7

Issues Before A National Multi Commodity Exchange

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1 Introduction

Derivatives as a tool for managing risk first originated with commodities markets and were then found useful as a hedging tool for stocks and financial instruments. The same is true in India as well. Trading in commodity futures has been in existence in India from the nineteenth century with organised trading in cotton through the establishment of Cotton Trade Association in 1875. Over a period of time other commodities were permitted to be traded in futures exchanges. Regulatory constraints post independence resulted in virtual dismantling of the commodities futures markets. It is only in the last decade that commodity futures exchanges have been actively encouraged. However, the markets have been thin with poor liquidity and have not grown to any significant level. Equity derivatives on the other hand, which were introduced only in the 2001, are growing very rapidly.

[1]The views expressed in this article are the personal views of the authors and do not in any way represent the views of their respective organizations. The usual disclaimers apply.

2 Liquidity Drivers

Traditionally commodity exchanges in India have been product specific. The need for a national multi-commodity exchange (NMCE) is now well articulated and accepted. However the mere setting up of a multi-commodity exchange is not going to result in a vibrant and liquid commodities derivatives market. There are a host of issues which need to be addressed along with the setting up of NMCE in order to develop the markets. The key to success is liquidity and the challenge is to create this liquidity where other exchanges have not been very successful so far.

In this context it may be worthwhile to go back to first principles. Who are the players that drive any derivatives markets? Typically they are hedgers, arbitrageurs and speculators. In the absence of these categories of players, especially the latter, it is unlikely that any derivatives market will be very liquid. So do we have these categories of players in the existing commodities markets?

A cursory examination of these markets shows that there are limited hedgers and arbitrageurs scattered across the various markets. There is no professional body of arbitrageurs participating in commodity derivatives; the lack of well developed organised spot markets and price discovery mechanism is a major impediment to arbitraging. Typically there are traders and trade bodies in the distribution chain that take advantage of the lack of price discovery and arbitrage the same. However these are restricted to small set of traders and are not wide enough to drive liquidity. The existing exchanges being product specific, speculators if any, are intrinsically linked to the trade and are limited in number. This also points to another key facet of existing exchanges. Since these have been traditionally set up by trade bodies, spot traders and others in the distribution chain have typically been member-brokers of such exchanges. Discussions with some of the traders suggest that the focus of brokers is hedging. Arbitraging with the spot market is done to a limited extent. Wider participation by arbitrageurs and speculators is ruled out as there are too many impediments and it is not attractive enough. This in fact also makes a case to provide a multi-commodity platform which will allow professional arbitrageurs and speculators to participate.

The other key constituent is the hedger. Today the scope to hedge positions in a commodity is limited by access to the market. Smaller and

retail level participation is not possible because of the closed door nature of existing exchanges. There is need to open up the markets and provide a distribution chain which will encourage and allow a wider body of participants.

This suggests that there is need to develop a professional body of brokers in the commodities markets who will provide services across commodities and across the country.

Moneys will tend to flow to areas of highest risk adjusted reward. If the commodity derivatives markets can be designed to insulate the arbitrageurs and hedgers from some of the peculiarities of commodities settlement it may even be possible to use the existing derivatives infrastructure and set of equity derivatives brokers to jump start this process. One such design is indicated towards the end of this article.

3 Spot Price Conundrum

The other important issue arising from the above is the state of the spot market and spot price discovery process. It is difficult to develop a good derivatives market without adequate spot price discovery. This also becomes extremely important in the context of physical settlement of commodities. Spot markets are scattered throughout the country and exist close to production centres. They are quite unorganized. Relatively more organised spot markets and mandis are run by Agricultural Produce Market Committee (APMC) under the state governments. However there is little transparency in trading and pricing along subsequent distribution channels. A lot needs to be done to strengthen spot markets especially in the collection and dissemination of spot prices (domestic and international) on online basis and organised trading in spot contracts wherever possible. There are also several structural and regulatory issues relating to the spot markets which impact spot price discovery and settlements.

Currently the commodities markets are regulated by various entities in a manner which directly impact spot prices, sales and inter-state movement in several commodities, especially agri-commodities significantly. There is central governmental intervention by way of minimum support price, minimum and maximum price bands for specific commodities, quotas and reservations, procurement through Food Corporation of India etc. As 'agriculture' is a state subject, the extent and variety of instruments used to

intervene in the agriculture sector also vary from state to state. Some examples of these are;

- Licensing requirements for wholesale trade, storage, processing of virtually all commodities in all states.
- Official permits are required for out-of-state sales of some commodities (paddy in Tamil Nadu and AP, edible oil in Gujarat, cotton and alcohol in Maharashtra).

