, there used to be four active players in the market, Standard Chartered Bank, City Bank, ABN Amro and Deutsche Bank.

4.2. Growth of Derivative Market in Pakistan:

Although the Pakistan stock exchange (PSE) formerly Karachi stock exchange (KSE) generally showed healthier growth in outlook of financial derivative market but in addition PSE, put up with high degree of volatility. However, PSE is considered highest volatile market in derivative all over the world these days. The foremost user of derivatives is Telecom Sector, transportation Sector, Banking Sector, financial institution and power sector in Pakistan during 2007-2012. In Pakistan, the derivative market is promising phase. However, the investors are reluctant to use derivative instruments due to lack of appropriate understanding to use such instruments. Several financial and non- financial firms, manufacturing sector and mutual firms are using financial derivative instruments. Furthermore, although individual investors use the equity and index future but the proportion of using derivative instruments is highly consist on institutional investors. The manufacturing sector of Pakistan like cement sector are used mostly Cross Currency swap (CCS) and interest rate derivative. (Azeem, 2014).

4.3. Dynamic Features for Growth of Derivative Market:

The fundamental variation in the financial environment all over the world has contributed towards rapid

development in derivative market (Chui, 2011). Initially, the central feature of derivative instruments is that they are prepared to transfer financial risk. While fixed income securities and equity are initiated to clear claims on the cash flow stream that is engendered to maintain ownership of the financial assets. The trader who actively trading in derivative markets have expectations about underlying asset price and deliver the superior strategies to manage risk related with variable price. The next powerful driver is the pace of development of financial improvement and new derivative instruments around the world. Modernization in information engineering, paired off with a financial institutions' drive to improve returns and enlarge their global reach smooth the progress of the financial intermediaries to constantly set up or hold new derivative instruments and improvements in risk-management techniques.

4.4. The Competency of Financial Markets and Derivatives:

The number of recently introduced derivative products has been improved efficiency of financial markets. Experiencing with world leading economies, the derivative instruments are reversed into the central division of their efficient financial system. In an effective marketplace, all information appropriate for estimating the value of a product is imitated in the current market price. Financial derivative represents some of the basic tools necessary in the mechanics of efficient capital markets (Rahman et.al, 2015).

Although efficient financial markets rigid bid and ask spread, but it would be lead on the path to higher trading volume and thus, greater market liquidity? Moreover, a constant and efficient financial market is to show the way towards sustainable economic growth and development.

The derivative instruments trade usually between wide varieties of firms, together with investment banks, commercial banks, fund managers, insurance companies and non-banking financial institutions (NBFI).

With the intention to make strong financial sector, sophisticated, feasible and modern competitive derivative securities are indispensable. The derivative products can be boost market efficiency by minimizing the risk of exchange rate, Commodities and interest rate for financial sector like commercial banks. By receiving such types of risk, the derivative user can hedge their risk exposure against unexpected fluctuation in exchange rate, interest rate and the prices of goods. In such instances, the parties can easily shift their risk related with their underlying assets to others through derivative mechanism. Particularly, the derivative dealings entail transferring such type of risk, which firms cannot escape. These are some crucial factors, which provide evidence that the establishment of derivative market in Pakistan is the essential decision for sustainable economic development and development of the nation.

5.0. Strengthening Financial Market Functions:

The market small size puts an adverse impact on financial market liquidity and badly hinders the participation of issuer and investors. The capital market contributes its essential part to channelize domestic savings with productive uses that efficiency enhancing productivity. Hence, the capital market development is a significant element of a country's level of savings, efficiency of investment and eventually the economic growth of a country. Although the Pakistani debt market is at a nascent stage, but it has the potential of growing manifolds. The market has witnessed positive feedback to some of the recent Term Finance Certificate (TFCs) issues. In that era, the interest of public in Initial public offering (IPO) is high which evidence that most of the IPOs were oversubscribed (Sharif, 2002).

In the late 90s, the Pakistani capital market suffered from the number of crucial issues like weak and outdated regulatory reforms from the financial sector, an inefficient and stagnant stock market, publicly owned mutual fund industry and a nascent insurance industry that contributed little to capital market development. During the period, Pakistani financial markets functioned in an unsuitable interest rate regime that attracted personal and institutional savings into the National Saving Schemes (NSS), which offered higher interest rates. This situation slowed the pace of development of capital market, hindered the growth of the corporate debt market, hold back financial intermediation. Although the Pakistan stock exchange represents a healthy growth of financial derivative's outlook, but PSE also experience a high degree of volatility. Currently, PSE is considered highest volatile market in derivative all over the world. The Main user of derivatives is Telecom Sector, transportation Sector, Banking Sector, financial institution and power sector in Pakistan during 2007-2012 (Azeem, 2014).

