

Study of farmers investment pattern in commodity derivative in India: With special reference to Allahabad district

¹ Nikhil Yadav, ² Dr. Ravindra Tripathi, ³ Dr. Rajesh Kumar Shastri
¹ Ph.D. Research Scholar, DHSS, MNNIT Allahabad, Uttar Pradesh, India
^{2,3} Assistant Professor, DHSS, MNNIT Allahabad, Uttar Pradesh, India

Abstract

India is an agrarian economy where most of the major strata of population's livelihood depend on agriculture. Commodities derivatives are emerging platform for investment for farmers as well as other stakeholder. India is moving towards knowledge economy for this transformation there is urgent need to include Indian farmers institutionalised system of financial planning. Objective of this research paper is investigated investment pattern of farmers in commodities derivative market and financial awareness of farmers towards derivative market. Through help of pie Fig data analysis has done by researchers. It concluded that lack of financial literacy and awareness participation of farmer in commodity derivative market is very low there is urgent need of awareness programmes for farmers regarding benefits as well as operational process of commodities derivative.

Keywords: commodities, derivatives, farmers investment, price discovery, derivative markets

1. Introduction

Commodities Derivatives whose value is derived from the price of some underlying asset like securities, spot price of commodities, spot price of bullion, currency, interest rate, commodity market index or anything else are known "commodity Derivatives". Derivative markets for commodities have very long history than spot market because farmer and other producers was making contract with buyers. but there was several issues like standard pricing, execution process and delivery of commodities with unorganized

contracts so to solve these issues organized platforms adopted by many countries where India was one of them (Thomes, S. 2003). This organized platform taken shape of commodity derivative exchange from. There two major function future commodity markets is price discovery and risk management of buyer and producer. Investment in commodity market is quite different from other financial derivatives because this do not help firm to raise resources from commodity derivative but provide insurance to buyer and producer for timely delivery of product at specific price (Bose, S. 2008)

1.1 Derivatives Products

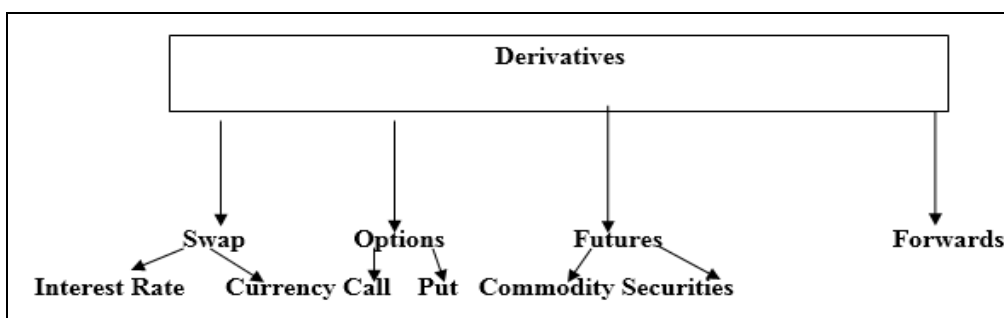


Fig 1

Figure 1 is showing pictorial representation of derivative market where A future contract is an agreement between two parties to buy or sell an asset at a certain time at a standard and specific price in the future, A Forward contract is customized contract between two entities, where settlement takes place on a specified date in future at today's pre-agreed price. Options are of two types-Calls and Puts. Calls give the buyer right but not the obligation to buy the given quantity of

underlying asset, at a given price on or before the given future date. Put gives the buyer right but not the obligation to sell the given quantity of underlying asset, at a given price on or before the given future date. Swaps are private agreements between two parties to exchange cash flows in the future according to the pre-arranged formula. They can be regarded as portfolio of forward contracts. The two commonly used swaps are:- interest rate and currency swaps

(<http://www.karvycommodities.com/commodity-futures-trading>).