The basic precondition for establishing a viable commodity derivatives market is the existence of large, competitive and transparent spot market. Unfortunately, the existing cash markets for most commodities fail to satisfy this precondition. NMCE may be required to actively participate in the process of information collection and dissemination and may even be required to set up spot markets or tie up with spot exchanges as and when they emerge. To begin with NMCE may have to do what existing exchanges are doing – take some reference price either by polling a set of traders or use some officially announced price such as by APMC.

Polling market participants for prices is fraught with the risk of misreporting and manipulation. It may be possible to still evolve some reference rate based on polling methodology. A good case in point is the MIBID/MIBOR rate announced by the National Stock Exchange (NSE) which has today found wide acceptance. The NMCE may be required to institute a similar approach to spot price reference rates.

4 Other Key Issues

What are the other key issues faced by NMCE? If the NMCE is to attract participation by a larger body of investors and arbitrageurs it has to ensure that the safety and integrity of the market. Unless and until participants are convinced that the exchange provides fairness, transparency and efficiency they will not be drawn into the market. This has several elements – the structure and management of the exchange itself, the trading facility and distribution, efficiency of settlements, risk management.

4.1 Exchange Structure

The starting point is the exchange itself. Exchanges have been traditionally set up as associations of traders/trade bodies to the benefit of its member

brokers. However there is now a growing recognition globally that a demutualised corporate structure may be more desirable. This especially so in the world of stock exchanges where a number of exchanges have or are in the process of demutualising their structures. This arises from the understanding that exchanges are required to cater the interest of not just intermediaries (brokers) but also to other constituencies – issuers/producers and investors/consumers. Indeed in the stock exchange world there is now a trend to merge the cash and derivatives markets under one umbrella in the interest of market efficiency.

Under such a structure the ownership of the exchange is separated from trading rights as a broker. This removes potential conflict of interest between managing the exchange and market integrity versus trading interests as a broker. In the current context this becomes even more important if the market is to be expanded to draw larger participation from across the country.

A tax paying corporate structure is desirable. A corporate structure imposes certain discipline on the exchange. Any exchange should be a commercially viable proposition and should not have to depend upon subsidies and tax shelters to survive in a competitive environment. This requires professional management of the exchange. NMCE should therefore be set up as a tax paying company where management is in the hands of professionals. The experience with stock exchanges suggests that the organization must be so structured as to bring about transparency in decision making. Typically rules and procedures to deal with all exceptions should be clearly enunciated and made transparent to the market and discretionary elements must be minimized.

4.2 Trading and Contracts

It will be necessary to create a nation-wide trading facility that is efficient and transparent. As a nation-wide exchange it must also provide equal access from across the country. This in itself eliminates a trading floor and suggests an automated trading mechanism. Typically such systems provide matching on price-time priority. The order book must be visible to the market and price dissemination should be on real time basis. The importance in such a mechanism lies in the fact that arbitrageurs and hedgers are then in a good position to take full advantage of the price discovery process.

The transparent price discovery process also encourages users/consumers to participate with a higher degree of confidence – an essential element if the market has to be expanded to bring in greater retail participation.

Such trading systems are relatively straightforward to implement and have been successfully demonstrated by stock exchanges in India.

In the context of trading, it may be mentioned that contract design will have a significant impact on liquidity. The basic factors which will have to be taken into account are fairly well known - characteristics of the underlying such as seasonality, product life, grades and standards, extent of international markets, rupee/dollar denomination, size of contract etc. The existing commodity exchanges already have contracts in place and may well form the basis for contracts to be traded on NMCE. Typically commodity exchanges globally use product committees to advice on contract design. NMCE should preferably start with a spectrum of commodities to make it worth the while for professional arbitrageurs and speculators to participate. Besides agri-commodities it may therefore consider others such as bullion or some metal.

However an automated trading system in itself is no guarantee of a successful exchange. Some commodity exchanges have automated their systems to an extent but have not seen significant improvement in liquidity. There are many stock exchanges in India which have automated trading systems but have been extremely unsuccessful in increasing liquidity in their markets. Trading systems form only one ingredient (albeit a necessary one) of a successful exchange.

5 Settlements

Efficient settlements are an absolute essential for a successful exchange. It is not enough to provide efficient trading platforms. Efficiency of settlement processes have a direct bearing on the ability of participants to effectively use derivative instruments.

