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## DEBT MARKET AND CREDIT DERIVATIVE INSTRUMENTS IN INDIA: ITS CONTRIBUTIONS, ISSUES & CHALLENGES

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**Abstract:** *The funds requirement of corporate world can be solved both from equity and debt market. However, projects having high gestation period largely depends on debt and that demands high debt and CDS instruments. Credit is the spinal cord on which the entire body of an economy rests. Globalization and liberalization, more pronounced in the last decade, led to the expansion of world market which could be taken as a proxy to measure the exponential growth of the credit market. But it is observed that the volume of credit market, especially credit derivatives market has exceeded everyone's expectations since their introduction in the early nineties. Being the OTC products, these are perceived as the most sophisticated and to some extent, hyped risk management tools because some analysts advocate that credit risk ceased to exist with their arrival. On the contrary these are also perceived as the real culprit in sub-prime crisis which unnecessarily put a financial institution in a position to bear credit risk without knowing its source of origination. This practically handicaps the effective regulation of such complex products. In this context, this paper attempts to explore the regulatory challenges and real contribution of these products to the financial world.*

**Key words:** *Credit derivatives, Debt market, Interest rate derivatives*

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## **INTRODUCTION:**

The funds requirement of corporate world can be solved both from equity and debt market. However, projects having high gestation period largely depends on debt and that demands high debt and CDS instruments. Credit is the spinal cord on which the entire body of an economy rests. Globalization and liberalization, more pronounced in the last decade, led to the expansion of world market which could be taken as a proxy to measure the exponential growth of the credit market. But it is observed that the volume of credit market, especially credit derivatives market has exceeded everyone's expectations since their introduction in the early nineties. Being the OTC products, these are perceived as the most sophisticated and to some extent, hyped risk management tools because some analysts advocate that credit risk ceased to exist with their arrival. On the contrary these are also perceived as the real culprit in sub-prime crisis which unnecessarily put a financial institution in a position to bear credit risk without knowing its source of origination. This practically handicaps the effective regulation of such complex products.

## **OBJECTIVES OF THE PAPER:**

The primary objective of the study is to discuss the various challenges encountered by the debt derivatives market in India. However, this paper attends to ascertain the following objectives:

1. Debt market in India and its present status
2. Benefits of a developed debt market
3. Need of debt derivative instruments
4. Regulatory framework of debt/credit derivatives instruments in India
5. Various Challenges and proposed solutions in debt derivative market

## **METHODOLOGY:**

Basically this is an explanatory paper which is based on the data collected from various journals, published reports of RBI, World Bank, BIS derivative report, etc. Besides above number of books and periodicals are also referred to compile data.

## **PRESENT STATUS OF INDIAN DEBT MARKET**

A steady growth of corporate sector in India over the last two decades has primarily been financed by retained earnings and capitals raised through equity offerings. Debt instruments



in the form of bonds issued in the debt market or bank loans, have hardly contributed to such growth. Nobody can deny the fact that a well developed debt market is essential for faster growth of industrial sectors, predicting interest rate, which helps in bringing monetary stability in long run. However the Indian debt market, in particular, corporate bond market, is less developed as compared to the Indian equity market despite of multiple measures taken to rejuvenate it. Several reasons such as delay in enforcement of contracts due to cumbersome judicial system, lack of standardization with respect to regulations, inadequate disclosure, and entry barriers have been the major impediments in the growth of corporate bond market. The World Bank has ranked India at 182 out of 183 countries (ahead of Timor-Leste) against the parameter of enforcing contracts (World Bank (2012) Doing Business in a More Transparent World). Moreover within the debt market, a clear and wide discrepancy exists between the growth of the government securities segment and private bond. For instance, during 2012-13 even though the traded value in the corporate bond market has increased by 24.4 % over last year (i.e. 2011-12), this is still less than one-fifth of the trading value when compared to central government securities (Source: RBI annual report 2012-13). Apart, with regard to comparing the growth of debt market vis-à-vis equity market, studies show that policies were biased in favor of liberalizing equity market since the official announcement of liberalization in 1991. The then existing political environment more concerned about protection of labor interest, a rapidly growing services industry culture were certain micro-level factors that led to such biasness towards favoring the equity market. According to Thomas, 2006 and Khanna, 2009, a number of factors contributed to weak financial markets in India post-independence period. In particular “a stronger labor oriented protections both in labor laws and bankruptcy laws which were designed to protect employment, placed limits on the ability of capital to read just in a timely manner to changing circumstances”. This implies the politico-legal environment was a major factor which inhibited the growth of debt market to large extent.

