List of Published Works

The following works were published in research Journals:

1. Unit Linked Insurance Products and Regulatory Tangle: (2011) PL February S-12.
2. Regulation of Financial Derivatives: Some Policy Considerations: The IUP Law Review, Vol I, No.3, 2011, p. 27.

APPENDIX I

PUBLISHED ARTICLE I:

Unit Linked Insurance Products (ULIP) and Regulatory Tangle

(2011) PL February S-12

The recent dispute between Securities and Exchange Board of India (SEBI) and Insurance Regulatory Authority of India has taken new dimensions with the intervention of Finance Ministry cutting in to call a draw. The main point of dispute was whether the ULIPs are insurance products or "collective investment scheme" as defined in Section 2(ba)[1] read with Section 11 AA[2] of Securities and Exchange Board of India Act, 1992(SEBI Act). This has led to a regulatory row hitherto unknown in the centralized regulatory regime as prevalent in India.

The row brings out a need for discussion into the following issues:

(a) Nature of regulatory scheme in India
(b) Nature of regulation-entity centric or product centric
(c) Role of various regulatory agencies in regulation of Collective investment schemes
(d) Nature of ULIP products
(e) Definition of "contract of insurance" as exempt from the purview of collective investment schemes under Section 11 AA of SEBI Act.

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[1] [(ba) "collective investment scheme" means any scheme or arrangement which satisfies the conditions specified in Section 11AA;]

[2] S 11 AA of SEBI Act reads as follows:
(2) Any scheme or arrangement made or offered by any company under which-
(i) the contributions, or payments made by the investors, by whatever name called, are pooled and utilized solely for the purposes of the scheme or arrangement;
(ii) the contributions or payments are made to such scheme or arrangement by the investors with a view to receive profits, income, produce or property, whether movable or immovable from such scheme or arrangement;
(iii) the property, contribution or investment forming part of scheme or arrangement, whether identifiable or not, is managed on behalf of the investors;
(iv) the investors do not have day to day control over the management and operation of the scheme or arrangement.
(3) Notwithstanding anything contained in sub-section (2), any scheme or arrangement
(i) made or offered by a co-operative society registered under the cooperative societies Act,1912(2 of 1912) or a society being a society registered or deemed to be registered under any law relating to cooperative societies for the time being in force in any state;
(ii) under which deposits are accepted by non-banking financial companies as defined in clause (f) of section 45-I of the Reserve Bank of India Act, 1934(2 of 1934);
(iii) being a contract of insurance to which the Insurance Act,1938(4 of 1938), applies;
(iv) providing for any scheme, Pension Scheme or the Insurance Scheme framed under the Employees Provident Fund and Miscellaneous Provisions Act, 1952(19 of 1952);
(v) under which deposits are accepted under section 58A of the Companies Act, 1956(1 of 1956);
(vi) under which deposits are accepted by a company declared as a Nidhi or a mutual benefit society under section 620A of the Companies Act, 1956(1 of 1956);
(vii) falling within the meaning of Chit business as defined in clause (d) of section 2 of the Chit Fund Act, 1982(40 of 1982);
(viii) under which contributions made are in the nature of subscription to a mutual fund;
shall not be a collective investment scheme.]

Nature of Regulatory Regime in India:

Regulation in India is an oft discussed topic. However the exact nature of regulatory regime has seldom been examined. Indian Constitution provides for the frame work on which regulatory agencies work in the country. Part XI read with 7th Schedule of the Constitution provides the guidelines of legislative process. According to this Constitutional scheme, Parliament of India and State Legislatures shall have exclusive any matter which comes within List I and List III respectively and both the Parliament of India and State Legislatures have exclusive power to make laws regarding the matters enumerated in List II of the Constitution of India. Articles 249-255 provides guidelines in case of conflict between the legislative powers. These provisions have been responsible for non-overlapping of the regulatory powers in India. Further unlike many other countries, regulation through specialized agencies is a relatively new phenomenon in India. Till very recently regulation was mainly done through the various departments of the government itself. This is also one good reason why regulatory overlapping was not very frequent in India.

However even during the time regulation was handled by the various departments of government, there were disputes as to the jurisdiction and powers of various departments. In most of these cases resolution was possible without going for a legal battle since the matter involved the same branch of the government. However since the evolution of regulation through self-sustaining corporate bodies, the dispute resolution has become more difficult especially since jurisdiction means power and no regulatory body would be willing to forgo the power that comes along with the jurisdiction.

Very recently the Reghuram Rajan Committee on Financial Sector Reforms has proposed establishment of a Financial Stability and Development Council which the planning commission has said would solve most of the issues relating to regulatory competition. Deputy Chairman of Planning Commission Mr Montek Singh Ahluwalia has reportedly[3] favoured fast tracking the process of setting up FSDC which he thinks would solve issues where two or more regulators are involved.

Nature of regulation-entity centric or product centric:

As already stated the legislative scheme outlined by Article 246 of the Constitution of India states that the appropriate legislative body has power to regulate the "matters enumerated in" the relevant List of 7th Schedule. A reading of various entries in 7th schedule would make it clear that the entries cover both entities and areas. In the case of IRDA and SEBI, Entry 43 of List I of Schedule 7 of Constitution of India reads as follows:

> "Incorporation, regulation and winding up of trading corporations, including banking, insurance and financial corporations, but not including co-operative societies"

Entry 47 mentions insurance whereas Entry 48 mentions stock exchanges and futures market.

A perusal of the legislative scheme under which SEBI and IRDA works would make it clear that these bodies are established to regulate the "securities market" and "insurance business" and reinsurance business". The term "securities market" is not defined in SEBI Act, but Sub clause (2)(a) of Section 11AA of SEBI Act gives an indication that it means any marketplace dealing in securities similar to stock exchanges.[4] The other provisions of

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[3] http://www.dnaindia.com/money/report_montek-singh-for-putting-financial-stability-and-development-council-on-fast-track_1371508 as viewed on 16.04.2010 at 23.09 hrs.

[4] S 11(2)(a) of SEBI Act provide that the measures mentioned in S 11 (1) deals inter alia with (a) regulating the business in stock exchanges ***and any other securities markets***;

Section 11AA also gives an indication that SEBI Act deal with entities and not the business of securities, though SEBI can regulate the market through regulation of entities which play in the market. Similarly IRDA Act also provides for regulation of entities playing in the insurance market. While it is true that these regulatory bodies also gets the power to regulate specific products through the entities floating the products, the thrust of regulation is always on the activities of the bodies which are regulated by these bodies. Thus it is clear that the role of agencies like SEBI and IRDA are more generic in nature- viz, to control the market place rather than the specific products. Further the SEBI Act mentions certain specific type of entities[5] that are coming within the purview of regulatory regime of SEBI. Only those entities venturing into any of the activities mentioned in the SEBI Act could be regulated by SEBI. Similar is the case of IRDA. As such it should be seen that those entities carrying on a business or activity that comes within the purview and already regulated by one of such authority should not normally come within the regulatory regime of the other.

It is also pertinent to note that these entities like SEBI and IRDA are products of a liberalization regime which did away with license raj; and any attempt by these agencies to prohibit entities from dealing with any product solely on the ground that these entities are not registered with them.

Role of various regulatory agencies in regulation of Collective investment schemes:

Collective investment schemes as defined in S 2(ba) read with S 11AA of SEBI Act has the following features:

1. These are schemes or arrangements by a company other than schemes exempt under Section 11AA (3).
2. Under these schemes, the contributions, or payments made by the investors are pooled and utilized solely for the purposes of the scheme or arrangement;
3. Such contributions or payments are made by the investors with a view to receive profits, income, produce or property, whether movable or immovable from such scheme or arrangement;
4. The property, contribution or investment forming part of scheme or arrangement, whether identifiable or not, is managed on behalf of the investors;
5. The investors do not have day to day control over the management and operation of the scheme or arrangement.