Commodity settlement represents one of biggest challenges to NMCE and the rest of the article is mainly devoted to raising some of the key issues regarding the same.

Settlement processes in equity and commodity derivatives share many common elements. Typically there is a daily mark to market settlement

where mark to market profit and losses are settled. And then there is final settlement at the time of expiry of a contract. Final settlement can either be (a) cash settled or (b) settled though physical delivery.

There is however some important differences between the way securities and commodities are settled when physical settlement is involved. This is elaborated later on in the article.

5.1 Physical Settled

The issues faced in physical settlements are enormous. There are limits on storage of commodities in different states. There are restrictions on interstate movement of commodities. There are state level octroi and duties which impact the cost of movement of goods across locations. The quality of warehouses leaves much to be desired and the process of taking physical delivery is very cumbersome. As a result existing commodity exchanges effectively settle very little by way of physical settlements and most participants prefer to close out or effectively settle in cash. This in itself is a major impediment to enhanced liquidity in the commodities markets as the link between an under developed spot price discovery mechanism and futures prices becomes even more tenuous preventing effective arbitrage and hedging.

The process flows in the event of physical settlement of commodities are different from that of other underlying. It may therefore be worth outlining the process flow.

5.1.1 Delivery Notice Period

Unlike in the case of say equity futures, in the case of commodities, a seller has an option to give notice of delivery. This option is given during a period identified as 'delivery notice period' (DNP). In a manner similar to options markets such contracts are then assigned to a buyer. However what is interesting and different from a typical options exercise is that both positions can still be closed out before expiry of the contract. The intention of this notice is to allow verification of delivery and to give adequate notice to the buyer of a possible requirement to take delivery. These are required by virtue of the fact that the actual physical settlement of commodities requires preparation from both delivering and receiving members.

Typically in all commodity exchanges, delivery notice is required to be supported by a warehouse receipt. The warehouse receipt is the proof for the quantity and quality of commodities being delivered. Some of exchanges have certified laboratories for verifying the quality of goods. In these exchanges the seller has to produce a verification report from these laboratories along with delivery notice. Some exchanges like LIFFE, accept warehouse receipts as quality verification document while others like BMF-Brazil have independent grading and classification agency to verify the quality.

In the case of BMF-Brazil a seller typically has to submit following additional documents

- A declaration, verifying that the asset is free of any and all charges, including fiscal debts related to the stored goods.
- A provisional delivery order of the goods to BM&F (Brazil), issued by the warehouse
- A warehouse certificate showing storage and regular insurance have been paid, covering a 15 day period counted as from the delivery notice issuance date.

The gap between last notice day and last trading day will be driven by possible duration to inspect and take physical delivery. These factors need to be considered while deciding the settlement mechanism.

5.1.2 Assignment

Whenever delivery notices are given by the seller, the clearing house of the exchange identifies the buyer to whom this notice may be assigned. Exchanges follow different practices for the assignment process. One approach is to display the delivery notice and allow buyers wishing to take delivery to bid for taking delivery. Among the international exchanges, BMF, CBOT, CME display delivery notices. Alternatively, the clearing houses may assign deliveries to buyers on some basis. Exchanges such as COMMEX and Indian commodity exchanges have adopted this method.

As mentioned earlier any seller/buyer who has given intention to deliver/been assigned a delivery has an option to square off positions till the market close of the day of delivery notice. After the close of trading, exchange assigns the delivery intentions to open long positions. Assignment is done typically either on random basis or first-in-first out basis. In some

exchanges (CME) the buyer has the option to give his preference for delivery location. This prevents any inefficient allocation of delivery locations but demands extra administrative work on the part of exchange.

The clearing house decides on the daily delivery order rate at which delivery will be settled. Delivery order rate depends on the spot rate of the underlying adjusted for discount/premium for quality and freight costs. The discount/premium for quality and freight costs are published by the clearing house before introduction of the contract. The most active spot market is normally taken as the benchmark for deciding spot prices. Alternatively, the delivery rate is determined based on the previous day closing rate for the contract or the closing rate for the day.

5.1.3 Delivery

After the assignment process, clearing house/exchange issues a delivery order to the buyer. Exchange also informs the respective warehouse about the identity of the buyer. The buyer is required to deposit a certain percentage of the contract amount with the clearing house as margin against the warehouse receipt.