### **BENEFITS OF A DEVELOPED DEBT MARKET**

Historically the Indian financial system has been dominated by DFIs and commercial banks, whose roles were more or less confined to lending to industries. However, the global financial crisis in 2008 highlighted the need to reduce the dependence on the banking



system, which alternatively creates a need for a developed bond market. Some of the benefits of a well developed corporate bond market are listed below.

- First, a deep and liquid debt market helps corporates to raise funds in a cost effective manner and reduces reliance on bank finance.
- Second, a developed debt market guarantees financing the urban infrastructure in an assured and sustainable manner compared to equity market where investors book profit in short term. For instance, the Deepak Parekh Committee on Infrastructure Financing has estimated that 51.46 trillion would be required for infrastructure development during the 12th Five Year Plan (2012-17) and a significant size of the fund could come from debt market.
- Third, SMEs which are perceived as the vulnerable sector compared to large scale industries in terms of credit bargaining power in the hands of the latter, there is every possibility that they may face a shortage of funds. In such situation debt market can be a better avenue to source funds at lower cost.
- Fourth, a significant amount of credit risk could be efficiently traded among the market participants in a debt market. On the contrary, where commercial banks, particularly public sector banks, have a huge outstanding Term loan to infra sectors, the management of this needs a developed market for trading the credit risk. Also banks show apathy towards lending funds on a long term basis due to an ALM mismatch in their balance sheet. During crisis time as Alan Greenspan had argued the debt market could act as “spare tyre” thereby substituting for bank finance.
- Fifth, since Indian corporates heavily relied on external commercial borrowings during last decade due to lower implicit cost, growing dependence could pose financing risk especially in times of sharp volatility in international markets. For instance recent phenomenon of sharp fluctuation in exchange rate, depreciating rupee have a bearing on the profitability of Indian firms. These risks could well be offset through a domestic debt market. Despite the fact that debt market provides a long run economic benefit, there is a significant risk folded in the market microstructure which requires immediate attention.

Overall it can be said that a developed debt market is essential for country's economic growth, which is possible through managing the risks inherent in the debt market. One way



to mitigate the risks in debt market is to use credit derivative instruments through which risk can be separately traded and transferred to those who are willing to take risk in return for a premium.

### **NEED FOR CREDIT DERIVATIVES INSTRUMENT**

Widely believed to have been invented by J.P. Morgan in 1994, the CDS (credit default swap), a plain vanilla credit derivative instrument, was originally conceptualized as an important risk management tool for financial institutions to prevent concentration of risks. Publicly available information on different CDS reveals market sentiments on credit risks and thereby helps financial institutions and retail investors to distribute risks. A key feature of these instruments is that they allow for trading of risk. Credit derivatives allow traders and investors to package the risk inherent in a debt into tradable components. Thus the interest rate risk can be isolated via interest rate swaps, the credit risk via credit derivatives and such risks alone can be traded separately from that of its original product. Moreover shifting of risks among the market participants lead to increased allocation efficiency in the economy. According to Vrolijk, 1997 derivatives make market much more perfect and thus it can influence monetary policy actions. In another study, Fender (2000) and Gorton and Rosen (1995) found that credit can be substituted by derivatives. Overall it can be said that credit derivative products help in reducing market imperfections, which in turn increase the efficiency.