As can be seen from this definition, this is a very wide definition, with the obvious intention to bring any collective investment scheme where investors do not have day to day control over management or operation of the scheme with the regulatory umbrella. However it has to noted that Section 11AA (3) excludes certain schemes from within the purview of collective investment schemes even though they are having the very same basic characteristics identified under S 11AA (2). The question is why? To answer this question we need to examine the exempted items, which are:

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[5] S 11(2)(b) of SEBI Act: reads (b) registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with securities markets in any manner;

13[(ba) registering and regulating the working of the depositories, [participants,] custodians of securities, foreign institutional investors, credit rating agencies and such other intermediaries as the Board may, by notification, specify in this behalf;]

(c) registering and regulating the working of [venture capital funds and collective investment schemes],including mutual funds;

Exempted Schemes/arrangements	Regulatory agency
Any scheme or arrangement offered by a cooperative society registered under the Cooperative Societies Act,1912(2 of 1912) or a society being a society registered or deemed to be registered under any law relating to cooperative societies for the time being in force in any state;	Regulatory body formed under the Cooperative Societies Act including Registrar of Cooperative Society
Any scheme or arrangement under which deposits are accepted by non-banking financial companies as defined in clause (f) of section 45-I of the Reserve Bank of India Act, 1934(2 of 1934);	Reserve Bank of India
A contract of Insurance to which insurance Act, 1938 applies	Insurance Regulatory & Development Authority of India
Any Pension, insurance or other scheme under Employees Provident Fund and Miscellaneous Provisions Act 1952	Employees Provident Fund Organisation
Scheme of acceptance of deposits under S 58A of Companies Act, 1956	Registrar of Companies
Scheme of deposits by a company declared as Nidhi or Mutual benefit society under S 620A of Companies Act, 1956	Registrar of Companies
Chit business as defined under S 2 of Chit Funds Act, 1982	Officer appointed by respective State Government
Contributions in the nature of subscription to a Mutual fund	SEBI

It is pertinent to note that each of these exempted schemes are governed by a special statute, different from SEBI Act and the mode of regulation of these schemes are provided under the relevant statute, and is regulated by another regulator(except mutual funds). An argument that can be advanced is that since Mutual funds, which are also exempted from the definition of collective investment schemes are regulated by SEBI itself, it would not be correct to look at the exempted products in this manner. However it is pertinent to note that in S 12(1B) of the Act which provides of registration of entities carrying on collective investment scheme mentions "collective investment schemes including mutual funds"[6], thereby making it clear that the definition of collective investment schemes in Section 11AA(2) was intended to exempt all those schemes and arrangement otherwise regulated. It is also pertinent to note that the definition of collective investment schemes and the provisions related to registration of persons carrying on such scheme were brought in through SEBI (Amendment) Act, 2002, S. 7(w.e.f. 29-10-2002) and on that date SEBI had in place a separate set of regulations for mutual funds called Securities and Exchange Board of India (Mutual Funds) Regulations, 1996. If we see the exclusion of Mutual

[6] S 12(1B): No person shall sponsor or cause to be sponsored or carry on or cause to be carried on any venture capital funds or collective investment schemes including mutual funds, unless he obtains a certificate of registration from the Board in accordance with the regulations:

Funds from the definition of collective investment schemes, the legislative intention in exempting schemes or arrangements already regulated by various bodies from further regulation by SEBI would become crystal clear. This deduction would be further strengthened by the argument that the statutes we are discussing, viz SEBI Act and IRDA Act are products of liberalization which is a philosophy antithetic to over-regulation, including regulation by multiple bodies.

Viewing the scheme of the SEBI Act from this angle, it would be clear that a contract of insurance, which is regulated by Insurance Act and IRDA, would not come within the purview of SEBI regulations.

Nature of ULIP products:

One of the main issues that were raised by the order of Ld. Prasanth Sharan, Whole Time Member, SEBI dated April 9, 2010 was regarding the nature of ULIP products. To quote from the impugned order:

> "I conclude that ULIPs offered by the said entities are a combination of investment and insurance and, therefore, the investment components are in the nature of mutual funds which can only be offered / launched after obtaining registration from SEBI under Section 12(1B) of the SEBI Act."[7]

To understand this further, we need to first look into the definition of the term 'mutual fund'. SEBI (Mutual Fund) Regulations, 1996 define Mutual fund as follows:

> "mutual fund" means a fund established in the form of a trust to raise monies through the sale of units to the public or a section of the public under one or more schemes for investing in securities including money market instruments or gold or gold related instruments or real estate assets;[8]

The Mutal Funds Act of British Virgin Island gives a better definition as follows:

> "an entity which collects and pools investor funds for the purpose of collective investment and which issues shares that entitle the holder to receive on demand, or within a specified period after demand, an amount computed by reference to the value of a proportionate interest in the whole or in a part of the net assets of the entity."

The essential features of mutual funds as per the SEBI definition are:

(a) A fund has to be established in the form of a trust
(b) The purpose of the trust is to raise money
(c) Money is raised through sale of units to public or a section of public under one or more schemes of investing in securities.

It is pertinent to note the following regarding this definition:

a. The definition precedes the definition of collective investment scheme in time.
b. Except the requirement that mutual funds are to be established in the form of a trust, the other two conditions are similar to definition of collective investment scheme under S 11AA of SEBI Act.
c. The definition is silent as to what the holder is entitled to.

It is in this light the definition of Mutual funds under Mutual Funds Act of British Virgin Island turns out to be better than the Indian definition. In the definition of Mutual funds under Mutual Funds Act, the holder of units of mutual fund is entitled to receive on demand, or within a specified period after demand an amount computed by reference to

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[7] See Para 24 of the Order dated April 9, 2010, available in SEBI Website.

[8] Regulation 2(q) of Securities and Exchange Board of India (Mutual Funds) Regulations, 1996

the value of proportionate interest in the whole or in part of the net assets of the entity. This appears to be a proper definition for Mutual funds.
Now let us examine the nature of ULIP products:

a. The Unit Linked Insurance Product has two components- insurance and investment
b. The customers are given option to choose from various funds maintained by the company as per IRDA guidelines for the purpose of investment.
c. The customer gets the option to move from one fund to another fund, and enhance, balance or secure the returns at specified points of time.
d. The insurance part of the product should always be active for the product to give any returns. Some of the insurance companies permit partial withdrawal of funds before maturity, in which case the funds required for insurance is parked with the insurance company. However it does not appear that any insurance company is giving a scheme where the insurance part can be totally withdrawn by the customer, keeping his funds with the insurance company only for the investment purposes.
e. Going to the rationale of the order of SEBI dated April 9,2010, some of the grounds taken by SEBI for coming to conclusion that ULIPs are similar to Mutual Funds and the correct position regarding each of them are given in the table below:

<table>
<tr><th>Arguments by SEBI</th><th>Correct Position/Counter Argument</th></tr>
<tr><td>The attributes of the investment component of ULIPs launched by these entities are akin to the characteristics of mutual funds which issue units to the investors and provide exit at net asset value of the underlying portfolio.</td><td>The definition of Collective investment scheme under S 11AA of SEBI Act recognises that there could be collective investment schemes outside SEBI regulation, including insurance product and company deposits</td></tr>
<tr><td>The investment component of ULIPs is subject to investment risks associated with securities markets which are entirely borne by the investors.</td><td rowspan="2">True but it needs to be also kept in mind that the guidelines issued by competing regulator IRDA are sufficient to hedge the investment risks</td></tr>
<tr><td>There are two components of ULIPs - an insurance component where the risk on the life insurance portion vests with the insurer and the investment component where the risk lies with the investor. This establishes conclusively that ULIPs are a combination product and the investment component need to be registered with and regulated by SEBI.</td></tr>
<tr><td>Further, it has been said that ULIPs have a mandatory insurance cover which forms a vital and inseparable part of every ULIP. In this regard I note from one of the products offered by one of the entities that for a sum</td><td>Here instead of going into the issue whether insurance component is the vital and inseparable element, the Ld. Member has instead gone into the issue whether the ULIP is predominant, and after coming to the</td></tr>
</table>

	assured of Rs. 15,00,000/- an annual premium of Rs. 1,50,000/- is collected for 10 years. The premium allocated for insurance out of this is Rs. 7500/- in the first year and Rs. 3000/- in subsequent years. (The annual premium for a term plan for 10 years for an identical sum assured for an identical life assured by the same company is Rs. 3,342/-) Here, the insurance component is 2% of the premium paid. The products offered by other entities also follow a broadly similar pattern. Thus, the argument that insurance is both predominant and inseparable in a ULIP fails.	conclusion that the insurance is not a predominant element, on the basis of the conclusion that the value of insurance component in case of some products is much less compared to investment component. It must be borne in mind that the issue is not whether which component is predominant, but whether the components are inseparable, since if the components are inseparable, the insurance companies would go out of the purview of SEBI regulation by virtue of Section 11AA(3)(iii) of SEBI Act.

