Commodity risk and Indian banks

(Speech delivered by Ms. Usha Thorat, Director, CAFRAL, at the Workshop on Commodity Risk Management for Indian Banks organised by NIBM and NCDEX, in Mumbai, on August 03, 2013)

I thank NIBM and NCDEX for inviting me here this morning to give the keynote address in this very timely one-day workshop on commodity risk management for Indian banks organized jointly by NIBM and NCDEX.

The regulator and the exchanges will be giving you a lot of information and suggestions on how banks can manage commodity risk through the use of the commodity futures. I am not that familiar with this subject and would rather leave this to the experts in the field.

What I thought I would raise today are some fundamental questions.

The role of markets is to undertake intermediation and allocate resources efficiently for societal welfare. The objective of futures markets in commodities is to ensure price discovery and facilitate hedging of price risk for final users – producers and consumers. Mr Thomas, Minister of State for Consumer Affairs in a speech in Sep 2012 referred to the National Agricultural Policy of July 2000 that recognized the positive role of forward and futures market in price discovery and price risk management, especially in agricultural commodities. To quote “A majority of the farmers being marginal and small cannot influence the market individually and operate in a very disadvantageous buyer’s market. They have usually little marketable surplus and also do not have holding capacity or storage facilities with them. The farmer very often is compelled to go in for distress sale because he has to pay back the credit availed, or to meet his obligations. This situation is often exploited by traders. As a result farmers do not get the right price for their produce. Price discovered on futures exchange provides a benchmark and is extremely helpful in the decision making process by farmers regarding the crops to sow what prices to expect etc.” He also stressed the need

for farmers to be able to use the futures market for price risk management. Majority of them lack easy access to the members of the futures exchange, the contract size is often too large and they do not have ready cash to meet the margin requirements on day-to-day basis. The solution to this issue he said lies in promoting institutionalized farmers' aggregators and felt that this was a role banks could take up.

Agriculture is critical to the nation. Increase in agricultural growth and productivity will make all the difference whether we can sustain long term higher rates of growth of the economy. It is critical for inflation management in a country like India. Eighteen per cent of bank credit is required to be given for agriculture. As such, banks have huge stake in minimising their credit risk which arises as a result of price risk in agricultural commodities. In other primary commodities, such as metals and power too, bank clients face price risk. Understanding the nature of this price risk and how futures markets can provide an effective tool for hedging such risk is something banks need to very essential. Hence this workshop is very timely.

Commodity futures provide an effective tool for hedging price risk if they are able to provide direction to the farmer on future prices. The issue that arises in this context is to what extent the futures provide direction to the farmer to plan his production.

I will show you four slides that illustrate that, with increased financialisation, commodity futures markets are hardly driven by the fundamentals- viz. demand and supply. Financial market players who operate in all financial markets including commodity futures have overwhelmed them.

Figure 1. Open interest in futures contracts for wheat, corn, and soybeans, Chicago Board of Trade (Jan. 1986 to Sept. 2011)