On the contrary, Credit Derivative Instruments were known as one of the important agents in spreading sub-prime crisis globally due to extensive use as naked instrument. A naked CDS refers to a CDS in which the buyer has no direct exposure in the underlying reference entity, but still enjoying the privilege of being indemnified by the seller in the occurrence of a credit event. In this sense it is perceived as a speculative tool. In most cases insurance companies act in the position of a seller of CDS, while banks and bond market investors are the buyers of CDS. So far as India is concerned, the financial sector in particular, the banking sector is hardly affected by the crisis because of limited exposure of banks' balance sheets to sub-prime mortgage assets. Except the sectors like real estate, export oriented units, SMEs that relied heavily on finance which suffered substantially; businesses in other sectors managed to do well. Such a paradox situation could be explained through the decoupling theory (Akin and Kose 2007; The Economist 2008) which argued that business cycles in a

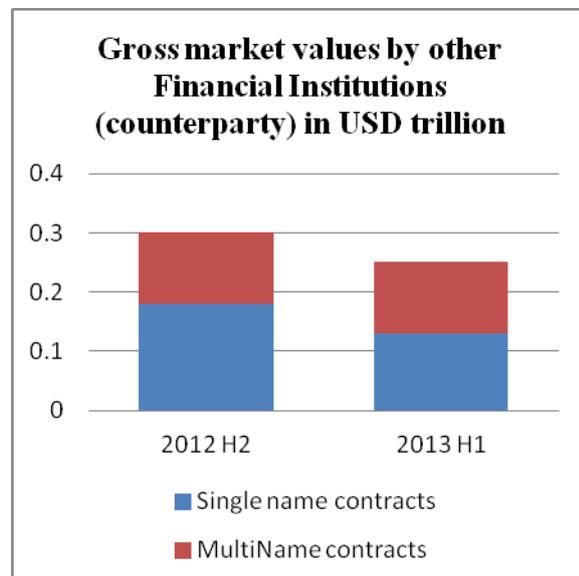
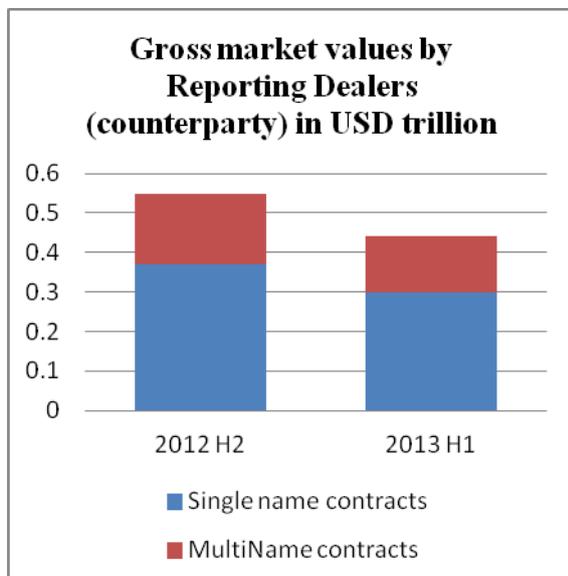
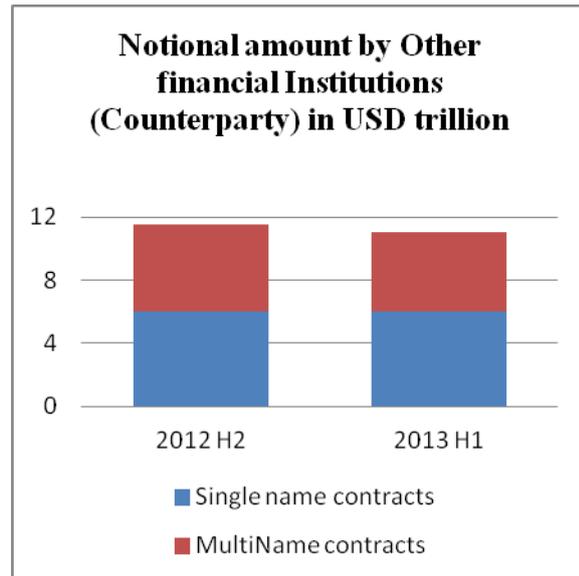
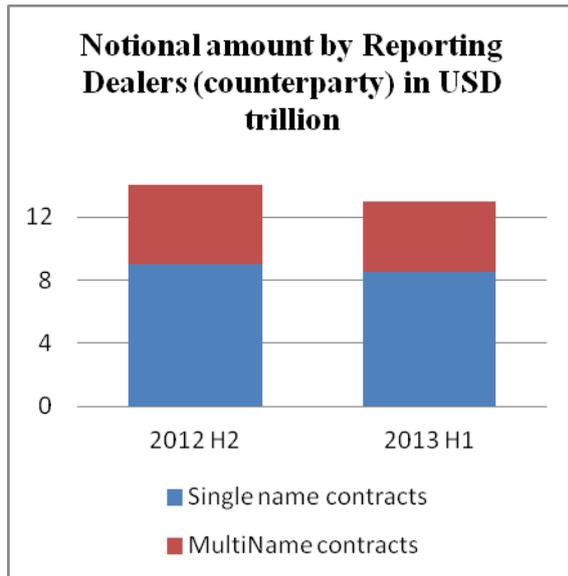


