Relationship between future and spot price market: Under the current scenario in the wake of retail policies in India?

Introduction

India- the world's 4th largest economy, which has $1.94 Trillion of Gross Domestic Product according to 2012's data released by IMF, has always been agriculture based country where the crops have a large dependability on Monsoon. The prices of agriculture commodities have largely been a function of demand, supply, inflation rate etc. along with the rainfall which is basically a product of monsoon period. Small variation of in the availability of water due to this monsoon can significantly impact the prices of commodities. But as the liberalization and global trades started to occur and India opened its door to trade with other countries, prices of various products including the agriculture products surged to very high limits. Apart from those microeconomic factors mentioned above the spot prices of commodities can be impacted by retail policies set by government of India such as reforms in retail policy, introduction of new supermarkets, increase in competition between existing players and new players of agriculture based products. It is to be noted that this report concentrates basically on agriculture products rather than presenting a general scenario of spot and future price market relationship of any general traded commodity.

Type	Actual Commodity
Precious metals	Gold, Silver, Platinum etc.
Other metals	Nickel, Aluminium, Copper etc
Agro Based	Wheat, Corn, Cotton, Oils, Oilseeds,Chana etc.
Soft commodities	Coffee ,Cocoa, Sugar etc.
Live-stock	Live- cattles, Pork Bellies etc.
Energy	Crude Oil, Natural Gas, Gasoline etc.

Before directly digging down into the factors which impact the prices of commodities of our discussion, I will take a divide and rule approach and will try to describe the terms briefly.

Spot price:

The current price at which a security is being bought or sold in a market at any specified place and time. But it is to be noted that this spot price does not represent the intrinsic value of the security rather it is extrinsic, whereas the futures price defines the expected value of the security which is related to the spot price and the specified time frame.

Spot prices are very important for the pricing of futures and when it comes to commodity, the parameters which are used to calculate the futures price are below:

- Spot price
- Risk free rate
- Maturity period

Given risk free rate, maturity period, we can also calculate the spot price of the commodity using futures price.

Futures

Futures is a standardized contract made between two parties where two parties come into an agreement, where a potential buyer is expecting the price of a commodity to go up in near future whereas a potential seller is expecting the price of a security (commodity here) to go down, the buyer will purchase a futures contract in which he would be able to purchase a specified quantity of a commodity at a specified period of time, called the maturity date. This makes one party loose and one party win, and this where speculators and hedgers meet and try to gain by using market understanding.

Retail market in India

India's retail industry is one of the fastest growing sectors and is believed to have a huge growth potential. The current retail sector in India is around $430 Billion and expected to grow to $660 Billion by 2015, according to Investment commission in India. Current retail policies does not allow FDI retailers to operate in India in Multi Brand Sector instead it allows only in single brand retail. The latest reforms made by UPA(II) government have allowed multi brand retail service providers to operate with FDI limit of 51% whereas 100% FDI in single brand retail has been allowed in January 2012 which was only 51% since 2006. Seeing the population of India which is approximately 1.23Billion, foreign retailers are highly interested to open retail chains in India in order to tap the huge consumer base. For example, fast food giants like Subway, Pizza Hut and McDonalds are expanding aggressively. The 95% of retail sector is unorganized in India and in the wake of new retail policies made by government have established significant safeguards to maintain the existence of existing shareholders. Here are some important points which need to be fulfilled by these multi-brand retailers in order to establish themselves in India-

- In order to establish any retail chain, this FDI needs to be approved by government first.
- Any foreign entity willing to make FDI, has to invest minimum of $100Million and at least 50% of this investment needs to be invested in backend infrastructure such as transportation, refrigeration, packaging etc.
- These foreign retailers need to source at least 30% of their input such as raw material form small and micro industry.
- One more safeguard has been pivoted where FDI is allowed only in 53 cities having population of 1 Million out of 8000 cities/towns of India.
- According to projections made these key initiatives will bolster the $28 Billion organized retail market which is expected to reach $260 Billion by 2020. These policy reforms have also shown their dramatic impact on stock exchanges where multiple retail stocks increased by 30%.

Till now we have described what are the spot prices, prices of futures contracts and also a brief description of newest retail policies in India released recently. This **report attempts to analyze the impacts of these policies on commodity prices** in a qualitative way.

Benefits of FDI in Multi Brand Retail

Given all things go rationally as planned, the new policy will impact the supply chain infrastructure in such a way where farmers will be able to get around 20-30% more remuneration due to the prospects of elimination of middlemen. It is also expected that due to new retail policies, around 3-4 million new jobs.

Analysis of Price Movement on Introducing Multi Brand Retail

Let's take an example of wheat which ultimately results into wheat and sold by various organized brands such as ITC, PillsBurry. In the absence of 51% FDI based retail stores, these producers have to purchase commodity such as wheat at a minimum purchase price from farmers but the value reached to farmers seems not be sufficient.

Consider a scenario, when the multi brand retailing is allowed to 51% using FDI, these multi brand retail outlets will sell many brands which presents a possibility that they may also produce final products of their own brands. As the sales by volume made by these retail chains remains quite high as compared to single brand retailers and **mom and pop** stores, they may exploit the concept of economies of scale and will sell the products at significant discounts to customers. This strategy will lead to high remuneration to farmers coupled with policy of 30% sourcing by these retailers from domestic suppliers. Due to competitiveness and elimination of most of the middlemen, existing single brand producers will have to provide high compensation to farmers. So for a person who is purchasing already manufactured flour from multi-brand retailer, this might seem beneficial as the prices will go down gradually, this reduction of prices may correspond to the improvement in supply chain efficiencies.

But for a person who is purchasing direct wheat from commodity market of any city, he might be impacted by these market developments. This corresponds to a very interesting phenomenon of behavioral finance, where a farmer selling at high cost to producers such as ITC or PillsBurry, will expect equivalent high price from the raw commodity purchasers (for eg. A person who prefers not to buy manufactured flour rather he prefers to make it at home in his own Atta Machine) and overtime this may shift the price to higher limits in unregulated markets. Subsequently the spot prices of the these kinds of commodities may change. The effects of Multi Brand retail on commodity markets are unpredictable, some say it can go up and some say it can go down. Economist Martibn Patrick points out, "The past experiences show that once the organized players come in, prices have not come down."

Adverse effects

Entrance of these big organized retailers may bring an unwanted effect in the market where they would largely source the high quality portions of commodities from farmers and lower quality portion will be routed to Mandis, these off-quality products might be sold at lower prices and in the long run it may happen that the commodities market will crash at Mandis. This negative effect will act as a major driver of curbing the inflation but this would give higher powers to Big players. Even though the Mandis would be negatively affected, these big brands given their economies of scale may be tempted to import large sums from outside which will impact the commodity producing farmers.

As they would be able to purchase high quality portion of commodities from farmers, the speculation on prices might increase the prices of futures contracts.

Conclusion

The report describes a general movement in prices, when the multi brand retail comes in India, the spot prices may go up or down which is highly unpredictable given the scale of retail market in India but the quality aspects discussed above may bring the spot prices down and may force the futures prices to go up due to the speculative behavior possessed by new players violating the relationship mentioned in the introduction of this report.