THE MAJOR ISSUES IN DEVELOPMENT OF COMMODITY DERIVATIVE MARKETS IN INDIA

G. RAMBABU
M.Com, NET,
UCC&BM, OU

Abstract

Commodity derivative markets have traditionally been a contentious issue at various policy forums across the world, particularly with the imbroglio created by allegations from various corners that they encourage excessive speculation and are therefore responsible for the recent commodity price escalation. While this suspicion of excessive speculation in the commodity markets has always been there among policymakers in developing nations like India, it has become more widespread since 2008 in the wake of worldwide inflationary pressures on food and energy. The sudden deflation in the value of various assets underlying different derivatives, which includes commodity derivatives, in the wake of the global meltdown has provoked greater apprehension about the economic utility of futures markets. The suspicion has reached such a high that even the U.S., the biggest proponent of market forces with the most active commodity exchanges in the world, is considering new modes of regulation, and is also investigating the role of commodity derivative trading in the steep rise in prices of wheat, rice, and crude oil.

Introduction

Derivatives have been associated with a number of high-profile corporate events that oiled the global financial markets over the past two decades. To some critics, derivatives have played an important role in the near collapses or bankruptcies of Barings Bank in 1995, Long-term Capital Management in 1998, Enron in 2001, Lehman Brothers in and American International Group (AIG) in 2008. Warren Buffet even viewed derivatives as time bombs for the economic system and called them financial weapons of mass destruction (Berkshire Hathaway Inc (2002)).

But derivatives, if "properly" handled, can bring substantial economic benefits. These Instruments help economic agents to improve their management of market and credit risks. They also foster financial innovation and market developments, increasing the market resilience to shocks. The main challenge to policymakers is to ensure that derivatives transactions being properly traded and prudently supervised. This entails designing regulations and rules that aim to prevent the excessive risk-taking of market participants while not slowing the financial innovation aspect. And it also calls for improved data quantity and quality to enhance the understanding of derivatives markets.

Derivative securities: some basic concepts

The Oxford dictionary defines a derivative as something derived or obtained from another, coming from a source; not original. In the field of financial economics, a derivative security is generally referred to a financial contract whose value is derived from the value of an underlying asset or simply *underlying*. There are a wide range of financial assets that have been used as underlying, including equities or equity index, fixed-income instruments, foreign currencies, commodities, credit events and even other derivative securities. Depending on the types of underlying, the values of the derivative contracts can be derived from the corresponding equity prices, interest rates, exchange rates, commodity prices and the probabilities of certain credit events.

In India, unlike the developed financial markets where OTC derivative markets epitomised complex, unregulated financial innovations that grew exponentially over the last two decades, the OTC derivative markets have evolved within a regulated space. The major elements of this regulatory framework include a broad specification of products to be permitted, nature of participants in the markets, distinct responsibilities for market makers and users for all OTC derivatives, effective reporting systems for capturing systemic information and focus on developing market infrastructure for post-trade clearing and settlement.

Given the above context, the OTC space in India for interest rate and forex derivatives will continue to operate within a regulated manner with increased transparency. New instruments for exchanges will be introduced in a gradual manner, as hitherto. Further areas for strengthening the functioning of OTC markets will include greater standardisation of OTC derivatives and extending central clearing arrangements for such contracts where feasible. Work has already been initiated for designing a centralised trade reporting system for all OTC derivatives for better systemic oversight and market transparency.

The over-the-counter (OTC) derivative markets, in particular credit derivatives, are now perceived as the weak link in the financial system that increased the systemic risk of contagion and exacerbated the financial crisis globally. Their complex and non-transparent nature coupled with a light-touch regulatory approach towards them resulted in excessive counterparty exposures and risk concentrations building up through the system. Naturally there has been a concerted effort globally to reform the OTC derivative markets, with much of the debate focusing on measures to address the issues of counterparty credit risk and non-transparency. The revised template for reforming these markets, as is being pursued in major jurisdictions, therefore broadly envisions greater standardisation of contracts to make them eligible for central clearing, tighter counterparty risk management norms and higher capital charges for all clearing-ineligible contracts and making these markets more transparent.