number of emerging markets got decoupled from those in advance economies due to rapid expansion of intra-regional trade over past few decades. This helped Indian Corporates remain less affected by the global crisis. On the other hand, an exponential growth in international trade and capital flow had made certain sectors very vulnerable to such crisis. Credit Derivative Instruments are bilateral agreements in which one counter party pays a fee (typically semi-annually or otherwise contracted) and has the right in case of default of a reference entity, to collect from the other counterparty a stipulated notional amount in exchange for a bond issued by the reference entity. The stipulated notional amount is generally the face value of the bond and the reference entity may be a corporate entity or a sovereign entity. Thus it acts as a protection against losses incurred by the holder of the bond in case of the default of the reference entity. The notional amount of outstanding contracts as on June 2012 is given in the following Table 1, which shows that the notional value of CDS contracts has decreased from June 2010 to June 2012. During the same period the gross market values have also fallen for credit default swap contracts.

**Table 1: Amounts outstanding of OTC CDS contracts (in billions of US dollars)**

Instrument	Notional amounts outstanding					Gross Market Values				
	Jun10	Dec10	Jun11	Dec11	Jun 12	Jun10	Dec 10	Jun11	Dec11	Jun12
<b>Credit Default Swaps</b>	<b>30261</b>	<b>29898</b>	<b>32409</b>	<b>28626</b>	<b>26931</b>	<b>1666</b>	<b>1351</b>	<b>1345</b>	<b>1586</b>	<b>1187</b>
Single name instruments	18494	18145	18105	16865	15566	993	884	854	958	715
Multi name instruments	11767	11753	14305	11761	11364	673	466	490	628	472

Source: BIS Quarterly Review, March 2013



Source: BIS semiannual OTC derivatives statistics

The above graph shows that the gross market value continues to fall from 2012 second half to 2013 first half. This was primarily due to expectations of default risk by the counterparties.

## REGULATORY ASPECTS OF CDS INSTRUMENTS

As every passing day unravels a little more about the underlying forces that work in a financial market, we need a step further in order to understand the full impact- the complex nature of derivatives used, high degree of leverage, underestimation of risk in the financial market, sizable amount of exposure of some large financial institutions to complex derivatives products, and the speed of contagion on financial market. After the sub-prime



crisis, credit derivatives are perceived as potentially dangerous products in the financial world. Owing to their off-balance sheet nature, it is very difficult to trace the exact amount of exposures of the counterparties. Apart from this, it is very difficult to know the identity of the counterparties. In India the credit derivative market is in a nascent stage and originate-to-distribute model is significantly different from the one prevailing in advanced markets. India has restrictions on investments by domestic residents in such products issued abroad and regulatory guidelines on securitization do not permit immediate profit recognition. Some of the issues pertaining to regulation of the CDS market are described below.

