Overview of Futures Trading in Agricultural Commodities: A Conceptual Perspective

Article *in* SSRN Electronic Journal · April 2012

DOI: 10.2139/ssrn.2038200

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Abstract

Futures trading in agricultural commodities in India has a past spanning more than a century. Commodity Futures are traded for castor seed, hessian, sacking, turmeric pepper, gur and potato. Trading has also commenced in cotton. Conditions of supply, demand, transportation, storage, and processing are main causes of price fluctuation, which at times are very wide and violent. The prices of the commodities emanating from the futures markets may help farmers/producers to plan their productions. In futures markets there are mainly two types of traders (buyers and sellers), (a) Hedgers and (b) speculators. Hedgers are predominant players of futures markets, which they share with speculators. Hedgers enter the future markets to hedge themselves from risks while speculators have profit in mind. However, the speculators enter into future contracts after assessment of information available to them about the market and price conditions. They may buy or sell based on their assessment. It is the speculators who bear the risk of their decision. In a future market the correctness / trust that futures prices are unbiased is based mainly on the profit motive of the speculators. This is an important characteristic of futures markets because if hedgers (also called commercial buyers) do not regard futures prices as 'unbiased equilibrium prices' they would not enter the market to hedge their risks at all. If India has to replicate something like the Brazilian experience, then it would have to adopt a multi-pronged strategy involving the agricultural producers, marketers and processors, marketing agencies, government departments and most importantly the financing agencies –mainly banks. The system of certification of stocks and storage of commodities can create a system of warehouse receipts that show proof of ownership of a certain quantity of a commodity. Such warehouse receipts can be treated as collaterals by commercial banks for futures financing stocks. Certificates of ownership can easily be used to meet delivery obligations. In this way commodity financing can be transformed radically and favorably futures markets warehousing systems.

Overview of Futures Trading in Agricultural Commodities: A Conceptual Perspective

Futures' trading in agricultural commodities in India has a past spanning more than a century .It started in 1875when trade in cotton futures was started by Bombay Cotton Trade Association. Trade in other commodities like jute, oilseeds, wheat, groundnut, sugar and bullion in different parts of the country by other Trade Association's followed this. The trade Associations framed rules and regulations governing trade in commodity futures. It was not until the Bombay Government did pass Bombay Cotton Contracts Control Act in 1919 that some kind of regulation of future markets was visible. Cotton Exchange of Bombay became first organized exchange in India. Trading in commodity futures continued in different centers throughout the country till it was banned during the Second World War. After independence a bill to regulate future was introduced in the Parliament in 1950 and was passed as Forward Contracts (Regulations) Act 1952.However a major help in the direction of revitalization /setting up of commodity futures exchanges was after the Kabra Committee Report (1994) recommendation for futures trading in17 commodities, establishment of international futures exchanges for trading in castor and pepper. Besides this Kabra Committee had also recommended

strengthening of existing commodity exchanges and Forward Markets Commission. Similarly, World Bank and United Nations Conference on Trade and Development (UNCTAD) submitted a report in 1996, which recommended that commodity futures markets should be revived in the country. It had become imperative to, manage price risks after economic and trade liberalization in post 1991 period and India's acceptance of World Trade Organization's (WTO) membership.

Commodity Futures are traded for castor seed, hessian, sacking, turmeric pepper, gur and potato. Trading has also commenced cotton. It is expected that trading in commodity futures shall receive a bigger and much needed thrust after the launch of a World Bank aided project in September' 98. This 18-month project aims to support the strengthening of commodity futures exchanges and the Forward markets commission in India.

Why do we need futures in agricultural commodities?

On observing the contribution of various sectors of the economy to country's national income it is seen that primary sector contributes nearly one third to it- most of this contribution comes from agriculture and the rest from mining. Production and consumption pattern of agricultural commodities is such that though the production is restricted to certain time periods in a year as well as certain regions of the country, the consumption takes place more or less throughout the year across the country. Conditions of supply, demand, transportation, storage, and processing are main causes of price fluctuation, which at times are very wide and violent. Agricultural commodities have to pass a chain of intermediaries from the farmers to the consumers commodity price change occurs due to large annual shift in production and general price situation are common for agricultural products .The mention of recent price swings of onion would not be out of place. A small fall in production levels of onion due to lower acreage followed by unseasonal rains in onion growing areas triggered a chain of price hikes, which became nearly uncontrollable.