Hence it can be concluded that it is unreasonable to hold ULIPs as mutual fund products simply because the requirements under SEBI guidelines are fulfilled, since the definition of mutual funds in SEBI guidelines have not be updated since the introduction of S 11AA in 2002 and further the legislative intention is clear in the language of S 12(1B), which says that "No person shall sponsor or cause to be sponsored or carry on or cause to be carried on any venture capital funds or ***collective investment schemes including mutual funds***[9], unless he obtains a certificate of registration from the Board in accordance with the regulations". Since mutual funds are also in the exempted category in S 11AA (3) of SEBI Act, the purposive inclusive of mutual funds alone within the registration requirement under S 12(1B) of the said Act clearly shows the intention of legislature to exempt all other collective investment schemes, which may have some of the features of mutual funds, but are regulated by a different regulator. Now in the light of the above discussion, it can be understood that the most critical test is whether the ULIP is an insurance product.

Definition of "contract of insurance"

Neither the SEBI Act nor IRDA Act defines what is meant by a contract of insurance, though indications under both these statutes are that the contract of insurance is defined in Insurance Act, 1938. However a perusal of Insurance Act, 1938 would reveal that the term 'Contract of insurance' though used in the Insurance Act, 1938 is not defined there in. However the Insurance Act defines different types of life insurance business and also frequently refers to "contract of insurance". Hence we need to look into cases laws for a proper definition of contract of insurance.

In *Prudential Ins Co* v *Inland Revenue Commrs*[10], the Kings Bench as defined a contract of insurance as "a contract where by one party (insurer) promises in return for a money consideration (premium), to pay to the other party (insured) money or money's worth on the happening of an uncertain event more or less adverse to the interest of the insured."

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[9] Emphasis supplied.

[10] (1904)2KB658:73LJKB 734:91 LT 520:20 TLR 621

In *Gould* v *Curtis*[11] the Kings Bench held that in case of life insurance policies, it is not necessary to have a character more or less adverse to the interest of the insured in the case of life insurance since life insurance has an investment aspect as well, such as one providing for the uncertainty of life.

From the above decisions it is apparent that insurance, especially life insurance has an integrated investment aspect as well. Even the traditional life insurance products, has the investment aspect and the pay out on maturity happens by liquidating the value of the collective investment, through a complex actuarial calculation, and if the logic adopted by SEBI in its order dated April 9, 2010 is applied, all life insurance products would come within the purview of S 11AA(2) and this was clearly not the legislative intention as can be seen from exemption given to contracts of insurance under S 11AA(3)(iii) of SEBI Act.

The question now posed is whether ULIPs specifically have the features of contract of insurance as defined in Prudential Ins. Co. and Gould. In fact this issue was examined in *Fuji Finance Inc. v. Aetna Life Insurance Co Ltd*[12] where the Court of Appeal in UK held 'capital investment bonds' (having features identical to ULIPs), to be contracts of insurance. The arguments raised against such reckoning by the court below was that a policy is not a contract of insurance unless quantum of the payment made unless triggered by death or a contingency on life (and not same as what insured would get on surrender of the policy), similar to the argument raised by SEBI in its order dated April 9, 2010. The court of appeal rejected this argument and held that since the policy came to an end on the death of the insured and the right to surrender was related to the continuance of life for it could not be exercised after the death of the insured, there was an uncertainty involved. While it accepted that a contract offering merely a surrender value would not have been an insurance policy, it held that there should be no reason why a contract that offers both death benefits and surrender benefits should not be considered as a contract of insurance. There seems to be no reason why this logic as applied to capital investment bonds are not equally applicable to ULIPs in India and hence ULIPs are contracts of insurance exempt from the regulatory purview of SEBI under S 11AA(3)(iii) of SEBI Act.

Final Analysis:

In the light of the above discussions, the following conclusions can be drawn:

a. Regulatory regime in India, post liberalization can bring in a scenario of regulatory competition which was hitherto unknown, and there is requirement of a dispute resolution mechanism between regulators to avoid such conflicts. Such mechanism should also ensure that before any orders which may affect the matters within the jurisdiction of another regulator, the matter has to be referred to the affected regulator and the dispute resolution mechanism and on post resolution of the dispute and/or approval of the order through the dispute resolution mechanism, such orders should be made public. This is required both for good governance, to avoid regulatory conflicts and to ensure smooth functioning and healthy growth of the financial sector.
b. Collective investment scheme is a generic term and the essential requirements to constitute any scheme or arrangement as provided in S 11AA (2) of the SEBI Act would also cover the entities exempted under s 11AA (3) of the said Act. The purpose of the exemption there fore is to avoid regulatory conflicts and an understanding of the exemption in this sense is missing from the SEBI order dated April 9, 2010.

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[11] 1913)3 KB84,95

[12][1997] Ch 173, [1996] 4 All ER 608.

c. It is undisputed that ULIPs are combined insurance and investment products. But it should also be understood that both the insurance and investment parts are currently regulated by IRDA, and hence further regulation by SEBI is both unnecessary and contrary to the spirit of S 11AA(3) of SEBI Act. Further such regulation is also not in sync with the purposes of liberalization which gave birth to agencies like SEBI and IRDA.
d. ULIPs which offer a combination of insurance and investment are contracts of insurance drawing the logic of *Fuji Finance Inc. v. Aetna Life Insurance Co Ltd* and hence are exempt from the regulatory purview of SEBI.

In the light of the discussion above, it is proper to conclude that regulatory competition at least in the case of ULIPs was perfectly unavoidable had SEBI took into account all aspects of law and regulation. However, it should not go unseen that existence of multiple regulatory bodies will create such scenes in future, since regulation means control and control means power. Hence it is pertinent to create an appropriate dispute resolution mechanism, which would pre-empt regulatory issues and resolve them before those issues go ugly. The most appropriate mechanism should be a higher body, with legal experts in board, which would judiciously decide on issues of regulatory competition taking all the parties into confidence and which has powers to withhold the orders before they are issued. It would be only appropriate that such issues are resolved before it goes public since the impact of such regulatory issues would be much higher on individual investor than any of the regulators can imagine.

APPENDIX II

PUBLISHED ARTICLE II:

Regulation of Financial Derivatives: Some Policy Considerations:

The IUP Law Review, Vol I, No.3, 2011, p. 27.

Regulation of Financial Derivatives: Some Policy Considerations

John Varghese*

Financial Derivatives which form a major driving force in the international monetary sphere are being used by banks and financial Institutions to mitigate risks arising from the volatility of the underlying asset. They form the back bone of international economy. Derivatives Regulation in the US and India is essentially a hybrid of "institutional" and "functional" regulation. Though Regulatory Institutions have come up with disclosure norms to ensure greater transparency in the trading of derivatives, derivative regulation is more focussed on self-regulation. This paper tries to examine the various models of regulation of financial derivatives from a purposive perspective.

Introduction

Financial Derivatives have established themselves as a major driving force in the international monetary sphere in the recent past. While derivatives were originally used as an effective monetary instrument to multiply the wealth through ripple effect, of late these instruments are also used by banks and financial institutions to mitigate risk arising from the volatility of the underlying asset. This apart, derivatives along with the new generation monetary instruments such as Investment securities in bearer form have already become the back bone of International Economy.