1. Frequent innovation in the features of Credit Derivatives segment has made difficult for the Regulator to come up with effective regulation for such products.
2. Being the OTC products, effective regulation is extremely difficult to put in place because of their non-standardized nature.
3. Whatever the policies were developed to curb the speculative activities in the CDS market, majority of them aimed to arrest the activities of banks preventing them from making speculation in the CDS market, considering them as the only participants. This has been criticized on the ground that policies were inadequate to bring the insurance companies under their scanners, who are equally responsible for selling default protection in the CDS market. For instance Basel III was developed in response to the deficiencies in financial regulation unfolded during the crisis to tighten the standards of banks on three fronts: capital requirement, leverage ratio, and liquidity requirements, without considering the regulations for the insurers such as AIG.
4. Absence of tight monitoring and regulation on the credit ratings institutions has caused a severe understatement of risk, which in turn led some insurers to cash in on selling CDS contracts to the investors. This has caused investors felt assured of buying triple –A rated securities, assigned by the credit rating institutions, from the insurance companies. According to Harrington (2009), because of little supervisory activities on AIGFP, the subsidiary of AIG, selling the CDS contracts, AIGFP consequently became an unregulated hedge fund, leveraging on the credit rating of the holding company to place huge bets with little reserves.



## **REMEDIAL ACTIONS/SOLUTIONS:**

To address these above mentioned issues, following solutions may be adopted.

- To control the ever multiplying naked CDS contracts, Regulators must ensure the originators/ sponsors should retain long term economic exposure to the securitization so as to align interests in the securitization value chain
- Regulators need to enhance transparency through disclosure by the issuers to investors of all risk practices that are to be performed by the underwriter, sponsor or originator.
- Encourage financial institutions and market participants to work on standardizing CDS contracts to facilitate central clearing.
- Regulators should facilitate appropriate and timely disclosure of CDS data relating to price, volume, open-interest by market participants, data warehouses.
- Various regulators must facilitate information sharing and cooperation amongst them in order to know the identity of the issuers as well as investors.
- Tight regulations of CRAs, by ensuring the usage of acceptable rating methods, transparency as well as conformance to standards help regulators to maintain a conducive environment for the development of debt market. Apart there should be a rule against issuers paying for ratings. Either investor should pay for them privately or, if public ratings are deemed essential, they should be publicly provided.
- Regulators should stop making big regulatory decisions with long term consequences based on their short-term effect on stock prices. The hasty crisis-to-crisis policy decision making lacks coherence as it is more or less driven by a desire to please the stock market. Always the regulator seems to prop-up stock prices as if that is the only important goal for which it exists.
- IOSCO recommends for securitization transactions, originators must keep at least 5% risk in the securitized portfolios. Recognition of upfront gain on sale should be eliminated and off-balance sheet treatment should be phased out, similar to RBI's revised guidelines on CDS contracts. Originators should give representations and warranties as to the actual performance of the pool.



## CONCLUSION

The introduction of credit derivatives no doubt alters the risk existing in financial markets. Available research shows that credit derivatives have an important role in the price discovery process on credit risk and the inception of credit derivative instruments trading has a negative impact on the cost of funding for entities with lower credit quality. Financial innovators were able to create new products and markets without anyone thinking too much about their broader financial consequences and without the regulators knowing very much about them at all. Last but not least, do we really need such exotic derivative products which can make positive contribution towards the development of financial system of a country? Is it not too early to introduce complex derivative products in line with the pace of development in physical world? Do our regulators understand all the risk embedded in such products and accordingly are they armed with sufficient resources to cope up any financial turmoil? Answer lies in the future.

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