Such wide and unpredictable fluctuations in commodity price create a lot of uncertainties and price risks for the marketers (as well as the producers). The government does use price support to protect the producers and consumers but marketers have to resort to trading / storage to protect themselves from risks or to shift to different entity in the marketing channel .In a nutshell it can be said that trading in commodity future would help in managing better the price and production risks associated with agricultural commodities. It would also help in overcoming the price fluctuations caused due to the consumption patterns of agricultural commodities. This is not to say that commodity futures trading would cure all fluctuations or remove altogether price and production risks in agricultural commodities. However it can help in reducing uncertainties for the traded commodities as the futures price generally tend to indicate a convergence a large number of demands and supply price.

Which agricultural commodities can be traded on futures markets:

It is generally agreed that commodities, which have the following characteristics, are suitable for trading in futures markets,

1. The commodity should not be perishable and should be able to withstand storage and transportation for a reasonably long period of time and space.
2. There should be a near perfect market for the commodity or say there should be a large number of buyers and sellers in the market
3. Commodity should be homogeneous and should be such that it is possible for it to be graded/classified into different grades/varieties.
4. There should be a free flow of the commodity to and from the market without any outside interference/control.

5. Most importantly some uncertainty should exist regarding the supply or demand or both of the commodities.

The condition of a near perfect market is brought about the fact that information dissemination is quick, effective and inexpensive in such markets thereby reducing the monopoly power. The prices of the commodities emanating from the futures markets may help farmers/producers to plan their productions-- this is what one may tend to agree, however, farmers so not use futures that often. They use forward contracts more frequently to plan their production instead. Main users of agricultural futures are intermediaries involved in marketing processes.

As put forth by Forward commission--- "Out of the five variables in generic forward contracts four--- quantity, grade, location, and time are standardized in case of futures contracts. Commodity futures contracts are bought and sold on designated exchanges and this is an important characteristic. Moreover the designated futures markets are regulated or supervised by regulatory authorities." It would by pertinent here to elaborate that forward markets are merchandising markets for deferred delivery (A simple example could be subscription to a magazine or booking of a new car with the dealer). In such cases the contracts are tailor-made to suit the requirements of buyers and sellers. On the other hand, futures markets have a small number of actively traded commodities. These markets, as said earlier, deal in standard homogeneous contracts for the delivery of specific quantity of specified grades of a commodity at designated delivery points within a given time interval.

Hedgers and Speculators:

In futures markets there are mainly two types of traders (buyers and sellers), i.e., (a) Hedgers, and (b) Speculators. Hedgers are predominant players of futures markets, which they share with speculators. Hedgers enter the future markets to hedge themselves from risks while speculators have profit in mind. However, the speculators enter into future contracts after assessment of information available to them about the market and price conditions. They may buy or sell based on their assessment. It is the speculators who bear the risk of their decision. In a future market the trust that futures prices are unbiased is based mainly on the profit motive of the speculators. This is an important characteristic of futures markets because if hedgers (also called commercial buyers) do not regard futures prices as 'unbiased equilibrium prices' they would not enter the market to hedge their risks at all.

To prevent defaults the contracts in the futures markets are traded /cleared by a clearinghouse / change specifically for the traded commodity. This permits any buyer /seller to reverse any previous any previous transaction without contacting the original counterpart. To protect itself the clearinghouse squares the market settlements of accounts on a daily basis and by requiring maintenance margins. Without such performance guarantees the protection from price fluctuation would be both incomplete and uncertain.