2. Review of Literature

Commodities market has achieved sustainable growth in terms of transparency, technology and trading activities but still most of commodities governed by state commodities act so it created hurdles to participate for small stake holders like farmer etc (Maravi, A.S, 2015) [8]. So this was basic reason for inefficient price discovery mechanism of all commodities through commodities derivatives (Chhajer, I. & Mehta, S. 2013) [5]. Indian future Market for agriculture yet not developed in efficient manner of risk mitigation and price discovery of commodities in spite of high volume trading of commodities (Naik. G, Jain. S, 2003) [7]. Commodities future helps farmers in hedging of their risk for agriculture commodities but due to lack of knowledge of hedging process there participations is very low (Shapiro. B and Brorsen. B, 1988) [9]. It will be too early to say conclusively For efficiency Indian commodities market operation and participation of farmers because there is many good signal exist which will lead Indian commodities market and welfare of stakeholder towards best commodities market of world (Bhattacharya. H 2007) [3].

3. Research Methodology

Primary as well as secondary sources of data collection have been taken. Data was collected through questionnaire & Interviews. Research Deign is descriptive research in Nature. The questionnaire and interview formed the basis of collecting the primary data. This study has been carried out in Allahabad and the area of study was selected as per the topics and objectives of the study. I have opted for a sizeable no. of respondents 50 for the study. It is understood that the objectives of the study would be fulfilled with this no. of respondent. Time period of the 1 JUNE – 31 July 2014. Secondary Source of data is collected from where various business journals, magazines, newspapers, websites, expert opinion, etc. are also analyzed.

4. Data Analysis and Discussion

Data tabulation

Most of the tabulated data is represented on the basis of questionnaire and interview. The information below describes how to read the research results: Percentage of Responses refers to the percentage of actual Participants who responded to the questions. Due to rounding and non-responses the total of these percentages may be Slightly above or below 70 %.

5. Graphical Representation of Findings from questionnaire

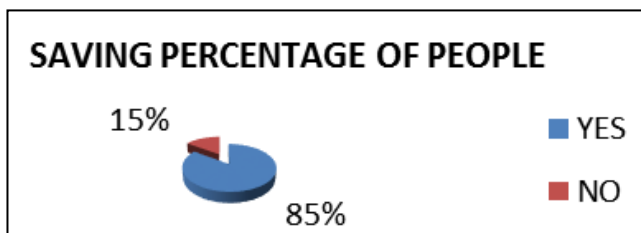


Fig 2: Do you save your income?

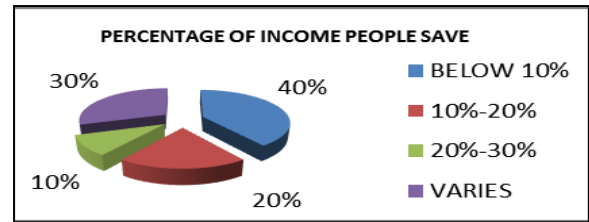


Fig 3: About what percentage of your income save?

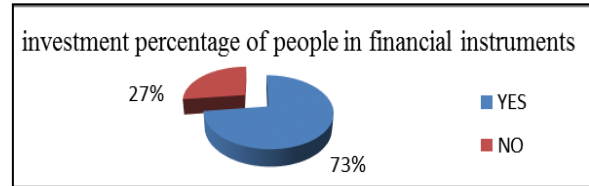


Fig 4(a): Do you invest your saving?

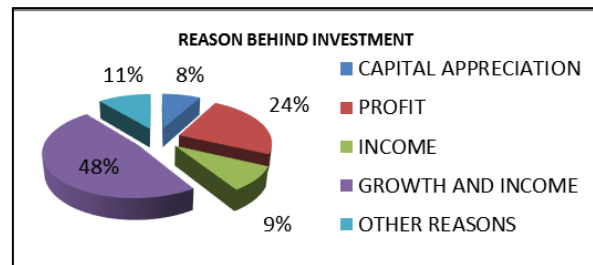


Fig 4(b): if yes then, what is the reason behind your investment?