Regulation of Financial Derivatives has a chequered history. There were periods in history when the trading in these instruments was banned. However like any prohibition, the prohibition of openly trading in financial derivatives only led to evolution of a clandestine market for these instruments, and innovative players in these markets created new types of instruments to bypass regulatory restraints.

Derivatives regulation in the United States as well as in India is essentially a hybrid of "institutional" and "functional" regulation. Some organisations that trade in derivatives are regulated by institutions like FSA, Securities and Exchange Commission, RBI, SEBI etc., and these institutions have come up with disclosure norms to ensure greater transparency in the trading of derivatives. On the other hand, the functional regulatory regime controls the instruments are “financial instruments” with a slew of measures to ensure transparency and accountability. On the whole it can be seen that the derivative regulation is more focused on self-regulation with an underlying assumption that the trade houses that utilises derivatives does so prudently and with self-regulation.

History of Derivatives Markets and Regulatory Efforts

Ever since money was invented, humans have devised ingenious ways to increase its worth. Financial sector have been dominating the political scenario of many civilizations and countries of the world since very early days in varying degrees. Financial derivatives have been in existence from very early days of development of financial sector. The history of derivative trading began almost simultaneously with history of trading. This is evident in many early civilizations as Rome, Mesopotamia and India[1]. Even in India, forward contracts were engaged for the purpose of trade right from Indus valley civilization[2].

In the medieval period, the European merchants made extensive use of financial derivatives for trade. An important legal development in the history of financial derivatives was the Royal Decree in Antwerp that made contracts for future delivery transferable to third parties. At about the same time, Merchants discovered that there is no need to settle forward contracts by delivering the underlying asset, as it is sufficient if the losing party compensates the winning party for the difference between the delivery price and the spot price at the time of settlement. Contracts for differences were written on bills of exchange, government bonds and commodities. Although it is likely that similar deals had been done in Bruges and with monti shares[3] in Italy, contracts for differences were used on a large scale for the first time in Antwerp. The commodities exchanges whose history starts with the beginning of options and futures trading in Amsterdam Stock Exchange in 1611, gave further impetus to the growth of financial derivatives.

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[1]Aristotle, *Politics*, (trans. Benjamin Jowett), vol. 2, in The Great Books of the Western World , (ed. Robert Maynard Hutchins) University of Chicago Press, Chicago (1952), book 1, p. 453, as quoted in Siems, T. F. (1997) *10 Myths about Financial Derivatives,* Cato Policy Analysis no. 283, http://www.cato.org/pubs/pas/pa-283.html accessed on 10-05-2010. Siems quotes Aristotle's story about Greek philosopher Thales indulged in perhaps the world's first futures contract. Thales was profited by forecasting that the next olive harvest would be an exceptionally good one. As a poor philosopher, he did not have many financial resources at hand. But he used what he had to place a deposit on the local olive presses. As nobody knew for certain whether the harvest would be good or bad, Thales secured the rights to the presses at a relatively low rate. When the harvest proved to be bountiful, and so demand for the presses became high, Thales charged a high price for their use and reaped a considerable profit. This is similar to what we call 'options' in the modern financial jargon, though the option exercised by Thales was more of a betting than making a shrewd financial calculation, since no one was sure whether the crops could survive the harvest when the prediction was made!

[2]See Zohary, Daniel and Maria Hopf, "*Domestication of Plants in the Old World: The Origin and Spread of Cultivated Plants in West Asia, Europe, and the Nile Valley*, 3rd ed., Oxford: Oxford University Press (2000), pp.140-141, who maintains that the sesame plant was cultivated in the Indus Valley between 2250 and 1750 BC. A tablet, which is from 1809 BC, shows that a Mesopotamian merchant borrowed silver, promising to repay it with sesame seeds "according to the going rate" after six months. He may have used the silver to finance a trading mission to the Indus Valley to obtain sesame seeds. This contract combines a silver loan with a forward sale of sesame seeds.

[3]'*Monte shares*' literally meant "mountain (of indebtedness) of shares which were sold as bonds. Such shares were sold according to fluctuating market price, and could be bequeathed to heirs or vacated upon death of the holder, in which case they bore higher rates of interest. Interest payments were pledged to the tax revenue from the city of Rome. This was a main source of income for papacy during the renaissance period. See Charles L. Stinger, *The Renaissance of Rome*, Indiana University Press, USA, p. 128.

By the end of 19th Century, there were well established Commodities Exchanges in different part of the world and India was a leader in commodities trading. During early 20th Century, there were a number of well-established commodity markets in India, trading in futures and other similar derivatives[4]. They were regulated by social control of close-knit groups and whenever such control failed; there would be a crisis[5].Some analysts were of the view that by the beginning of 1900's India had one of the world's largest future's industry[6]with well-established commodities exchanges.

The history of regulation of financial derivatives is also not recent. The first attempt to regulate the financial markets can be seen from the early 16th century. Thus in Antwerp, contracts for differences were outlawed shortly after forward contracts had been made transferable, around 1541[7]. Later on, a ban on short selling was imposed in 1610. But it is unlikely that this restriction was effective because a forward contract did not show how it will be settled. Even if the contract requires the delivery of the underlying asset, the parties to the contract can informally agree on a cash payment at the delivery date. In Amsterdam in 1621, 1630 and 1636, three edicts were issued with the intention to undermine contracts for differences by making them unenforceable in the courts[8]. In 1734, the British Parliament passed the *Sir John Barnard's Act*, which declared contracts for the future delivery of securities to be "null and void". Fines amounted to £500 for "refusals" and "putts" and £100 for short-selling operations. The *Act* applied only to derivatives on securities because, as debated in Parliament, it was feared that commodity markets would move back to Amsterdam if contracts for the future delivery of commodities were outlawed in London. Hence for a long time, the trade in derivatives was based on reputation of traders rather than on the basis of legal backing. In France too the *Commercial Code* of 1807 outlawed the trading in securities otherwise than in authorized exchanges. A Police Order of January 24, 1823 again restricted the trading in securities

[4]The history of futures trading in commodities in India dates back to the later part of 19th century when the first commodity exchange, viz. the Bombay Cotton Trade Association Ltd was set up for organizing futures trading. The early 20th century saw the mushrooming of a number of commodity Exchanges. The principal commodity markets functioning in pre-independence era were the cotton markets of Bombay, Karachi, Ahmedabad and Indore, the wheat markets of Bombay, Hapur, Karachi, Lyallpur, Amritsar, Okara and Calcutta; the groundnut markets of Madras and Bombay; the linseed markets of Bombay and Calcutta; Jute and Hessian markets of Calcutta; Bullion markets of Bombay, Calcutta, Delhi and Amritsar and sugar markets of Bombay, Calcutta, Kanpur and Muzaffarnagar. There were no uniform guidelines or regulations. These were essentially outcomes of needs of particular trade communities and were based on mutual trust and faith.

[5] Report of the Expert Committee to study "The Impact of Futures Trading on Agricultural Commodity Prices}", Ministry of Consumer Affairs, Food & Public Distribution, Government of India (2008) (Abhijit Sen Committee), p. 2.

[6] Asani Sarkar, "*Indian Derivatives Market*", as available in the website http://www.newyorkfed.org/research/economists/sarkar/derivatives_in_india.pdf (Last accessed on 10-05-2010) at p. 3

[7]Swan, Edward J, *Building the Global Market. A 4000 Year History of Derivatives*, Kluwer Law International, The Hague (2000), p.144.