World Bank –UNCTAD study:

A study titled "India: Managing price risks in India's liberalized Agriculture: Can futures help?" was undertaken jointly by World Bank and United Nations Conference on Trade and Development (UNCTAD) in 1996 in collaboration with Government of India to review the constraints opportunities and options for improving future markets besides other things. It also studied the general benefits and risks of exchanges evaluated reforms and investments needed to improve the performance of the existing futures markets and commodity exchanges and also reviewed the possibilities for improving new future contracts.

The report elaborates that price volatility creates uncertainty and risks, which can strengthen the agricultural performance and have negative impact on the income and welfare of the farmers and the rural poor. It goes on to say that in India the risks and uncertainties associated with price volatility have been controlled through policy instruments which either eliminated or tried to minimize price

volatility, a closed external regime, price controls, pervasive government dictates on private sector activities, extensive market intervention and crop insurance. These controls are now being given up by the government in an effort to spur agricultural growth. The report felt that the interventions in futures markets would severely limit the ability of futures trade to operate in an adequate and safe manner by preventing the arbitrage of agricultural commodities across the space and seasons in an efficient and competitive way.

The main recommendations of the report were that futures markets can help only if (a) the government interventions do not hinder the normal, efficient and competitive flow of commodities in the economy and (b) a sufficiently large part of physical trade should be left in the hands of the private sector and prices should be allowed to clear the market. It is also said that government has an important role to play in providing a stable and predictable external trade environment. Other recommendation of the study were that the Forward Markets Commission (F M C) should curb its discretionary interventions—associations should be recognized on a permanent basis, renewal of the contracts should be automatic, regulatory measures should be standardized and price ceilings withdrawn.

The FMC would have to be strengthened to play an improved monitoring and supervisory role. Commodities exchanges would need to upgrade their rules and regulations of trading procedures, delivery system, trade supervision and capacity to design and introduce futures contracts.

Forward Markets Commission:

Forward markets Commission was established under Section 3 of the Forward Contracts (Regulation) Act, 1952 and has executive as will as advisory functions. The functions of the commission are:

(1) To advice the Government in respect of recognition or withdrawal of recognition of associations conducting forward trading.

(2) To keep forward markets under observation.

(3) To draw the attention of the Government to the various developments that are taking place in the different forward markets, with suitable recommendations.

(4) To collect and publish information (including information regarding supply, demand and prices) as regards trading conditions in respect of markets falling under its jurisdiction,

(5) To submit periodical reports to Government on the operation of the Act and on the working of forward markets, and

(6) To inspect accounts of recognized associations and to recommendations generally with a view to improving the organization and working of forward markets.

The Government delegated certain powers, by it; to the Forward Markets commission under section 26 these powers so delegated to the Commission are as listed as follows,

a. Power to direct rules to be made or make rules
b. Power to approve amendments to the rules of recognized association
c. Power to call upon a recognized association to furnish explanation relation to its affairs on any of its members.
d. Power to suspend business of a recognized association.
e. Power to issue directions to recognized associations has also been conferred on the Commission.

Brazilian experience:

There is a concentration of commodity futures markets in the countries that have vibrant domestic trade and a domestic value addition and significant presence in global trade in primary produce. Agricultural commodity futures exchanges and contracts account for more than two thirds principal commodity exchanges and commodity contracts. Experience of Brazil in commodity futures markets is often cited as success story.

Brazil is the world's largest exporter of coffee and also a major exporter of sugar and cotton. In Brazil the trading in futures began in 1919 at the Sao Paulo commodities exchange, which had been, established earlier 1917. Main commodities traded were cotton and coffee and it played a significant role in the coffee sugar export based economy of Brazil at that time. The exchange diversified in early forties and started trading in alfalfa garlic, peanuts, beans and corn in addition to coffee sugar and cotton. The Sao Paulo commodities exchange played a crucial role in organizing modern infrastructure ware housing and transportation in modern warehousing facilities for commodities like coffee, sugar were created at the initiative of Sao Paulo Commodities Exchange. In 1952 to modernize its activities it founded the Sao Paulo system for clearing futures contracts and had individuals of good financial standing as members but this system was revamped in 1977 when exchange decided to admit brokerage houses as clearing members. Further changes were made in 1985, which enabled the establishment of commercial banks and financial institutions as clearing members of exchanges clearing system. This admission created and a more solid base for the clearing system. The exchange's clearing system had also commodity distributors as its members.