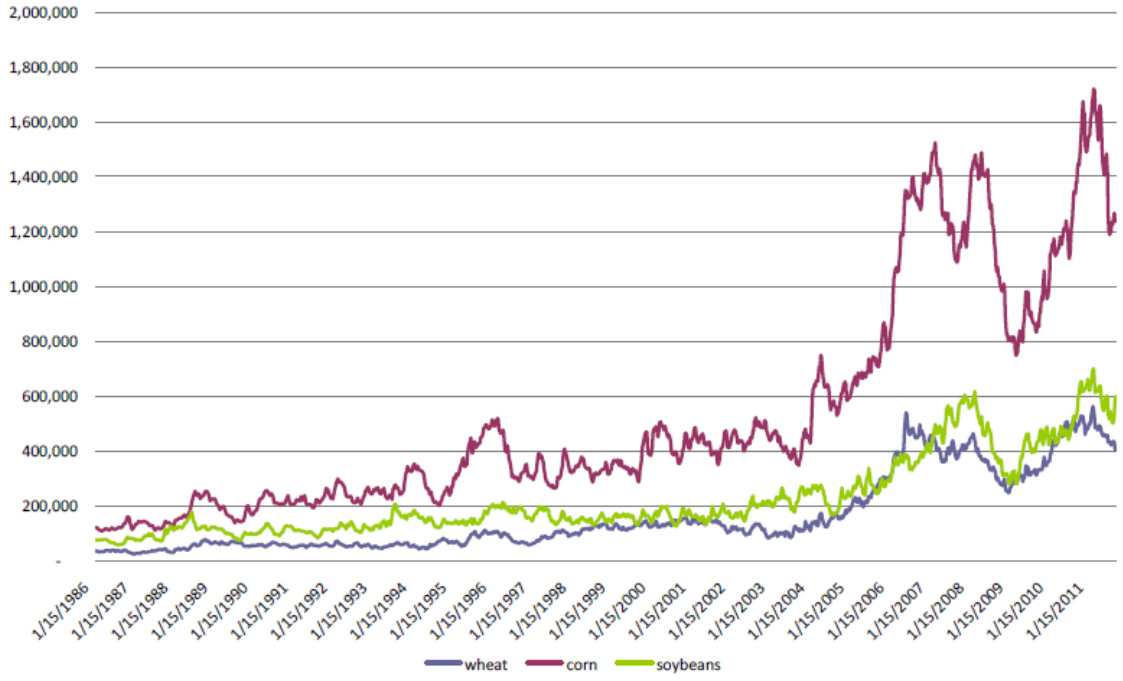
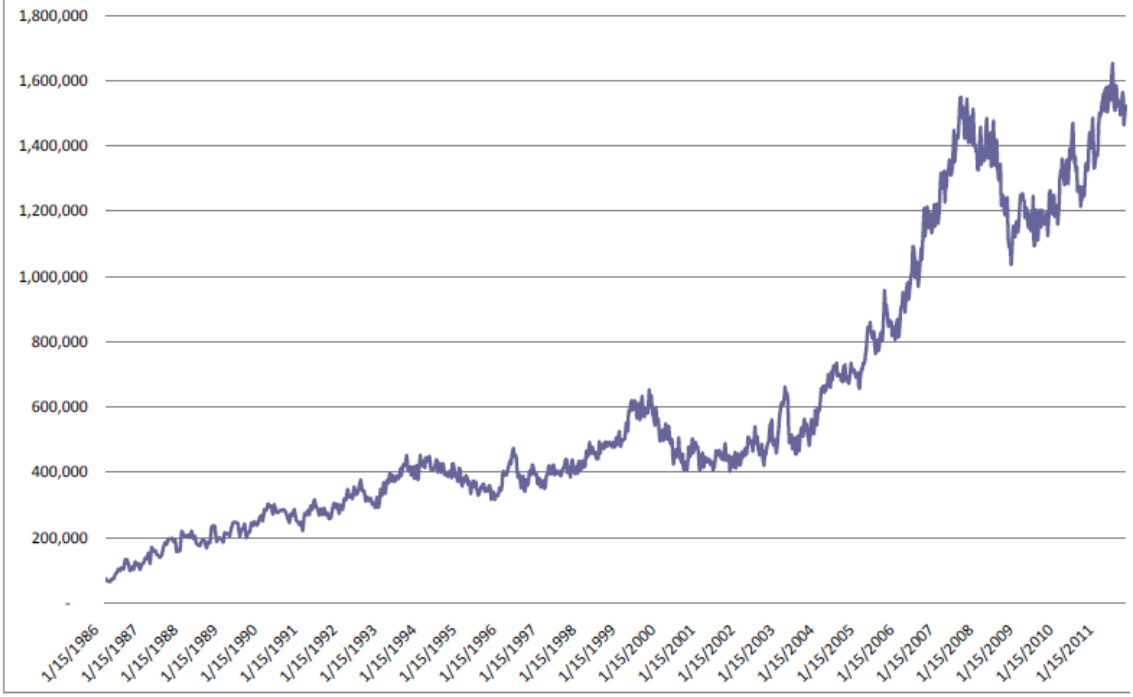