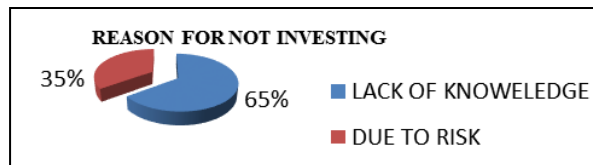


Fig 4(c): If no, then what is the reason of not investing?

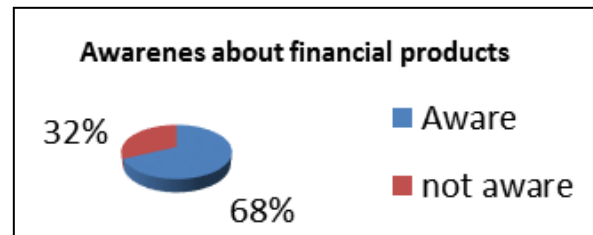


Fig (5): Are you aware about different financial products?

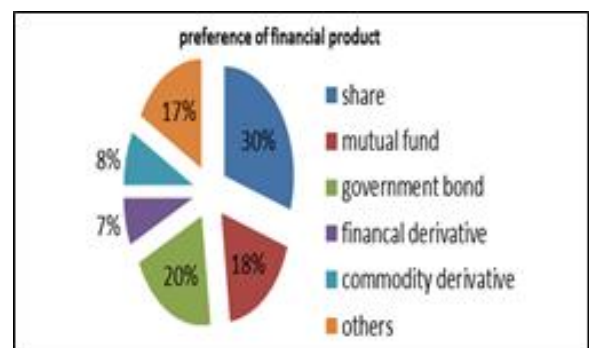


Fig 6: which financial product you prefer most?

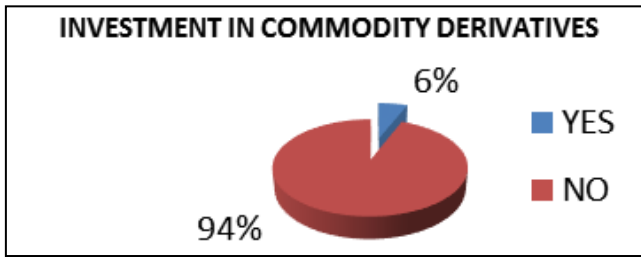


Fig 7(a): Do you invest in commodity derivatives?

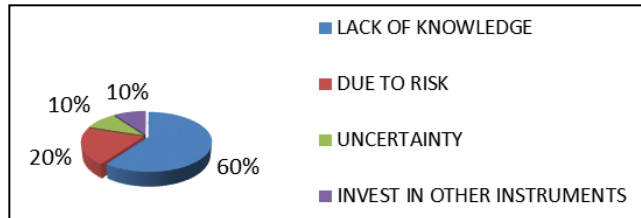


Fig 7(b): if no, then what is the reason of not investing in commodity derivatives?

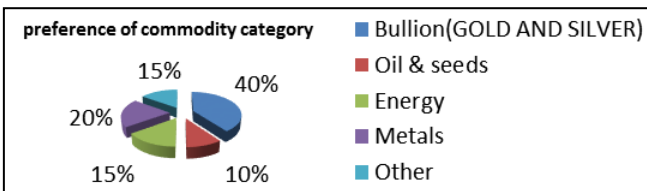


Fig 8: which category of commodity you prefer most?

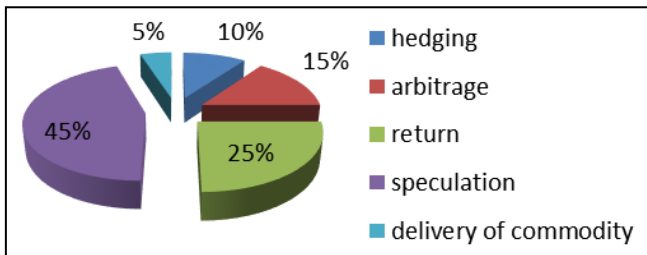


Fig 9: what is the reason for investing in commodity?