The OTC derivatives are generally considered superior to exchange-traded derivatives in their amenability to customisation to cater to specific risk management needs of clients. OTC markets are also best suited to test innovative products, let them stabilise and get refined, before these are considered suitable for wider offering through standardisation. However, the explosion in the OTC derivative volumes over the past decade globally has largely been a result of these markets moving out of the regulatory perimeter as part of a conscious policy stand. The regulation of financial markets in key developed markets was reinterpreted as being limited to regulation of the conduct of business aspect on exchange-traded markets, under the presumption that the risks in OTC derivative markets would best be addressed through entity regulation.

Issues going forward

Given the above context, the OTC market in India for interest rate, forex and credit derivatives will continue to operate within a regulated framework with increased transparency. New instruments for exchanges will be introduced in a gradual manner, as hitherto. Further areas for strengthening the functioning of OTC markets will include greater standardisation of OTC derivatives and suitably extending central clearing arrangements for such contracts where feasible.

However, there are a few open issues which need to be addressed:

(i) ***Contract standardisation:*** standardisation is one of the prerequisites of moving contracts towards central clearing. There is merit in going by the argument put forth in a recent Financial Services Authority (FSA) paper that there are benefits from pursuing greater standardisation in itself, irrespective of whether these products are then cleared or traded on an exchange. Given the vanilla nature of products permitted in the Indian context, standardisation for existing products may not be difficult.

(ii) ***Bilateral collateralisation:*** though bilateral collateralisation is considered an efficient, though sub-optimal, solution to central clearing, it involves significant trade-offs. Move towards increased collateralisation could increase cost for hedging by the real sector and place huge premium on availability of good quality collateral. In case of client trades, it may need to be recognised that a bank-client relationship is a much broader one and could include a credit relationship as well. Provision of a facility-wise collateralisation may work operationally, collateralisation is effective only if the exposure is calculated frequently and there is a mechanism to exchange collateral dynamically. Who would ensure this? It will invariably again be the bank's own model which will be used to arrive at both the exposures in favour or against the bank. From a systemic perspective, there is also the issue of procyclicality that gets hardwired in the system through mark-to-market based collateralisation and this would be equally applicable in the central clearing model.

(iii) ***Push towards central clearing:*** while CCP model is accepted as an ideal solution form a counterparty risk perspective, it is being increasingly recognised that a universal acceptance of CCP model would result in the concentration of risks at one point, which would potentially become the single point of failure for market stability. Certain issues become extremely critical in this regard: Clear ability of contracts would be a key issue. The essence of a CCP arrangement is netting and margining, which are contingent on homogeneity of the underlying asset, availability of reliable prices and sound risk models to capture potential future exposures. The ability of models to capture tail risks is, however, put to question post crisis.

It would become imperative for the CCPs to be treated as "too-big-to-fail" systemic entities and be brought under the oversight of the systemic regulator within a globally harmonised set of standards. In this regard one important and as yet unresolved question is whether CCPs should have access to central bank credit facilities and, if so, when. Given the incentives structures and the lack of competition in such market infrastructure entities, it may be worthwhile to consider CCPs as "public utility" and organise them as at-cost entities.

(iv) ***Higher capital requirements for non-cleared trades:*** the Basel requirements already prescribe a capital charge for credit risk exposure of banks arising out of OTC derivative transactions. In as much as these exposures are reckoned on a gross basis, there is already a disincentive for bilaterally cleared OTC transactions as against centrally cleared transactions. To further address the systemic risks inherent in significant inter-bank OTC transactions, all such inter-bank exposures may be subject to a higher capital charge.

(v) ***Role for bespoke products:*** this issue is more relevant for jurisdictions involving product regulation, as in India. The trade-off is between the requirements of the real sector and the risk assessment of the product. To give an example from our experience, certain zero-cost forex option/swap structures were permitted in the past to enable better design of hedging solutions for clients. These cost reduction structures, introduced in 1996 inherently involved a

trade-off between reduction in the cost of hedging and retention of part of the downside risk. The concerns relating to proper valuation, mis-selling of such products and other irregularities that emerged in the recent past forced a re-evaluation of the propriety of allowing such products in India.