[8]See Wolfgang Hafner*et al*. (Ed.), *VinzenzBronzin's Option Pricing Models - Exposition and Appraisal*, Springer, Switzerland, 2009 at p. 443. See also, Joseph de La Vega, *Confusion de Confusiones, Am*sterdam, 1688, translated by Hermann Kellenbenz H, 1957, reprinted by Baker Library, Harvard Business School, 1998.

and commodities to authorized dealers at stock exchanges. However Jureg[9]notes that this did not prevent trading in such commodities or derivative trading, but only took them out of the premises of stock exchange, based on reputation, with no recourse to court in case of breach of contract. In the 1820s, derivative trading with government bonds flourished in Paris. Contracts such as contracts for future delivery (négotiations à terme), forward contracts (marchésfermes) and options (marchés à primes, marchéslibres), a call option called an "achat à prime" and a put option called "vente à prime" and repurchase agreements, which were called "reports" were greatly traded in Paris. By 1857 however, contracts of future delivery were made legal if the delivery date did not exceed 2 months (1 month for railway shares). In Germany contracts for future delivery were called "Zeitgeschäfte",which were subdivided into Contracts for future delivery were subdivided into forward contracts (fest abgeschlosseneGeschäfte, festeGeschäfte, Fixgeschäfte) and options (Prämiengeschäfte, Dontgeschäfte).

In 1885, derivative contracts became legally enforceable in France, although it was still possible to raise the objection against gambling under some circumstances. In Germany the regulatory framework was similar to that in France for most of the nineteenth century, i.e. derivatives were traded in a legal limbo. In Prussia contracts for future delivery were outlawed for Spanish government bonds in 1836, for all foreign securities in 1840, and for securities of railways in 1844. After the unification of Germany in 1871, it was up to the courts to decide whether a contract for future delivery was legitimate or whether it was motivated by illegal gambling. The courts took into consideration the contract's terms, the profession and wealth of each party and anything else that might shed light on the contract's purpose, which all gave rise to considerable legal uncertainties. In 1896, Germany passed a law (Börsengesetz) that severely restricted derivative dealings. It became illegal to conclude contracts for the future delivery of wheat and milling products, and for shares of mines and factories. The government also could regulate and prohibit contracts for all other goods and financial assets. These severe restrictions disrupted commodity markets and financial markets in Germany, diverting trade in commodities and securities to foreign exchanges[10]. The German law of 1896 also determined that contracts for future delivery were enforceable only if both parties had registered as dealers. However instead of facilitating any meaningful regulation, this clause took out derivatives trade largely into the unregulated zone, since many traders opted not to register themselves and instead opted to carry on trade in derivatives on reputation basis.

In India too trade in financial derivatives have been carried on for long on a reputation basis. Indian Contract Act, 1872, contained provisions modelled on Gaming Act, 1845(UK) which prohibited agreements by way of wager[11]. For long this provisions were thought to be prohibiting derivative transactions, though the courts have, on many occasions clearly decided to the contrary[12]. Soon after independence, Forward Contracts

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[9]Weber, Ernst Juerg, "A *Short History of Derivative Security Markets"* (June 2008), Available at SSRN: http://ssrn.com/abstract=1141689, p. 27.

[10]*Id*, at p. 39.

[11] Section 30 Indian Contract Act, 1872 provides that agreements by way of wager are void; and no suit shall be brought for recovering anything alleged to be won on any wager, or entrusted to any person to abide by the result of any game or other uncertain event on which any wager is made.

[12] See Bhagwandas Parasram v. Burjorji Ruttonji Bomanji, AIR 1917 PC 101, Ismail Lebbe Marikar Ebrahim Lebbe Marikar v. Bartleet and Company, AIR 1942 P. C 19, Rajshree Sugars

(Regulation) Act, 1952 and Securities Contract (Regulation) Act, 1956 were enacted in quick succession in India, and the objectives of these Acts, interestingly, were to prevent undesirable transactions in securities by regulating the business of dealing therein, "by prohibiting options and by providing for certain other matters connected therewith"[13]. There were specific provisions in these statutes, which prohibit the trading in certain financial derivative products. However the trading in such financial derivatives continued in the grey market throughout this period.

It was only in the wake of liberalisation of Indian Economy which started from 1991, the financial derivatives got some respectability. Currently there are three regulators in the regulatory space governing financial derivatives in India: The Reserve Bank of India (RBI), Forwards Market Commission (FMC), Securities and Exchange Board of India (SEBI). There is also a level of self-regulation among the market players. However, each of these regulators play in a different turf, for example, Reserve Bank of India is concerned with only the activity of banks and Non-Banking Financial Companies (NBFCs) in dealing with derivative instruments; whereas other companies dealing in derivatives are being controlled by SEBI. To understand the scope of regulation by these entities it is necessary to understand the basic theory of regulation.

Definition of Regulation:

Robert Baldwin[14] tries to analyse the meaning of the word "regulation" as follows:

> "At its simplest 'regulation' refers to the promulgation of an authoritative set of rules, accompanied by some mechanism, typically a public agency, for monitoring and promoting compliance with these rules. Rule-making and monitoring/enforcing mechanisms need not be located in a single institution. A second broader conception of regulation takes in all the efforts of state agencies to steer the economy. Such an approach has the merit that a variety of tools are considered as possible alternatives to possible command and control type regulation, so that where rule making seems to be inappropriate as a means for achieving policy objectives, other tools may be used. A third definition, broader still considers all mechanisms of social control-including unintentional and non-state processes- to be forms of regulation. Thus such a definition extends also to mechanisms which are not products of state activity, or part of any institutional arrangement, such as development of social norms and the effects of markets in modifying behaviour."

Thus regulation has three different connotations, in an ascending order of broadness:

a. . Regulation means administrative rule making power, which restricts administrative discretion and provides a framework for administrative action, such as any regulation by RBI for regulation of activities in derivatives market.

b. Regulation means all efforts taken by state agencies to steer the economy, including the efforts by state agencies to enforce compliance through agreements, guidelines which do not have any binding force but which sets best practices which cannot then be ignored by the market players.

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and Chemicals Limited v. AXIS Bank Limited, 2008 Bus L R 908, 2009(1) CTC 227, (2008)8 MLJ 261.

[13]See the Object clause of Act 42 of 1956.

[14] Robert Baldwin, Colin Scott, Christopher Hood (Ed), *A Reader on Regulation*", Oxford University Press (1998) at pp 3-4.

c. Regulation means all mechanisms of social control including self-regulation.

In this paper, the word regulation is being used in the broadest sense of the word.

Regulatory Approaches:

There are three distinct approaches to regulation as follows:

1. Public Interest approach or functionalist analysis: According to this approach, the State is considered to act in public interest to tackle market imperfections.

2. Interest group approach: This approach sees regulation is the product of relationship between different groups and between such groups and the State.

3. Regulatory Capture approach: Under this approach regulation is driven by the pursuit of self-interest by policy participants. Focus rests on individual actor rather than group or state activity. "Regulation is seen as another commodity, 'bought' by the economically powerful and used in a manner calculated to gain further wealth to the powerful."

In India, though in practice the interest group approach and the regulatory capture approach drives regulatory activities to a great extent, the public interest approach is the only publically taken approach to regulation. Generally, regulatory framework of securities market has been divided into prudential regulation and conduct of business regulation. This division is arguably flawed in two respects: It inadequately reflects philosophical justification for regulation, and it focuses on type of rule imposed rather than the type of risk which is to be addressed[15].

Regulatory Styles:

Operating style of regulators differs with jurisdiction and regulatory styles are deeply rooted in a country's political, social and cultural past. Though there may be variations in the functioning of individual regulators, there are certain common traits that can be identified as the regulatory style of a particular jurisdiction. Generally critics have identified three major regulatory styles:

Formalised Regulation: United States of America follows this style which is largely dominated by formalized and legalistic style, administered by powerful regulators having rule making, enforcement and sanctioning powers, with formal and relatively transparent processes involving fairly lengthy decision making cycle.

Informal Regulation: UK follows this style characterized by less formal and less transparent regulators who wield substantial powers with little procedural check. Regulation has been considered a private affair between the regulator and the regulated in which third parties are deemed to have little interest or even right to information or consultation.

Advisory Regulation: This system, which was largely followed in countries like Japan, where while regulatory authorities exercise wide discretion in issuing guidance,

[15] Alastair Hudson, *Modern Financial Techniques, Derivatives and Law*, Southern Methodist University, Institute of International Banking and Finance, London, (2000).

compliance is largely voluntary[16]. The Old boy network, with retired government officials commonly transferring to the management of businesses ensured low relational distance in regulation[17].