6. Findings from interview of commodity investors

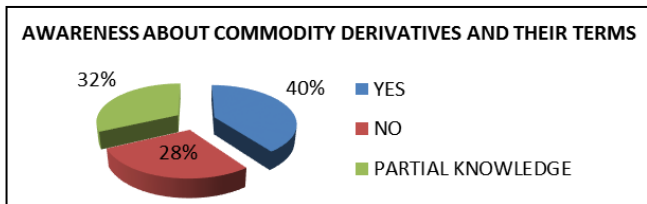


Fig 10: Are you aware about commodity derivatives and their terms?

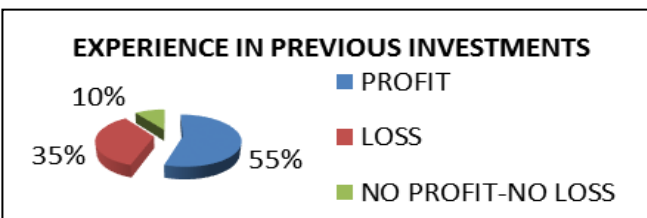


Fig 11(a): what was experience in pervious investment?

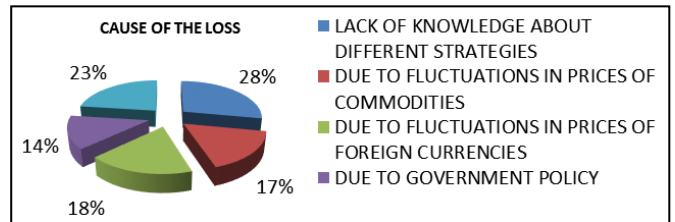


Fig 11(b): if loss occurred, then what was the cause?

6. Interpretation and Results

Above Fig 2 highlight saving patterns of people farmers so it infer 85% people save their money and 15 % people do not save their money which mean majority of populations save their money. Fig 3 highlights compositions structure farmers save where below 10% people save 40% of their income, 20% people save 10 to 20% of their income, 10% people save 20to 30% of income and 40% people’s savings depend on their financial situations which infer majority of farmers savings are unplanned. Fig 4 (a) highlights 73% people invest in financial instruments 27 % save their money but do not invest in financial instruments. Fig 4 (b) highlights objective of investment where 48% person people invest for growth and income, 9% people invest for income, 8% for capital appreciation, 24% people invest for profit, 11% people invest for other reason. Fig 4 (c) indicates major reason for people to not invest in commodity market where 73% people do not invest due to lack of knowledge and 27 % due to risk or fear of loss. Fig 5 helps to identify financial literacy status among people Fig infer 68% people are aware about different major financial products and 32 % are not aware. Fig 6 highlights preference of different financial product where 30% people invest in share 18% in mutual fund, 20% in government bonds, 7% in financial derivatives, 8% in commodities derivative which infer very less investment in commodities derivative. Fig 7 (a) is showing only 6% people invest in commodities derivatives and 96 % do not invest in commodities derivative so it infer majority of farmers or people do not invest in commodities derivative. Fig 7(b) highlights reason to not invest in commodities derivatives where 60% farmers do not invest due to lack of knowledge, 20% due to risk, 10% due to uncertainty, 10% in invest in other instruments so it can conclude that reason of low investment in commodity market is low awareness among farmers or people. Fig 8 is showing preference of category of commodity where bullion (gold & silver) is 40%, oil and gas is 10%, energy 15%, metal 20% and 15% invest in other commodities so it infer gold and silver is most preferable commodities among investors. Fig 9 highlights reason or objective of investment in commodities where 10% hedging, 15% arbitrage, 25% return, 45% speculation and 5% delivery of commodity so it can conclude that majority of people use commodities derivative for speculations purpose. Fig 10 highlights deep understanding of investor about commodity derivative where 40% people know all about, 32% have partial understanding and 28% people unaware about commodity derivative but they invest. Fig 11(a) highlights past experience of commodity investor where 55% people gain profit, 35% people made loss and 10 % people was in break even position. Fig 11(b) helps to understand reason of

loss of investor 28% made loss due to selecting wrong strategy, 17% investor made loss due to fluctuations in price of commodities. 18% due to currency rate fluctuations and 14% due to government policies changes. So it can conclude Most of investors suffer loss due to lack of knowledge of different strategies. Commodity prices are generally less volatile than stock prices therefore it is relatively safer to trade in commodities. The Indian commodity exchanges are still at a nascent stage of development and there are numerous of bottlenecks which hampering their growth. Some of the major problems associated with commodity markets in India include issues related to infrastructure, trading system, broking, community, controlled markets, integration of regional and national exchanges and the integration of spot and futures markets. In India Bullion, energy, oil & seeds, metals and agro products are popular in trading.