However, interestingly, many corporates and industry associations represented that prohibiting cost reduction structures will seriously impede the dynamic forex risk management operations of corporate and their competitiveness in the global markets. It has been suggested that structures may be allowed with additional safeguards to address the leverage and mis-selling issues. It would be interesting to see how the global debate in regard to the reform of the OTC derivative markets finally settles in various jurisdictions.

Development of Derivative Markets

The SEBI Board in its meeting on June 24, 2002 considered some important issues relating to the derivative markets including:

· Physical settlement of stock options and stock futures contracts.

· Review of the eligibility criteria of stocks on which derivative products are Permitted.

· Use of sub-brokers in the derivative markets.

· Norms for use of derivatives by mutual funds

The recommendations of the Advisory Committee on Derivatives on some of these issues were also placed before the SEBI Board. The Board desired that these issues be reconsidered by the Advisory Committee on Derivatives (ACD) and requested a detailed report on the aforesaid issues for the consideration of the Board.

In the meantime, several other important issues like the issue of minimum contract size, the segregation of the cash and derivative segments of the exchange and the surveillance issues in the derivatives market were also placed before the ACD for its consideration. The Advisory Committee therefore decided to take this opportunity to present a comprehensive report on the development and regulation of derivative markets including a review of the recommendations of the L. C. Gupta Committee (LCGC). Four years have elapsed since the LCGC Report of March 1998. During this period there have been several significant changes in the structure of the Indian Capital Markets which include, dematerialisation of shares, rolling settlement on a T+3 basis, client level and Value at Risk (VaR) based margining in both the derivative and cash markets and proposed demutualization of Exchanges. Equity derivative markets have now been in existence for two years and the markets have grown in size and diversity of products. This therefore appears to be an appropriate time for a comprehensive review of the development and regulation of derivative markets.

Conclusion

As per above discussion the paper provides an overview of derivatives markets, and products. Derivatives are invented in response to some fundamental changes in the global financial system. They, if properly handled, should help improve the resilience of the system and bring economic benefits to the users. In this context, they are expected to grow further with financial globalisation. However, past credit events exposed many weaknesses in the organisation of derivatives trading. The aim is to minimise the risks associated with such trades while enjoying the benefits they bring to the financial system. An important challenge

is to design new rules and regulations to mitigate the risks and to promote transparency by improving the quality and quantity of statistics on derivatives markets.

Now that the commodity derivatives markets have not only been liberalised but has entered the convergence mode it is time to start thinking big. The limitations still haunting the commodity markets have to be removed to facilitate seamless integration of physical and futures markets as well as between the markets for physicals and financials. The ultimate objective of all these initiatives should be to reap the economies of scale and scope not only for its own sake but also to face the challenges thrown up by a "borderless" global market. The market participants and the regulator(s) have to brace themselves to face the challenges thrown up by the global developments of ever growing exchanges and integration of markets.

References

1. Govt. of India (2004): Economic Survey 2003-04, Ministry of Finance

2. Government of India (2003) : Report of the Task Force on Convergence of Securities and Commodity Derivatives Markets (Chairman,Wajahat Habibullah)

3. Nair, C.K.G. (2001b) : Securities Market and Commodity Derivatives Market – "Rush" vs. Slow Growth?", NSE News, December, 2001

4. Whaley R (2008): "Understanding VIX", Vanderbilt University, Owen Graduate School of Management, memo.

5. ISDA (2008): "The ISDA market survey: What the results show and what they don't show?" ISDA Research Notes, no 1, autumn 2008.

6. Carlson, J B, B Craig, P Higgins and W R Melick (2006): "FOMC communications and the Predictability of near-term policy decision", Federal Reserve Bank of Cleveland Economic Commentary, June 2006.

7. Sahadevan K.G. (2002) : Derivatives and Price Risk Management; A Study of Agricultural Commodity Futures in India, Institute of Management, Lucknow

8. Raghuram Rajan and Ajay Shah (2003) : New Directions in Indian Financial sector Policy; A work undertaken under the aegis of a project by NCAER for Ministry of Finance

9. Government of India (2001) : Report of the Group on Forward and Futures Markets (Chairman, Kalyan Raipuria)

10. Thomas, Susan (2003): Agricultural Commodity Markets in India; Policy Issues for Growth, Indira Gandhi Institute for

Development Research, Mumbai.