Figure 2. Open interest in futures contracts for crude oil ('light sweet') NYMEX (Jan. 1986 to Sept. 2011)



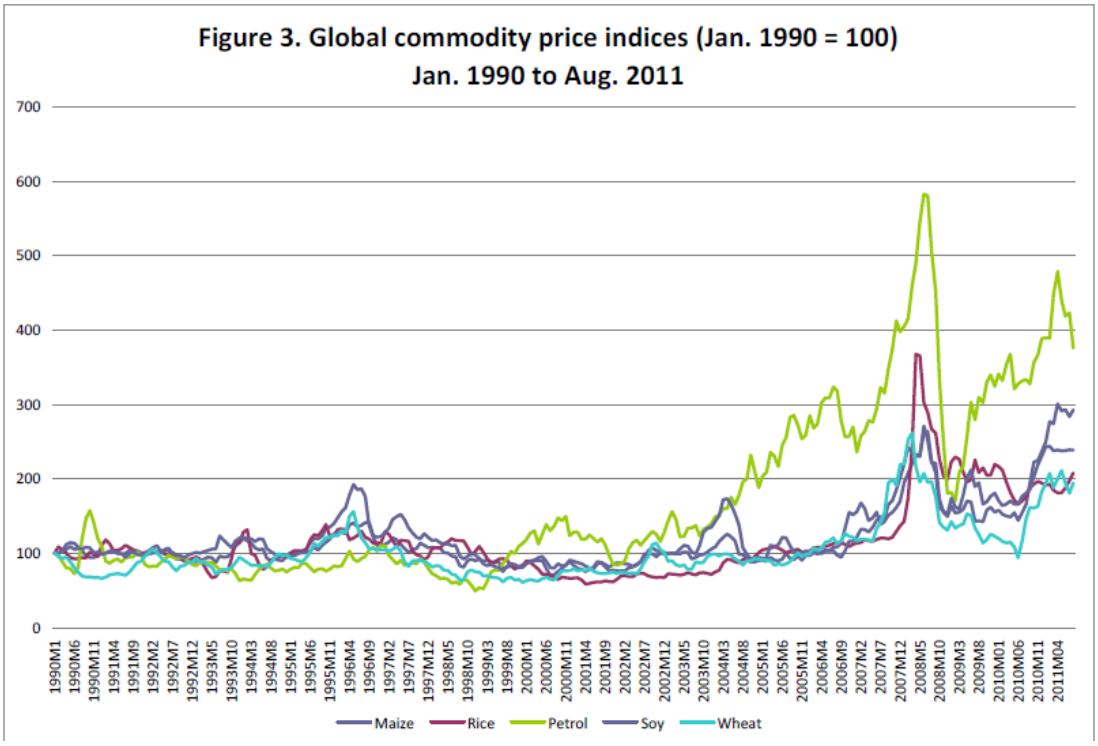


Figure 3. Global commodity price indices (Jan. 1990 = 100)
Jan. 1990 to Aug. 2011
700
600
500
400
300
200
100
0
1990M1
1990M6
1990M11
1991M4
1991M9
1992M2
1992M7
1992M12
1993M5
1993M10
1994M3
1994M8
1995M1
1995M6
1995M11
1996M4
1996M9
1997M2
1997M7
1997M12
1998M5
1998M10
1999M3
1999M8
2000M1
2000M6
2000M11
2001M4
2001M9
2002M2
2002M7
2002M12
2003M5
2003M10
2004M3
2004M8
2005M1
2005M6
2005M11
2006M4
2006M9
2007M2
2007M7
2007M12
2008M5
2008M10
2009M3
2009M8
2010M01
2010M06
2010M11
2011M04
Maize
Rice
Petrol
Soy
Wheat