The period available for the buyer to take physical delivery is stipulated by the exchange. Buyer or his authorised representative in presence of seller or his representative takes the physical stocks against the delivery order. Proof of physical delivery having been effected is forwarded by the seller to the clearing house and the invoice amount is credited to the seller's account.

In India if a seller does not give notice of delivery then at the expiry of the contract the positions are cash settled by price difference exactly as in cash settled equity futures contracts. Under the existing legal framework such cash settlement may be considered as wagering and therefore a penalty is imposed on the seller for not marking open positions for delivery.

As may be seen from the above, this process deviates from physical settlement of equity derivatives in that all open positions at the end of a contract in the case of equities are considered for physical settlement whereas in the case of commodities; there is an option given to the seller to deliver. Moreover, settlement across all equities/funds is done on the same day resulting in significant settlement efficiencies. In the case of commodities the actual physical settlement dates may be different for different commodities

though the effort is to harmonise them to the extent possible. This process of physical settlement also makes it difficult for professional arbitrageurs to fully participate.

Given these difficulties it is understandable why the bulk of commodity futures contracts in India are cash settled.

5.2 Warehousing System

To the extent that positions are cash settled it is easy for NMCE to set up settlement processes. This has been well implemented by some stock exchanges which now have electronic links with designated clearing banks for efficient funds movements. Typically the exchange will require its members to open designated accounts with specified clearing banks. Such accounts will be used only for the purpose of settlements. The exchange will have the right to debit/credit such accounts directly through electronic interface with the clearing banks.

For the purpose of commodity settlements NMCE will have to enter into an arrangement with designated warehouses to handle settlements. It is desirable that the system of cash settlement of sell positions that are not marked for delivery is discontinued. If a physical settlement system is to be in operation it is better to have all open positions at the end of the contract to be settled through delivery. Otherwise, as mentioned in the next section on cash settled contracts arbitrageurs/hedgers may be disadvantaged.

The ability to settle commodities efficiently, of course, depends to a great extent upon the warehousing systems available. The effectiveness of NMCE will be dependent on how effectively the system of warehousing and warehouse receipts work.

The first requirement in this direction is to have good standards and quality assurance/certification procedures. A good system of grading allows commodities to be traded by specification. Currently there are various agencies that are responsible/specify grades for commodities. For example, the Bureau of Indian Standards (BIS) under Ministry of Consumer Affairs specifies standards for processed agricultural commodities whereas AGMARK under the department of rural development under Ministry of Agriculture is responsible for promulgating standards for basic agricultural commodities. Apart from these, there are other agencies like EIA which specify standards for export oriented commodities. There is a need for a

central notification agency for standards and grades including sampling and testing techniques for agricultural commodities. It is also important that the standards developed must be closely aligned to commercial practice.

This is an area where much work is required to be done to improve both standards and testing/certification methods. To begin with NMCE will have a choice to either institute a system of designated surveyors to inspect and certify delivery. All instructions for physical delivery may then require a quality certificate from approved surveyors. Alternately, certified warehouses can issue quality certificates either using in-house labs or professionally licensed graders. Some exchanges like NYBOT use this method.

Most international commodity exchanges used certified warehouses (CWH) for the purpose of handling physical settlements. Such CWH are required to provide storage facilities for participants in the commodities markets and to certify the quantity and quality of the underlying commodity. Such a system has many benefits. The most significant benefit is that a warehouse receipt becomes good collateral, not just for settlement of exchange trades but for other purposes too.

In India the warehousing system is not adequate to meet this requirement. Central and state government controlled warehouses are the major providers of agri-produce storage facilities. Apart from these, there are a few private warehousing being maintained. However there is no clear regulatory oversight of warehousing services. Contrast this with depositories, banks and custodians in the capital market world which are governed by explicit statutes (Depositories Act, SEBI Act etc.). There is a lack of minimum standards in procedures, design and management of the warehouses. As a result any commodity exchange which enters into an arrangement with a warehouse will (a) have to implement its own methods of assessing warehouse quality and (b) depend entirely upon general law in the event of non-performance by a warehouse. There is a need for setting up of a nodal agency for regulating warehousing and various allied issues such as licensing standards, registration of certification and inspection agencies, warehouse inspection. This is fairly important and needs to be address as soon as possible.

Reliability and efficiency of the current set of warehouses are still to be established. Ideally it would be desirable that warehouses provide a performance guarantee assuring that the quantity/quality of goods on the

receipts matches with those in the warehouse. If this is done the comfort level of participants to give/take delivery will increase significantly.

