A Study on Benefits of Commodity Derivatives Market

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ABSTRACT

In India, governmental policies on agricultural commodity futures fluctuate based on public food policy needs and inflationary trends. This pattern isn't unique to India and is seen in many global commodity markets, particularly in developing nations. However, despite occasional policy reversals, India's current focus is on using the commodity derivatives market to bring large numbers of impoverished farmers into mainstream financial systems. The discussion around how soon the developments in India's commodity futures market will benefit small-scale producers remains ongoing. However, efficient commodity derivatives markets hold significant potential to contribute to price stability and economic growth. This study aims to examine the characteristics of India's commodity futures market and determine whether it effectively supports price formation. Data from the Multi Commodity Exchange of India Ltd. (MCX) and the National Commodity and Derivatives Exchange Ltd. (NCDEX) will be analyzed to assess price formation efficiency in the electronically traded commodity derivatives market.

Keywords: commodity, market, futures, derivatives, commodity derivative

INTRODUCTION

India's commodity futures market has a long history, dating back more than a century. The first formal futures market was established in 1875 under the name "Bombay Cotton Trade Association" for trading cotton derivative contracts. This was followed by futures trading in other commodities like oilseeds and foodgrains. The market experienced rapid expansion between the two World Wars, and by the onset of the Second World War, numerous commodity exchanges were operating, trading futures in commodities such as cotton, groundnut, jute, wheat, rice, sugar, and precious metals like gold and silver.

However, during the Second World War, futures trading was prohibited under the Defence of India Act due to supply constraints. Post-independence, futures trading was revived in the late 1950s and 1960s, but by the mid-1960s, futures trading was banned in most commodities, except pepper and turmeric. Some relaxations occurred in the 1980s with futures trading allowed in commodities like potatoes, castor seed, and jaggery. In 1999, edible oilseed futures were permitted, followed by sugar in 2001.

The National Agricultural Policy of 2000 recognized the role of forward and futures markets in price discovery and risk management. In 2003, the Government of India permitted futures trading in 54 additional commodities, marking a significant liberalization of the market. While global markets, such as in the U.S. and Europe, have developed futures contracts for a variety of assets, including financial futures, India's commodity futures market has remained relatively simple, focusing on single commodity contracts.

The two primary economic functions of commodity futures markets are price risk management and price discovery. Forward contracts play a crucial role in managing supply and demand risks, but they expose traders to price risk.

Futures contracts help mitigate this risk by allowing traders to lock in future prices, making them an essential tool for economic stability and planning.

OBJECTIVE:

- To examine the Commodity Derivatives Market in India.
- To identify the challenges in implementing and executing commodity derivatives.

BENEFITS OF COMMODITY DERIVATIVES MARKET:

1. **Hedging Against Price Risk**

The primary advantage of futures markets is enabling anticipatory hedging under a free-market price regime. Hedging helps offset the price risk inherent in cash market positions by taking an equal but opposite position in the futures market. This mechanism protects traders from potential losses in the physical commodity market by allowing gains in the futures market.

2. **Flexibility in Pricing**

Futures markets offer a wide range of contracts for each commodity, providing traders with flexibility in pricing compared to a fixed policy rate system. This allows traders to better manage their pricing strategies.

3. **Inventory Management**

Futures markets also assist in managing inventory. The price spread (basis) between futures contracts of different maturities signals stock availability to the market. This spread reflects storage and interest costs, guiding traders on whether to hold or release stock, thus promoting an efficient inventory management system that smooths spot market prices and potentially reduces price volatility.

4. **Improved Access to Credit**

Futures markets can enhance access to credit, especially for small producers. Hedged inventories can serve as valuable collateral, allowing farmers and firms.

To secure more favorable borrowing terms, which drives demand for commodity price hedging.

5. **Efficient Resource Allocation**

By providing price signals that guide production and consumption decisions, commodity derivatives contribute to a more efficient allocation of resources in the economy.