Activities at the Sao Paulo Commodities exchange kept on expanding as it had already introduced Gold contracts in 1981. In1986 the Exchange added currency contracts for hedging in dollars, yen and pounds sterling. Contracts in live cattle feeder cater and frozen chicken was also added. The result was that this combination has helped to enhance the value addition and manufacturing activity in Brazil. The Sao Paulo commodity Exchange was merged with Bolas Mercantile Commodity Futures in 1991 to create *Bolsa de Mercadorias of Futuros* (BM&F) who primary goal was to develop futures markets on financial sets and agricultural commodities. One of the characteristics of BM&F is that it stands as the common counterparty guarantor for all futures trades. In this arrangement the clearing party members are responsible for all obligations and settlement of futures transactions before the exchange becomes responsible. There are several guarantee levels first in the margin deposits of customers, second level is given by commodity brokerage houses as they are responsible to clearing members for obligations of the .The third level is given by the clearing members. Beyond this is the guarantee of the clearing member with the clearinghouse, and then there is a fund created by resources deposited by all members. Notable feature of BM&F is that it offers services of coffee and cotton grading, gold terminal operations. Income received and capital gains by funds are exempted from Brazilian income tax on foreign investors for the income from transactions carried out at other exchanges.

All these features have helped BM&F gain a global reputation and it became an important complimentary mechanism for physical markets, industrial activity and value addition.

Role of Banks in fostering futures in agricultural commodities in India:

If India has to replicate something like the Brazilian experience, then it would have to adopt a multi-pronged strategy involving the agricultural producers, marketers and processors, marketing agencies, government departments and most importantly the financing agencies –mainly banks. A natural question would be- what is the role of banks in these schemes of things? The only way to answer this question is start from the very beginning. Development of agriculture requires credit not only at the stage of producing crops but also in agriculture marketing and processing activities, credit flows to agriculture has been going on for few decades and banks are in a position to assess risks and returns in these activities. It would be some time before credit direct activities and pick-up in India Agricultural marketing scenario. The reason may be perception high risks associated with the activity.

To start with, one of the major ways of participation and facilitation by Banks in commodity futures markets could finance of ware housing activities (building and operation) on a larger scale. This would build up the basic infrastructure which would have multi-pronged uses.

There is a direct and intimate dependence of commodity futures exchanges with storing of commodities at certified warehouses. Commodities in such warehouses are graded and certified before being stored. These facilities of grading, certification and storage are accessible to the participants of the futures markets and non-participants alike. The system of certification of stocks and storage of commodities has created a system of warehouse receipts that show proof of ownership of a certain quantity of a commodity. Such warehouse receipts are treated as collaterals by commercial banks for futures financing stocks. Certificates of ownership can easily be used to meet delivery obligations. In this way commodity financing has been transformed radically and favorably futures markets warehousing systems. There is only one independent clearing corporation to guarantee futures contracts. It is the FCCCI-First Commodities Clearing Corporation of India Ltd. This entity guarantees the performance of International Pepper Futures Traded at IPSTA (Indian Pepper and Spices Traded Association).

Selective credit controls have enabled the allocation of credit to the commodity sector. However, as said earlier, these controls are being gradually withdrawn. The level of protection from price fluctuations would depend on the level of correctness of the assessment of risk and uncertainty by the commercial bank. The price signals emanating from commodity futures trading would enable the banks in making better risk assessments which in turn may mean better credit flows to agriculture production, processing and marketing. Any increase in net value addition using commodity futures and better assessment of price risks would help commercial banks to pursue profitable opportunities in commodity financing.

Commercial and Development Banks, both, can and have to play a supportive and constructive role in raising the standard of existing commodity exchanges to international standards. They will also have to help in increasing the reach and depth of trade at these exchanges. Thus, it can be said, without doubt, that banks do have a future in Commodity Futures Markets in India.

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