Even with this in place, many problems of physical settlements will remain. Typically even with the better warehouses in India, not all locations are equal. There are some warehouse branches which are of much better quality than others. Some are minimal in their setup and quite clearly cannot meet the minimum requirements for exchange settlements. As a result NMCE will have to also designate branches of certified warehouse which are acceptable. This means that while nation-wide trading can happen easily it may be very difficult for a broker who is acting as a seller to arrange for delivery at designated warehouse branches. The tendency therefore will be to close out positions/cash settle the same.

Third party pre-shipment verification services may also be used to ensure that the physical commodities settled are of the desired grade/specifications. While this will add to the overall cost of operations it will help significantly reduce potential post settlement disputes/differences. It is encouraging that such services are today beginning to be made available in India.

5.3 Cash Settled

Much of the above problems are eliminated if contracts are cash settled. Indeed as mentioned earlier most of the contracts are indeed settled in cash by default i.e. by the seller not giving notice of delivery. In order to circumvent legal issues relating to wagering the existing commodity exchanges impose a nominal penalty on such sellers.

Besides the legal issue of wagering one rationale for physical settlement is that it is possible for arbitrageurs and hedgers to avoid price risk of cash settlement. Typically contracts are cash settled at a closing price which is not known till end of trading day. As a result, even if a hedger/arbitrageur, for example, had a fully covered short position (by way of stocks/commodities) he would still run a one day price risk of closing out on contract expiry. However if settlement was physical he would have no such price risk as he could deliver the stocks and be effectively insulated from price movements.

If the intention is to expand the market to bring in more players, hedgers and arbitrageurs there is a case for physical settlement of commodities.

However, given the issues relating to physical settlement there is merit to starting the market with cash settled contracts and then moving over to physical settlement based market.

5.4 Warehouse Receipt Based Settlements

As a medium term goal, the NMCE should look at replacing the current method of physical settlement with settlement using warehouse receipts. This would allow for settlements though exchange of warehouse receipts. Over time the physical receipts should be eliminated and replaced with electronic ones. Eventually the receipts should be fungible in that a buyer should be able to take delivery at any branch of a warehouse at a cost.

Ideally a warehouse receipt should be equivalent to the physical commodity it represents in terms of rights and liabilities. It should also be easily transferable. There is an issue of whether it should be transferable by endorsement and delivery or it should be in the nature of a registered document requiring registration of change of ownership with the warehouse. The advantages of the former are ease of transfer, especially for farmers etc. However, it is not clear whether ownership of holders in due course can be challenged or be subject to unforeseen liens. Moreover such receipts are susceptible to all manner of fakes/forgery reminiscent of the physical share certificates. NMCE may therefore require that all deliveries should be accompanied by warehouse receipts without any endorsements i.e. change of ownership. This would require a facility from the CWH to re-endorse the receipts much like share transfers.

The advantage of reliable warehouse receipts which are unambiguous in their legal status is that these can then be directly used for settlements. This would mean that the cumbersome process of having to separately take physical delivery can be obviated and the same receipt can be re-tendered for delivery without necessarily having to take physical possession of the goods. This would result in much greater churning and liquidity in the market.

It would also be useful if the holder of a warehouse receipt could take physical delivery from the nearest warehouse branch irrespective of where the commodity was originally warehoused. This may be possible for widely distributed commodities and for reasonably small quantities. The benefit of this would be a much wider dispersal of warehouse receipt hold-

ings and participation at retail levels. For large quantities or specialized commodities the CWH may offer this facility at a cost which will include cost of transportation.

In order to manage all of this efficiently and without facing problems of fake receipts etc. it would require the CWH to connect all branches electronically and to hold warehouse receipts in electronic form. This will require appropriate changes in the legal framework governing warehouses and negotiability of receipts.

6 Risk Management

A key element of settlement and safety of the market is guaranteed settlements. This eliminates counterparty risk as exchange/clearing house becomes counterparty to transactions. The exchange/clearing house, besides providing clearing and settlement services, manages market risk and guarantees completion of settlements. This encourages wider participation by all sections of investors and traders.

This requires effective risk management systems and a legal framework which supports the same. There are fairly well understood methods of risk management used by derivatives exchanges and it should be possible for NMCE to quickly implement an effective risk management system.