6. **Broader Economic Benefits**

An efficient commodity derivatives market allows for better resource allocation and risk management, which can ultimately promote economic development by stabilizing prices, improving credit access, and supporting production

planning.

COMMODITY FUTURE TRADING:

A commodity futures contract is a standardized, tradable agreement set by a commodity exchange, which allows for the purchase or sale of a specific commodity at a predetermined future date. Physical goods are not exchanged until the contract expires. This feature allows traders to offset their trades without the need for immediate delivery of the goods. The futures market attracts both hedgers, who seek to manage risk, and traders (speculators and arbitrageurs), who utilize market information and price judgments to profit from price movements.

Hedgers take long-term market positions, whereas traders or arbitrageurs focus on short-term market movements, contributing to price discovery. Hedging is particularly useful when prices need to be fixed in the long term, avoiding the need for immediate physical purchase and preventing funds from being tied up in inventory.

EXAMPLE: Consider a wheat miller who agrees to sell flour to a bread manufacturer for delivery four months from now at an agreed-upon price. If wheat prices rise within those four months, the miller faces potential losses. To hedge this risk, the miller buys wheat futures contracts. When the contract matures, if wheat prices have indeed risen, the miller can offset the higher purchase price by selling the futures contracts at a profit, protecting the profitability of the original flour sale.

Convergence: As the expiration date of a futures contract approaches, the difference between spot and futures prices decreases, eventually becoming zero at maturity. This is known as convergence. Any remaining price difference between cash and futures prices at contract maturity is negated by arbitrageurs.

There are two main types of futures contracts:

1. **Physical Delivery Contracts** – These require the physical delivery of the commodity.
2. **Cash Settlement Contracts** – These settle the difference in price without physical delivery.

Even though physical delivery is rare, having this provision ensures that futures prices reflect the real market value of the commodity at contract expiration.

Price Prediction: Futures prices result from the bids and offers of traders, based on expectations of prices at contract maturity. Price forecasting is typically done using two methods:

- **Fundamental Analysis** – This focuses on factors like supply, demand, weather, production, and government policies.
- **Technical Analysis** – This method analyzes past price movements to predict future trends.

By combining these approaches, traders can better time their market entry and exit, enhancing their investment strategy.

SIGNIFICANCE OF COMMODITY DERIVATIVES:

1. Price Discovery

The commodity derivatives market, being highly competitive, serves as an essential tool for determining prices. The price of a commodity is influenced by demand and supply dynamics, which are affected by various regional, economic,

social, and political factors, along with a continuous flow of global information. Any changes in these factors impact the demand and supply of a commodity, thus influencing itsCurrent and future prices. Derivatives help in determining these prices, providing a true representation of the commodity's value. The prices in the derivatives market reflect the market participants' perceptions about future events, leading to a forecast of the commodity's price trends.

2. Risk Management

Commodity derivatives assist in managing risk, making participants more willing to hold underlying assets. Risk management involves identifying the desired level of risk, assessing the actual risk, and adjusting the position accordingly. This is done through hedging (reducing risk in holding a market position) and speculation (taking a position based on anticipated market movements). By enabling both these activities, commodity derivatives improve the effectiveness of risk management for market participants.

3. Increased Liquidity

Commodity derivatives increase liquidity in the market for the underlying assets. A liquid market ensures that traders can buy and sell commodities or financial instruments at prices close to their true value. As a result, trading volumes increase due to the participation of a larger number of market players, boosting overall liquidity.

4. Efficient Resource Allocation

Commodity derivatives provide price signals that guide current consumption and production decisions. These price signals also help in planning future production and consumption, ensuring optimal resource allocation in the economy.

ISSUES OF COMMODITY DERIVATIVE MARKET:

Price volatility is a significant challenge for producers of primary commodities. Low prices for essential commodities limit the income that farmers and small producers can earn, while high price volatility complicates their ability to optimize their income. This volatility affects producers across various economic contexts, but its impact is especially severe for those in less developed countries (LDCs).

