# A STUDY ON PRICE DISCOVERY AND VOLATILITY SPILLOVER IN COMMODITIES MARKET IN INDIA WITH SPECIAL REFERENCE TO MULTI COMMODITY EXCHANGE

# THESIS

#### Submitted to Bharathiar University

For the award of the degree of

#### DOCTOR OF PHILOSOPHY IN MANAGEMENT

By

#### Ms.DEEPTHY.K, MBA.,

#### (Reg.No: 2015R1519)

Under the Guidance of

### Dr. (Mrs) S.NIRMALA, MBA., M.Phil., Ph.D.,

Associate Professor, Department of Business Administration & Principal PSGR Krishnammal College for Women Coimbatore – 641 004



### PSGR KRISHNAMMAL COLLEGE FOR WOMEN

College of Excellence (Autonomous Institution – Affiliated to Bharathiar University) (Accredited with 'A' Grade by NAAC) An ISO 9001:2015 Certified Institution Coimbatore – 641 004 Tamilnadu, India

#### **DECEMBER 2018**

# CHAPTER 7 CONCLUSION

The study focuses on price discovery and volatility spillover of Indian commodity market with special reference to Multi Commodity Exchange. The market behavior and the impact of macroeconomic indicators on commodity futures market have also been analysed.

The analysis using various statistical tools revealed that Gold have the highest Compounded Annual growth rate. The coefficient of Variation revealed that Mentha oil is relatively more volatile than other commodities. The Contango and Backwardation analysis reveled that all commodities exhibited Contango except Mentha oil, CPO and Cotton. The analysis using various econometric tools revealed that both future and spot market of all the selected commodities are integrated in long run. The Vector Error correction Model reveals that price is first discovered in futures market for all commodities except mentha oil. For crude Palm Oil, both future and spot market are equally efficient in discovering the price. The granger causality test revealed that in short run, there is a bi directional lead lag relationship between futures and spot market with stronger relationship from future to spot for Copper, Zinc, Mentha Oil and Crude Palm oil. A unidirectional lead lag relationship from future to spot was found for Gold, Silver, Crude Oil, Natural Gas, Aluminium, Lead, Nickel, Cardamom and Cotton. The results are also supported by Wald test results. The analysis of volatility spillover reveals that there is a bidirectional volatility spillover, with stronger spillover from future to spot for all commodities except cardamom and Mentha oil. The results are consistent with results of Price Discovery except for Cardamom market which shows the inefficiency of the dissemination of prices to the spot market of cardamom.

The study suggests that the farmers should be encouraged to participate in the future market which will help them make critical cropping decisions for the coming season. The farmer's participation in commodity market will help them to realize correct price for their produce which will help them to repay the loans. It is also suggested that the government should allow banks, mutual funds and Insurance agencies to invest in commodity market which will further improve the participation in the market.

#### 7.1 IMPLICATIONS FOR FUTURE RESEARCH

The current study offers adequate scope for further research in the related areas. The present study focuses on the commodities traded in Multi Commodity Exchange. The study can be further extended to commodities from other exchanges. A comparative study of same commodities traded in different exchanges can be done to analyse the efficiency of exchanges in facilitating price discovery.

Further an analysis of efficiency of Indian commodity market compared to the global counterparts can be done. This will help in analyzing the information flow between these markets.