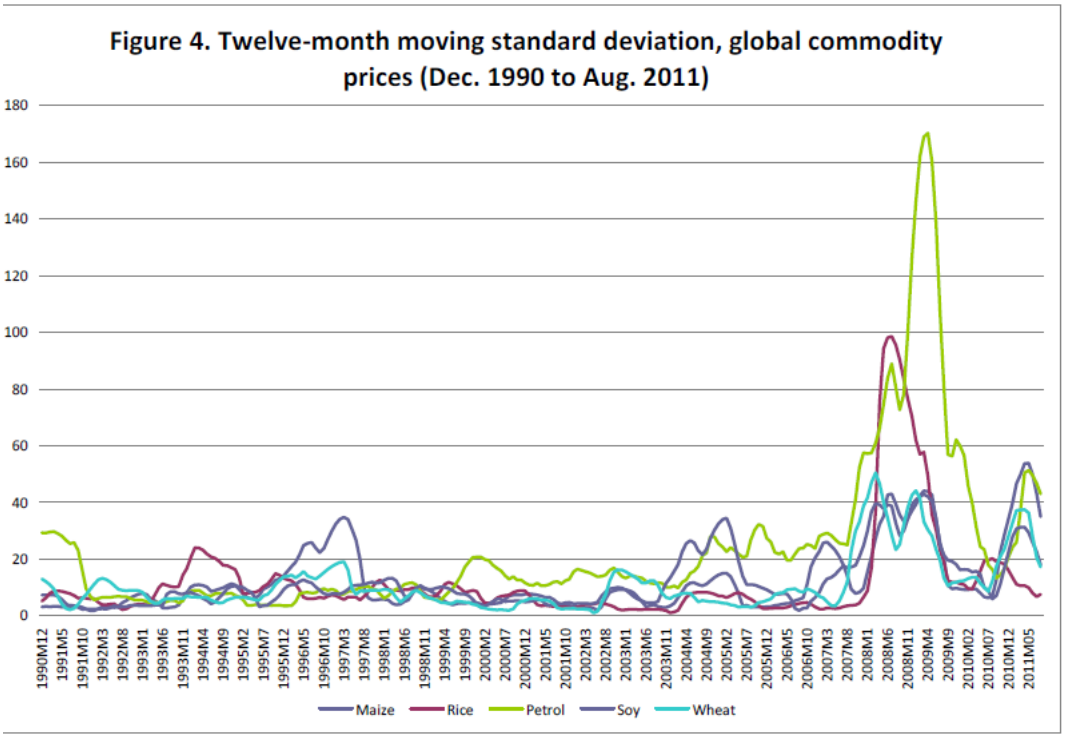


Figure 4. Twelve-month moving standard deviation, global commodity prices (Dec. 1990 to Aug. 2011)
180
160
140
120
100
80
60
40
20
0
1990M12
1991M5
1991M10
1992M3
1992M8
1993M1
1993M6
1993M11
1994M4
1994M9
1995M2
1995M7
1995M12
1996M5
1996M10
1997M3
1997M8
1998M1
1998M6
1998M11
1999M4
1999M9
2000M2
2000M7
2000M12
2001M5
2001M10
2002M3
2002M8
2003M1
2003M6
2003M11
2004M4
2004M9
2005M2
2005M7
2005M12
2006M5
2006M10
2007M3
2007M8
2008M1
2008M6
2008M11
2009M4
2009M9
2010M02
2010M07
2010M12
2011M05
Maize
Rice
Petrol
Soy
Wheat

These charts taken from an October 2011 paper by Ghosh Heintz and Polllin show that the pattern in food prices is creating justified fears of a renewal or intensification of the global food crisis. The authors find strong and consistent evidence in support of the need to limit the huge increases in trading volume on futures markets through effective regulations. They also find that the opposite position—i.e. the main analytic arguments opposing market regulation—cannot be supported by the evidence. That is, they find no support for the claim that liquidity in futures markets serves to stabilize prices at their “fundamental” values or that spot market prices are formed free of any significant influence from futures markets. Given these results, the most appropriate position for regulators to assume at present is a precautionary principle: they should enact and enforce policies capable of effectively dampening excessive speculative trading on the commodities markets for food.