Since the 1930s, various policies have aimed to mitigate the instability inherent in commodity markets, often relying on government intervention. One prominent approach was the promotion of buffer stock schemes through International Commodity Agreements (ICAs). However, two main issues arose within these systems:

1. Difficulty in establishing and updating price ranges over time based on changes in costs or consumer preferences.
2. Challenges in securing sufficient funds to maintain prices within specified ranges, particularly during periods of high production and low prices, necessitating long-term storage.

Concerns about fluctuating commodity prices have led many governments to implement extensive policy interventions, aiming either to replace market-driven price discovery with a regulated price system or to shield producers and consumers from price fluctuations through controls or subsidies. This has often resulted in the establishment of institutional arrangements for price stabilization, including physical buffer stock schemes, stabilization funds, variable tariff schemes, and marketing boards.

Consequently, commodity futures markets have a limited presence in developing nations, where they often fall short of

ideal market conditions. Historically, many governments in these countries have discouraged or even banned futures markets due to fears that speculative activity could exacerbate price volatility and threaten food security. Government interventions to artificially stabilize prices have hindered the development of market-based price risk management systems.

Recently, however, some countries have begun to liberalize their commodity markets, actively supporting the development of commodity futures markets with governmental backing. The World Bank has advocated for market-based approaches to managing commodity price risk, suggesting that these methods can offer viable alternatives to traditional stabilization schemes. The World Bank (1999) noted that market-based management tools, despite their limitations, present promising alternatives to costly and counterproductive governmental policies.

At the national level, many countries have moved away from marketing boards that previously regulated markets for commodities like coffee, cocoa, and other crops. Others have made these changes under financial pressure or as part of reforms supported by international institutions like the World Bank.

CONCLUSION

Commodity derivatives play a vital role in the price risk management process, especially in economies that are heavily reliant on agriculture. Derivatives such as forwards, futures, options, and swaps are widely utilized in both developed and developing countries. However, their application in India remains relatively limited. The production, supply, and distribution of numerous agricultural commodities are still governed by the government, allowing only forwards and futures trading for certain commodities.

The effective use of commodity derivatives can significantly enhance price stability and assist producers in managing risk. This, in turn, can lead to improved economic outcomes for agricultural sectors, contributing to overall economic growth. As the market for commodity derivatives evolves, it holds the potential to provide crucial financial tools that empower producers, enhance market efficiency, and foster a more robust agricultural economy.

REFERENCES

1. "Soft Commodity Definition". Investopedia. 15 February 2009. Retrieved 6 December 2012.
2. O'Harrow, Robert (21 April 2010). "A primer on financial derivatives". Washington Post.
3. "Opportunities and Risk: An Educational Guide to Trading Futures and Options on Futures" (PDF). Chicago, Illinois: National Futures Association. 2006. p. 6.
4. "Understanding Derivatives: Markets and Infrastructure - Federal Reserve Bank of Chicago".Chicagofed.org. Retrieved 23 August 2016.
5. "The Regulation of Derivatives in Canada". Expert Panel. 2007.
6. Loder, Asjylyn (18 July 2010). "Commodity Manipulation May Be Easier to Prove After Overhaul". Bloomberg.
7. Bytom Lauricella (2 November 2009). "Gold Mutual Funds Vs. Gold ETFs: It Depends on the Goal". Wall Street Journal. Retrieved 3 October 2011.
8. "The Future of Commodity ETFs". Morningstar. 25 August 2009. Retrieved 3 October 2011.
9. Banerjee, Jasodhara (16 January 2013). "Origins of Growing Money". India: Forbes India Magazine.
10. Sinha, Ram Pratap; Bhuniya, Ashis (7 January 2011). "Risk Transfer Through Commodity Derivatives: A Study of Soyabean Oil". SSRN 1736406.