India generally follows the UK model of regulation, which is characterized by informal, less transparent and almost private regulation.

While we can broadly categorise regulation as above, based on jurisdictional culture, it is to be understood that regulatory models within a single jurisdiction is also not homogenous. There will be a number of varied approaches followed within a country itself depending on the sector being regulated. Some of the sub models of regulation are:

1. **Command and Control theory:** Classical model of regulation with the regulator making and enforcing the rules. In India, control of RBI is broadly falling within the category. RBI issues regulations, which generally the regulated entities have no option but to follow.
2. **Partial Industry Intervention theory:** The regulated businesses will have some obligations in their licenses which the agencies would enforce. A key aspect of such regulation is that though all players are obliged to have licenses, only those with a dominant market are exposed to all the regulatory requirements. SEBI in India generally operates in this mode.
3. **Franchising:** Firms wanting to carry the regulated activity bid for the right to do so. The franchise would be issued to the most favoured bidder, who will have to carry out regulated activity for a fixed period of years. The franchisee agreement would contain certain clauses as to quality and mode of carrying out the activity, which the regulator would then seek to enforce. Though such a model is largely not applicable in financial sector in India, telecom regulation in India is the best example for such a model of regulation.
4. **Regulation by Contract:** In this model, the government enters into contract with the regulated entities, and clauses of contract contain the terms of regulation. A good example of this type of regulation can be seen in Stock Exchanges entering into listing agreements with companies, and regulating the companies through these listing agreements. While the primary objective of entering into listing agreement is obviously not regulation, regulation takes place incidentally to the main purposes which help in achieving regulatory standard across all firms contracting with the regulatory body, without ever issuing a mandatory rule[18].
5. There is no accepted definition for the term self-regulation. In this scheme of regulatory regime, the representative organisations, for example a trade organisation, develops a system of rules which it will then monitor and enforce against, in some cases, its members and in rarer cases larger community[19]. These representative bodies function independently of government encouragement, and mostly the major objective behind self-regulation is to prevent government from coming up with mandatory regulation. In India, Foreign Exchange Dealers

[16] . Herald Baum, “Introduction: Emulating Japan?” In H. Baum (Ed), *Japan: Economic Success and Legal* System Berlin: Walter de Gruyter, (1997) pp.12-13.
[17] *Ulrikr Schaede, “The ‘Old Boy’ Network and Government Business Relationship in Japan” in In H. Baum (Ed), supra n. 18. at p. 343.*
[18] *Supra n*. 15, at p. 26.
[19] *Id*, at p 27

Association of India (FEDAI) is a recognised self-regulatory body in respect of foreign exchange swaps, and International Swaps and Derivatives Association (I.S.D.A.) is the international self-regulatory body in respect of derivatives and currency swaps in general. The I.S.D.A. draft agreements have helped to bring in uniformity in contracts relating to derivative transactions and currency swap agreements world over and have been helping the derivative industry to function independent of governmental interference of any particular country in a self-regulatory mode.

Objectives of Derivative Regulation:

The financial regulation in any country, should aim at the following aspects:

a) Ensuring that the underlying instruments are transactionally, informationally and functionally efficient.

b) Regulation should not hinder or have negative impact on financial innovation.

c) Steps should be taken to avoid regulatory arbitrage.

Financial Standard Foundation (FSF), after analysing the reports of International Organization of Securities Commissions (IOSCO) and Committee on Financial Sector Assessment (CFSA) and various other international bodies has set certain guidelines for regulation of securities market which are internationally accepted [20] and has been continuously monitoring the performance of various countries in meeting these objectives. The regulatory guidelines set by FSF are as follows:

1. The principles of the regulator should be clear and objectively stated.
2. The regulator should be operationally independent and accountable in the exercise of its functions and powers.
3. The regulator should have adequate powers, proper resources and the capacity to perform its functions and exercise its powers.
4. The regulator should adopt clear and consistent regulatory processes.
5. The staff of regulator should observe the highest professional standards, including appropriate standards of confidentiality.
6. The regulatory regime should make appropriate use of Self-Regulatory Organisations (SRO's) that exercise some direct oversight responsibility for their respective areas of competence to the extent appropriate size and complexity of markets.
7. SRO's should be subject to the oversight of regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.
8. The regulator should have comprehensive inspection, investigation and surveillance powers.
9. The regulators should have comprehensive enforcement powers.

[20] Based on data available on http://www.estandardsforum.org/india/standards/objectives-and-principles-ofsecurities-regulation accessed on 29-1-2011

10. The regulatory system should ensure an effective and credible use of inspection, investigation, surveillance and enforcement powers and implementation of an effective compliance programme.
11. The regulator should have authority to share both public and non-public information with domestic and foreign counterparts.
12. The regulators should establish information sharing mechanisms that set out when and how they will share both public and non -public information with their domestic and foreign counterparts.
13. The regulatory system should allow for assistance to be provided to foreign regulators who need to make inquiries in the discharge of their functions and exercise of their powers.
14. There should be full, timely and accurate disclosure of financial results and other information that is material to investors' decisions.
15. Holders of securities in a company should be treated in a fair and equitable manner.
16. Accounting and auditing standards should be of a high and internationally acceptable quality.
17. The regulatory system should set standards for the eligibility and the regulation of those who wish to market or operate a collective investment scheme.
18. Regulation should require disclosure, as set forth under the principles for issuers, which is necessary to evaluate the suitability of a collective investment scheme for a particular investor and the value of the investor's interest in the scheme.
19. Regulation should ensure that there is a proper and disclosed basis for asset valuation and the pricing and the redemption of units in a collective investment scheme.
20. Regulation should provide for minimum entry standards for market intermediaries.
21. There should be initial and ongoing capital and other prudential requirements for market intermediaries that reflect the risks that the intermediaries undertake.
22. Market intermediaries should be required to comply with standards for internal organization and operational conduct that aim to protect the interests of clients, ensure proper management of risk, and under which management of the intermediary accepts primary responsibility for these matters.
23. There should be procedures for dealing with the failure of a market intermediary in order to minimize damage and loss to investors and to contain systemic risk.
24. The establishment of trading systems including securities exchanges should be subject to regulatory authorization and oversight.
25. There should be ongoing regulatory supervision of exchanges and trading systems which should aim to ensure that the integrity of trading is maintained through fair and equitable rules that strike an appropriate balance between the demands of different market participants.
26. Regulation should promote transparency of trading.
27. Regulation should be designed to detect and deter manipulation and other unfair trading practices.

28. Regulation should aim to ensure the proper management of large exposures, default risk and market disruption.
29. Systems for clearing and settlement of securities transactions should be subject to regulatory oversight, and designed to ensure that they are fair, effective and efficient and that they reduce systemic risk.

Derivatives Regulation in India:

In India derivatives trading is regulated by a mixture of command control, franchising, contractual and self-regulatory mechanism. As already mentioned, the Securities Contract (Regulation) Act 1956 (SCRA), the Forward Contracts (Regulation) Act, 1952, Depositories Act, 1996 and certain provisions of Companies Act, 1956 provide the statutory backbone for derivatives regulation. However it is worth noting that apart from creating a regulator and entrusting the duty of regulating derivatives with the regulator, these statutes do not deal with regulation of derivatives in great respect. While Section 17 of SCRA entrust the regulatory responsibility of certain types of derivatives to SEBI, Sections 20, 21 and 21A of Reserve Bank of India Act, 1934 empowers RBI as the regulator in respect of certain government securities market and also regulate the major players in the derivatives banks-the financial institutions. SEBI has created certain Self-Regulatory Organisations (SRO's) which are non-governmental bodies with the responsibility to regulate their own members through a set of rules of conduct for fair, ethical and efficient practices. SEBI also exercises its regulatory oversight through Stock Exchanges. Stock Exchanges are bodies created by cooperation among market players and the SEBI generally maintains tight regulatory oversight over these market places. These bodies like the National Stock Exchange, Bombay Stock Exchange (BSE), Multi Commodities Stock Exchange (MCX) etc., act as franchisees to SEBI to enforce regulation of players in derivatives market through a process of listing contracts, rules and guidelines. Commodities market is regulated by yet another regulator, Forwards Market Commission (FMC) which, unlike SEBI and RBI is not a statutory body but a department of Ministry of Consumer Affairs. FMC exercises considerable powers under Forwards Contract(Regulation) Act, 1952 regarding futures and options trading in commodities,(which is a variant of derivatives) and exercises its control both through command and control mechanism as well as through franchising regulatory duties to commodities exchanges like MCX etc. There are also a host of self-regulatory organisations, at national {Foreign Exchange Dealers Association of India (FEDAI)} and at international level I.S.D.A. which set industry standards for derivatives trading and ensure compliance through a peer pressure mechanism.