7. Conclusion

- The important reason behind the low investment in commodity derivative is lack of Knowledge about commodity derivative.
- In commodity future market the availability of credit is of great importance as a future contracts are booked to locking prices and reduces the effects of volatility. At the cost of locking prices at any exchange is usually the margin payment would definitely help in increase participation and liquidity..
- Opportunities like better price realization and risk mitigation for farmers, which is quite important for insuring a mature and vibrant commodity market
- Another major challenge is warehousing as very little physical delivery is seen in the market due to limited resources and higher cost.
- Indian commodity future market is in a crucial expansion stage where it requires a lot of support from policymakers to sustain growth.

8. Recommendations

- Commodities an important investment tool enables bank and financial institutions to better manage their portfolio and hedge their inflation risk. Indian market should try to imbibe the Chinese initiative to incorporate banks participation in commodity bourses. This would have helped in increasingly attracting investment.
- More promotional events need to be initiated to the inception markets involving corporate world and farmers. In exchange market facilitates better price discovery and help towards overall growth of the market.
- Farmers should take positions in commodity futures and avoid loss by locking-in the price at which they want to sell their products.
- Industrialists can fix the price of raw materials by buying commodity futures and farmer can produce according demand of industry

9. Limitations of Study

The sample size of our survey is only 50, which cannot determine the investment behaviour of the total population. The sample has been drawn from the Allahabad here the income of an individual is low. Indian commodity market is

small so we cannot study in all aspect

10. References

1. Aulton AJ, Ennew CT, Rayner AJ. 'Efficiency Tests of Futures Markets for UK Agricultural Commodities', *Journal of Agricultural Economics*. 1997; 48(3):408-23.
2. Bose, Suchismita. Commodity Futures Market in India: A Study of Trends in the Notional Multi-Commodity Indices, *Money & Finance, ICRA Bulletin*. 2007, 2008; 3(3). Available at SSRN: <https://ssrn.com/abstract=1262742>
3. Bhattacharya H. Commodity Derivatives Market in India. *Economic and Political Weekly*. 2007; 42(13):1151-1162. Retrieved from <http://www.jstor.org/stable/4419414>
4. Chowdhury AR. 'Futures Market Efficiency: Evidence from Cointegration Tests', *Journal of Futures Markets*. 1991; 11(5):577-89.
5. Chhajed I, Mehta S. Market behavior and price discovery in Indian agriculture commodity market. *International Journal of Scientific and Research Publications*. 2013; 3(3):1-4.
6. Dickey DA, Fuller WR. 'Distribution of the Estimation for Autoregressive Time Series with a Unit Root', *Journal of the American Statistical Association*. 1979; 74:427-31.
7. Naik G, Jain SK. Indian agricultural commodity futures markets: a performance survey. *Economic and Political weekly*. 2003, 3161-3173.
8. Maravi AS. Performance Analysis of Indian Agricultural Commodity Market. *IRACST – International Journal of Commerce, Business and Management*. 2015; 4(2):1125-1135.
9. Shapiro B, Brorsen B. Factors Affecting Farmers' Hedging Decisions. *North Central Journal of Agricultural Economics*. 1988; 10(2):145-153. doi:10.2307/1349215
10. Thomas S. Agricultural commodity markets in India: Policy issues for growth. *Derivatives Markets in India*, 2003.
11. Retrieved <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.197.6692&rep=rep1&type=pdf>
12. <http://www.karvycommodities.com/commodity-futures-trading>