Daily mark to market settlements combined with initial or upfront margins are the basic bread and butter of risk management. There are different ways of setting initial margins. A portfolio based Value at Risk (VaR) system would be most appropriate. Typically exchanges use a scenario analysis such as SPAN® to calculate possible VaR of each member portfolio. These provide for inter commodity spreads as well as calendar spreads to ensure that appropriate margins are charged.

Over and above the initial margin the exchange may want to impose real time position limits based on open positions at various levels – market, trader, client. This is important in the context of an automated trading environment which allows for rapid build up of open positions. Such a system will monitor open positions on a real time basis and allow the exchange to take swift remedial measures under unusual circumstances.

Typically there would also be margins charged on buyers against warehouse delivery of warehouse receipts (prior to settlement). The extent of

this margin is a function of the legal status of warehouse receipts and enforceability of claims against the same.

7 A Different Approach

To summarise the above, NMCE will be required to significantly enhance the scope, efficiency and transparency of the commodity derivatives markets in order to enhance participation and bring liquidity. Some of the key issues that will need to be addressed relate to (a) putting in place appropriate and efficient market structures such as a demutualised exchange, nation-wide automated trading system, (b) work to strengthen related market structures such as spot market and info dissemination, quality standards and assurances, certified warehouses and (c) work towards replacing physical settlements with warehouse receipts based settlement systems. Many of these are outside the purview of an exchange and require significant changes in infrastructure and legal framework.

Assuming that many of the elements are put in place there is still no assurance that NMCE will be able to attract liquidity.

In this context it may be worthwhile to examine the scenario in the stock exchange world to draw relevant lessons from the same. Two exchanges, BSE and NSE, have successfully implemented automated trading systems on a nation-wide basis and have been able to attract liquidity. Other exchanges have automated their equity trading but have failed in the market place. NSE has been more successful than BSE and has been able to attract more liquidity away from other exchanges to it. Can NMCE to the same?

There are some underlying factors which are different between stock markets and commodity markets. For one, in the stock markets all the exchanges were effectively trading the same set of securities in the cash market resulting in a fragmentation of demand-supply. NSE, by introducing a nation-wide distribution network, was able to bring all the fragmented pools into a large order book resulting in enhanced liquidity. This is not true in the case of commodities where different exchanges mostly trade different products and the demand-supply in that sense is not fragmented. However the commodity exchanges have a closed door approach as a result of which the market has not expanded and NMCE may be able to widen the market through a nation-wide network. NSE attracted trading members from different exchanges who were conversant with the relatively homoge-

nous market and were therefore able to effectively reach the larger set of investors. The same is not true in the case of commodities where trading familiarity with the different commodities is not distributed on a nationwide basis. Therefore the task of attracting enough traders for a significant set of commodities across the country becomes an important consideration. NMCE will therefore have to concentrate on commodities which have broader distribution and trading interest to start with if it has to compete with the existing commodity exchanges.

Can this be done differently?

One such alternate mechanism is to use the existing stock exchanges to trade commodity derivatives.

Create a class of synthetic security (a commodity bond) which has commodities as the underlying much in the nature of a securitised asset. There could be several ways to do this. One would be to issue commodity bonds much like gold deposit receipts. Another could be to set up exchange traded fund (ETF) like structures based on commodities. This security would be eligible to be traded on stock exchanges both in the spot market and in the derivatives market.

The advantages of doing this are significant. All the necessary requisites as outlined above are already available with stock exchanges. They have the trading platform, the market structure, clearing settlement mechanisms and the legal framework to support all of the above. Most importantly they have the distribution network and brokers to support wide spread derivatives trading. The entire gamut of issues relating to warehouses and warehouse receipts for settlement also becomes much more manageable. Settlement on the exchange is based on the commodity bond – settlement will be done through giving and taking delivery of the commodity form in demat form exactly like any other security. A buyer who wants physical delivery can approach the issuer of the security for delivery.

One issue is that there have to be entities who are willing to securitise commodities. These could be government procurement agencies, banks, financial institutions etc. who are sitting on surplus stock or have custody of such assets. Such agencies may be encouraged to issue commodity bonds much in the same manner as securitised assets. This approach would have the additional benefit that the issues relating to quality certification, grading, verification etc. also become immediately more manageable.

In any event it is important that there is competitive pressure on all key market intermediaries. There is case for more than one multi-commodity exchange and more than one model/structure of such exchanges.

The cost of this alternate model will be much lower than setting up a new NMCE. It may be worthwhile to consider and allow existing exchanges to therefore expand their operations to allow for such commodity derivatives along with new NMCE initiatives. May the best exchange win.