Regulatory objectives in India:

As early as in 1997, SEBI and PWC along with USAID had tried to outline the broad features of regulatory framework for derivatives market. As per the PWC report[21] the following were the considerations that should be kept in mind while evolving an appropriate framework for exchange traded derivatives:

> "…the regulatory framework must provide the necessary protections but not restrict market development. Such a framework should be based on:
>
> - The demand for such a market,

[21]Available on http://pdf.usaid.gov/pdf_docs/PNACC022.pdf (Last accessed on 29-01-2011) at p 5-6

- Potential market participants and how they believe they would use the market,
- The existing financial and legal infrastructure and its integration into the regulatory structure, and
- The existing market environment and culture.

The PWC report suggested that the principal function of the over sight government is to assure self-regulation is in public interest. To accomplish this oversight, regulator reviews the exchange rules and procedures expressly for the purpose of determining whether they are:

a) consistent with minimum best practice derivatives market standards, and
b) designed to ensure a market that is open and competitive (free from manipulation and other forms of trade practice abuse).

The self-regulator has the front line responsibility to assure financial integrity, to protect the customer and to ensure open and competitive markets that treat outside capital and all participants fairly and equitably. In addition to performing at least a periodic auditing of all SRO programs and activities, the oversight regulator steps into investigate alleged market

manipulation or other wrongdoing and takes appropriate enforcement action when the SRO does not adequately fulfil its responsibility[22] The report further points out the following minimum regulatory goals that are internationally accepted:

a. Financial safety, including integrity of clearing houses and market participants
b. Fairness, including fiduciary and related customer(investor) protection practices
c. Market efficiency and integrity.

Subsequently SEBI appointed Dr. L C Gupta Committee to study the appropriate regulatory framework for financial derivatives, which came up with the following broad regulatory objectives:

i. **Investor Protection:** This includes rules relating to ensuring fairness and transparency in market dealings, guidelines for safeguarding client's money, ensuring competent and honest service and market integrity.
ii. **Quality of Markets:** aims at enhancing important market qualities, such as cost efficiency, price-continuity, and price-discovery.
iii. **Innovation:** Should not stifle innovation which is the source of all economic progress.

While these objectives form the broad basis of the regulatory scheme floated by SEBI, the SEBI circular No FITTC / DC / CIR-1 / 98 dated June 16, 1998, has also laid down how the stock exchanges should be regulated as follows:

> "The derivatives exchange/segment should have a separate governing council and representation of trading/clearing members shall be limited to maximum of 40% of the total members of the Governing Council. The exchange shall regulate the sales

[22]*Id,* at p. 6.

practices of its members and will obtain prior approval of SEBI before start of trading in any derivatives contract[23].”

However RBI which regulates empowered to regulate the interest rate derivatives, foreign currency derivatives and credit derivatives which are basically traded by financial institutions like banks and Non-Banking Finance Companies have an entirely different set of regulatory goals. In its Guidelines on Derivatives Trading[24], RBI has outlined the following as the regulatory goal:

a) To ensure suitability and appropriateness of the derivative products being offered to customers.
b) Providing adequate information to the investors about the products.
c) Ensuring proper documentation of the derivatives product.
d) Identification of risk.
e) Risk measurement and setting proper risk coverage limits.
f) Ensuring independent risk control mechanism.
g) Segregating operational management control of the organisations dealing with derivatives.
h) Audit requirements.

RBI is enforcing these requirements through a command and control mechanism, and hence the regulatory spectrum of RBI is wider than that of SEBI.

Out of the regulatory objectives identified by FSF, except the requirement of internal control of market intermediaries all other regulatory requirements are either in progress for compliance or fully complied with in India. The latest available report of CFSA dated March 2009[25] concluded that India has fully implemented 20 IOSCO principles, broadly implemented 8 and partly implemented the remaining 2 principles. The gaps in compliance, as observed by the report, included those in the areas of supervisory autonomy, transparency and disclosure, regulation and inspection of market intermediaries, and oversight of the secondary markets. According to the report, there is a clear division of regulatory jurisdiction over Indian financial markets between the Securities and Exchange Board of India, the equities market regulator, and the RBI, which also oversees the government securities market. On the basis of this FSF has concluded that India has complied with only 58.33 % of the IOSCO guidelines, with a rank of 14 in Financial Standards Index, in which Netherlands ranks first with 73.33 % compliance.[26] UK ranks 5 and USA ranks 7 in this index, as on March 2009, with 68.33% and 65% compliance respectively.

Lessons from 2008 Market Crash:

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[23] See the copy of the circular is available in http://www.sebi.gov.in/Index.jsp?ContentDisp=Search (Last accessed on 28-01-2011).

[24] DBOD. No. BP. BC. 86/21.04.157/2006-07 dated April 20, 2007 and the annexed guidelines available on http://rbi.org.in/scripts/NotificationUser.aspx?Mode=0&Id=3432 (Last accessed on 29-1-2011).

[25] For details see http://www.estandardsforum.org/india/standards/objectives-and-principles-of-securities-regulation (Last accessed on 29-1-2011)

[26] See the Financial Standards Index ranking available in http://www.estandardsforum.org/browse/ranking accessed on 29-1-2011.

It would be worthwhile to note that most of the countries which are ranking above India in Financial Standards Index had been badly affected by the market crash of 2008 and have seen failure of institutions involved in derivatives trading. In India no institution of considerable repute failed on account of financial crisis.

Rakesh Mohan, Deputy Governor to Reserve Bank of India, in a speech entitled "Emerging

Contours of Financial Regulation: Challenges and Dynamics"[27] after considering the most influential[28] committee reports that came up regarding financial regulation and integration comes to a conclusion that all these reports acknowledged the regulation and supervision in advanced economies were clearly too lax in the recent times, and there needs to be re-thinking leading to much strengthened and perhaps intrusive regulation and supervision in financial sector. Dr Mohan further goes on to observe:

> "With financial deregulation in key jurisdiction like the United States and the UK, along with most other countries, financial institutions also grew in complexity. Financial conglomerates began to include all financial functions under one roof: banking, insurance, asset management, proprietary trading, investment banking, broking, and the like. The consequence has been inadequate appreciation and assessment of the emerging risks, both within institutions and system wide.[29]"

This systemic risk in conjunction with the unprecedented explosive growth of securitised credit intermediation and associated derivatives was based on an erroneous assumption that such products constituted a mechanism which took off the risk off the balance sheets of banks, placing it with a diversified set of investors resulted in the collapse of the global economy in 2008. The opaqueness of these derivative products, which was the result of their valuation becoming increasingly dependent on model valuation and credit ratings, rather than observable and transparent market valuation, made shadow banking system and other rot in the system unobservable. As a result of all these factors, rather than reducing systemic risk, the system of complex securitisation and associated derivatives only served to increase systemic risk. Moreover, it became increasingly difficult to trace where the risk ultimately lay[30].

Similar to Dr Mohan, many experts unregulated have cited trading in derivatives as one of the crucial factors that led to the financial crisis of 2008. The main pitfalls, so long as derivatives regulation are concerned are as follows:

1. Deregulation of derivatives trading leading to lack of oversight over the practices of originator firms.

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[27] Available in http://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/ECFRBU0609.pdf accessed on 1/2/2011.