5.1. Get Away Risk from Market Participators:

The derivative instruments confer strength to the financial market with providing market participants basic hedging techniques along with different investment choices. All derivative instruments like Future, Forward, Options and Swap generally have risk-shifting feature, which would facilitate the participators of the market to get away from risk. The financial market players, as hedger, speculator and arbitrageurs actively trade in financial market and formulate financial market liquid as it before. LI Tian, 2005 has found in his study that "No speculations, no hedges", the hedger is the trader who wants to shift his part of risks to the others. The financial

market also requires speculators, who not only want to make profit by acquiring the risks, but it can also turn down the risk of entire financial market. Therefore, for sustainable expansion of derivative financial market, sound practices of hedger and speculators are essential.

5.2. Globalization of Economy:

The sound financial derivative market is essential for attracting the foreign investors in the country. The derivative market risk-shifting capacity can alleviate foreign capital entering Pakistan's market with low-risk and facilitate to meet its investment save. The volatile stock market and interest rate with the globalization of capital market have encouraging demand for financial derivative instruments to beat risk exposure. The sustainable financial globalization entails generous financial market.

A foreign investor requires strong financial compatibility along with risk- shifting prospects with market stability at long-term basis. However, the current performance of Pakistan Stock Exchange boosts up participation of foreign investors in the country. In Pakistan, the capital resources in the country is scares that due to amplifying the fiscal deficit, reducing foreign reserves and put adverse burden on balance of payment of the economy. Along with several varieties of derivative instruments, foreign investor can also be encouraged to enter and withdraw from the market to improve liquidity and profit. This mechanism will smooth the flow of foreign capital in Pakistan. FDI can be a considerable weapon to tackle these hurdles hence, bridge the gap between investment and the domestic savings. In 1990s, the growth of FDI became considerable in Pakistan, which was the result of elimination of control on capital flow and remittances in 1988. It accelerated FDI US$ 939 million in 1996.

5.3. Sector wise Growth of Derivative in Pakistan:

In expansion phase of financial market in 2003-2005, the trading of derivative instruments executed prominently. The major player of derivative instruments in Pakistan according to their trading volume is cement sector. The cement sector is an expansion phase such type of capital incentive industries requires huge investments and high scale of risk. At this era, the cement sector builds up around 60% of forward contracts to curtail risk. This expansion phase, Lucky cement used interest rate and currency swaps for his manufacturing units to achieved higher level of production. The second player of derivative market in Pakistan is Attock cement, which is used derivative instrument to support his plant expansion capacity.

The floating rate is exchanged for fixed rate based on 6-month T-bill interest rate swap can also be used by Attock cement. Furthermore, another well-known manufacturing unit Kohinoor Textile Mills Ltd. Deal with derivative transactions.

6.0. Potential Benefits of Derivative Instruments for Pakistan Financial Market:

The derivative financial instruments are essential for those individual investors or institutions that should carry out their business globally, which increase the risk of foreign currency and interest rate.

1. The derivative instruments can trim down financial market volatility. The market participants, through finest and rational usage can stabilize the financial market volume. Owing to this unique feature, derivative market prominently renowned all over the world.
2. In forward and future contracts, there is no need of cash at the time of commence the contract. Low transaction cost can also encourage investors towards derivative contacts that can easily execute at very low cost.
3. Furthermore, through derivative instruments, the market participants can easily manage their part of risk exposure in an efficient way.
4. Through Arbitrage, it has ability to take advantage of price deviation in different market place of the same underlying assets.
5. The derivative mechanism enforces the financial market to act rational with efficient market hypothesis (EMH). It can also provide price and interest rate infrastructure and some derivative instruments like future and options give clue about future trend of the market.
6. An additional considerable benefit of trading derivative instruments is to obtain debt leverage easily. With the usage of derivative instruments, the financial institutions can acquire debt without any difficulty for strengthening their business operation smoothly with their desire interest rates.

7.0. Conclusion:

The Objective of this paper is to highlight the significance of derivative market in emerging economies like Pakistan with reference to its growth and new dimensions. This study explains that the use of interest rate derivatives as a tool to solve their financial risk management problems along with its significance of development and financial market structure. The study concluded that the development of derivative market is prerequisite in the current financial environment and supportive financial environment is essential for promoting

and growth of financial market in Pakistan.

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