The Institute for Agriculture and Trade Policy analyzing the price of agricultural commodities in a publication in 2011 concluded that those with a commercial interest in commodities no longer dominated commodity markets. They found that orthodox agricultural economic explanations of futures and options market operations no longer sufficed. Agricultural supply and demand factors could not explain, by themselves, the extreme price volatility and price hikes that were damaging both U.S. farm cash-flow management and food security globally.

In a very widely quoted research paper on Index Investment and the Financialization of Commodities, authors Ke Tang and Wei Xiong found that, concurrent with the rapidly growing index investment in commodity markets since the early 2000s, prices of non-energy commodity futures in the United States have become increasingly correlated with oil prices; this trend has been significantly more pronounced for commodities in two popular commodity indices. This finding reflects the financialization of the commodity markets and helps explain the large increase in the price volatility of non-energy commodities around 2008. In the aftermath of the boom and bust in commodity prices in

2006–2008, policymakers in many countries are debating whether to impose constraints on commodity index investment. On the one hand, the partial segmentation of commodity markets implies potentially inefficient sharing of commodity price risk. Because index investors tend to hold large diversified portfolios across various asset classes, their increasing presence is likely to improve the sharing of commodity price risk, which means lower risk premiums and thus higher prices, on average, for farmers and producers selling their commodities. On the other hand, their presence also introduces a channel to spill volatility from outside markets on and across commodity markets. Their conclusion is that until researchers can reliably measure the net effect of this trade-off, policymakers need to be cautious about imposing constraints on commodity index investment because such constraints also limit the potential risk-sharing benefit. On the other hand the same evidence can be used to argue that unless the net effect is reliably measured, regulators should assume a precautionary principle.

Closer to home, the case of soya bean futures is a warning on how futures markets can be manipulated and cannot always be relied upon to provide a guidance about prices and in doing so the farmer can burn his fingers.

The recent developments in the spot commodity has once again illustrated how the players in all these markets are interlinked. The insufficiency of the exchange guarantee fund and regulatory gaps for the spot exchanges have come to light as also the possibility of serious payments crisis which could have potential ripple effects.

However, in the absence of markets, what is the appropriate mechanism? Central planning as everyone knows is also fraught with risks of inefficiency and leakages. So regulated markets with safeguards seems to be the only alternative. Rules based on analysis of comprehensive trade data and sound legal reasoning to make markets fair are prerequisite to good enforcement that

can manage the price volatility that results from supply, demand and other fundamental factors.

In this mileu, what role should banks play and how should the market regulator and the bank regulator be looking at this issue? The experience seems to suggest that allowing banks to take independent positions in the futures markets and in the underlying could be fraught with risk. The recent cases of JP Morgan in power trading and Goldman Sachs in aluminum seem to suggest that the role of banks in trading of commodities and their derivatives could be quite injurious to consumers and producers alike. Given the experiences of the global financial crisis and the limited experience of commodity futures in India, it is unlikely that banks will be allowed in the near future in India take proprietary positions in the commodity derivative markets.

In the first instance, however, banks can facilitate their customers in hedging the price risk through futures markets. This can be done through aggregation of individual client's position and has to merit of reducing the bank's credit risk on account of the price volatility faced by the borrower. There could be some basis risk arising out of such activity for which separate capital can be allocated.

In conclusion, it does appear as if global financialisation of commodity markets has increased the price risk of commodities. Whether, however, the increase in commodity prices and the increase in the price volatility are due to factors that were common to all financial markets in the run up to the global financial crisis or due to greater financialisation, is a question that still need to be answered with more research. There is no doubt however that globalisation of finance has become inevitable and the linkage between global finance and global commodities and derivatives is inevitable. Hence global efforts, such as G20 FSB and BCBS, which focus on financial stability, have to take into account stability in commodity markets in addition to other financial markets.

References:

a) Ghosh Heintz and Pollin, “ Speculation on commodities futures markets and Global Food Prices – Oct 2011

b) Ke Tang and Wei Xiongon “Index Investment and the financialisation of Commodities” (Princeton Univ)

c)Jayati Ghosh – “Implications on regulating Commodity Derivative Markets in USA and EU – Paper for PSC Quarterly”