[28] Rakesh Mohan lists the following committee reports as most influential reports: Report of the High Level Group on Financial Supervision in the European Union (Chairman: Jacques de Larosiere); The structure of Financial Supervision: Approaches and Challenges in a Global Market Place (Group of Thirty; Chairman: Paul Volcker); The Fundamental Principles of Financial Regulation (The Geneva Report); The Turner Review: A Regulatory Response to the Global Banking Crisis (Financial Services Authority of the UK); and finally, The Report of Working Group I of the G-20 on "Enhancing, Sound Regulation and Strengthening Transparency (G-20). See *id*, at p. 5.

[29] *Id* at p. 6.

[30] *Id*, at p. 7.

2. Watering down of the concept of risk during 1990's leading to further laxity in regulatory approach. As Lynn Turner, former chief accountant of Securities Exchange Commission (SEC) observes, what resulted in the effective collapse of major financial institutions such as AIG and Enron was the introduction of credit derivatives that the congress and administrations ensured would never be subject to regulation[31]. He points out that the regulatory system in place for years leading up to the crisis was not out dated but was systematically dismantled by the administration.
3. Increased complexity of the derivatives product made them beyond the understanding of regulator and common investors giving leeway to the originator to stash high risk financial products and market them as no risk products to unknowing investors.
4. Uncontrolled operation of Statistical Rating Organisations which continued to rate bad derivative products as good deepened the impact.
5. Repeal of Glass-Steagall Act, 1933 which was designed to segregate banking and securities business with Gramm-Leach-Bliley Act, 1999 which effectively removed the segregation between investment and commercial banking led to creation of a vicious circle of bankers who were more interested in satisfying their greed than in ensuring consumer protection.

Dr Shyamalan Goliath, former Deputy Governor of RBI, in a paper entitled "Financial Crisis- Some Regulatory Issues and Recent Developments"[32] records that one of the important lessons that India learned from the financial crisis is that financial sector development per se cannot be an objective in itself. It needs to be pursued in the broader context of financial stability and has to necessarily correspond to the level of maturity of the financial system and the needs of the real economy. Reforming financial markets involves improving access to simple, transparent, and easy-to-understand products. Increasing complexity does not facilitate the market mechanism. The purpose of financial instruments is to transfer risk to those that understand these risks, not to hide or camouflage them. Regulatory comfort and assessment should therefore be a critical determinant in pursuing financial reforms. In regard to derivatives, India has both OTC and exchange traded instruments for currency and interest rates. OTC markets in India are well regulated, unlike many other jurisdictions, to address issues of leverage and customer appropriateness and suitability. Only OTC contracts where one party to the transaction is a RBI regulated entity is considered legally valid. Suitable reporting and post trade clearing and settlement mechanisms are being further strengthened. In fact the realization that OTC derivatives require more regulation is deepening even in USA where the Obama Administration's Reform Plan announced in June 2009 called for all OTC derivatives to be traded to recognised clearing houses to eliminate lack of transparency and threat of widespread defaults. According to the plan, clearinghouses and exchanges would provide

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[31] See Lynn E Turner, "The Systematic dismantling of the System", CPA Journal May 2009 as quoted in Peter D Goldman, *Fraud in the Markets- Why it Happened and How to Fight It*", John Wiley & Sons, New Jersey, (2010).

[32] Inaugural address at the FIMMDA-PDAI Annual Conference, January 4, 2010, Mumbai available in
http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/SMRM040109.pdf accessed on 31/12/2011.

a needed guarantee to derivatives transactions by requiring dealers and corporations to post collateral on the deals and meet daily margin requirements[33].

Suggestions for improvement of regulatory framework:

Joseph Stiglitz, in his latest book, "Free Fall - America, Markets and the Sinking World Economy[34]" has pointed out the need for a stricter regulatory regime for derivatives, in other words, re-regulation and more government involvement in the economy. As Dr. Rakesh Mohan, Deputy Governor, Reserve Bank of India, in his paper prepared for the Financial Stability Review (June 2009 issue) of Bank of France[35], observed that unproductive financial innovation have to be discouraged in the new regulatory regime post crisis. Moreover, the debate on financial innovation and regulation has to be considered in terms of potential and systematic relevance of such innovations besides the capabilities for bringing them effectively under the regulatory umbrella. There are also suggestions to have a central counter party (CCP) for OTC derivatives especially for Credit Default Swaps (CDS) applicable to all jurisdictions, which will help to ensure greater transparency and better reporting. In addition Dr Mohan suggests that public authorities should also encourage the financial industry to standardise contracts and to use a data repository for the remaining non-standardised contracts and promote fair and open access to central counterparty services. Dr Mohan also suggests that through the expanded Financial Stability Forum, now renamed as Financial Stability Board, the International Monetary Fund and the international standard setters, international standards, including those for macro-prudential regulation, the scope of regulation, capital adequacy and liquidity buffers, should be coordinated to ensure a common and coherent international framework, which national financial authorities should apply in their countries consistent with national circumstances.

While understanding these suggestions, it must be borne in mind that India was less affected by financial crisis than USA and EU nations, and one of the important reasons for this was that the risk appetite of Indian Banks and other institutions were much less compared to US and EU banks due to cultural factors among other things. Moreover the Indian derivative markets being nascent, many of the high risk products including mortgage based derivatives were less prevalent in India than in other countries like USA, and EU Countries. Another important aspect was that the real estate sector, though unregulated had not entered the derivatives market in a large way, so as to have impact of the falling reality prices felt on the financial sector. Combined with this the tight regulatory control by RBI and SEBI over different derivative products and originators, had helped to prevent systemic risk to a great extent.

However, it would be foolish to believe that our regulatory system is superior to other systems or that enough has been done to prevent the derivative products from operating as weapons of mass destruction in India. On the contrary, the need for vigilant regulation suitable to the investment culture of the country and maturity of the markets, and ensuring transparency and appropriateness of the derivative products to ensure customer safety

[33] See Roya Wolverson, "The Road to Financial Regulatory Reform", July 22, 2010 Council on Foreign Relations, available on http://www.cfr.org/publication /21266 /road_to_financial_ regulatory_reform.html accessed on 31/12/2011.

[34] Joseph Stiglitz, *Free Fall- America, Markets and the Sinking World Economy* , Penguin Books, London (2010)

[35] Supra n. 29 at p. 8.

have been brought to the forefront by the experiences of countries that followed laissez faire policy in regulation of derivatives. It is also imperative that there should be some international standard setting process for both product design as well as approach towards risk of all forms so far as derivative products are concerned, since in the current globalised economy, strict regulatory regime in some countries and lax standards in others would lead only to regulatory arbitrage. In a globalised economy, regulatory arbitrage is much more dangerous since corporations have global presence and loss in some jurisdictions would have fatal effects in organisational efficacy in other jurisdictions, leading to a higher risk to investors from even tightly regulated countries. Hence there is a need for creation of a network amongst regulators in various countries, as well as the different regulators in the same jurisdiction, to ensure better regulatory cooperation, common regulatory standards and denial of regulatory arbitrage opportunities to unscrupulous players in the market, An international regulatory framework arrangement, much like the BASEL guidelines for banks, should be brought in place for derivative instruments and trading in derivatives market. Such a framework should lay down standards of risk taking in derivative instruments and guidelines to derivative product design and tighter control over structure of underlying securities, which will then help to have a uniform standard across the world for such instruments. There should also be a proper control mechanism to identify sufficiently early, mitigate and to cover up the various types of risks involved in similar type of instruments. Such an approach would enable to retain the derivatives products as good risk hedging tools for all investors, rather than an instrument to satisfy the greed of a few investment bankers.

In fact it should be kept in mind that financial products per se are not bad; it is the greed behind them that make them bad. In order to keep away greed from derivatives products, regulatory vigil should focus on the transparency of the products as well as the system, which will then make these products what they profess to be- money multipliers-not just for a few, but for all prudent investors.