

An Analysis Of Commodity Market

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I. INTRODUCTION

A commodity market is a market that trades in the primary economic sector rather than manufactured products, such as cocoa, fruit and sugar. Hard commodities are mined, such as gold and oil. Investors access about 50 major commodity markets worldwide with purely financial transactions increasingly outnumbering physical trades in which goods are delivered. Futures contracts are the oldest way of investing in commodities. Futures are secured by physical assets. Commodity markets can include physical trading and derivatives trading using spot prices, forwards, futures, and options on futures. Farmers have used a simple form of derivative trading in the commodity market for centuries for price risk management.

A financial derivative is a financial instrument whose value is derived from a commodity termed an underlier. Derivatives are either exchange-traded or over-the-counter (OTC). An increasing number of derivatives are traded via clearing houses some with central counterparty clearing, which provide clearing and settlement services on a futures exchange, as well as off-exchange in the OTC market.

Derivatives such as futures contracts, Swaps (1970s-), Exchange-traded Commodities (ETC) (2003-), forward contracts have become the primary trading instruments in commodity markets. Futures are traded on regulated commodities exchanges. Over-the-counter (OTC) contracts are "privately negotiated bilateral contracts entered into between the contracting parties directly".

Exchange-traded funds (ETFs) began to feature commodities in 2003. Gold ETFs are based on "electronic gold" that does not entail the ownership of physical bullion, with its added costs of insurance and storage in repositories such as the London bullion market. According to the World Gold Council, ETFs allow investors to be exposed to the gold market without the risk of price volatility associated with gold as a physical commodity.

Commodity-based money and commodity markets in a crude early form are believed to have originated in Sumer between 4500 BC and 4000 BC. Sumerians first used clay tokens sealed in a clay vessel, then clay writing tablets to represent the amount—for example, the number of goats, to be delivered. These promises of time and date of delivery resemble futures contract.

Early civilizations variously used pigs, rare seashells, or other items as commodity money. Since that time traders have sought ways to simplify and standardize trade contracts. Gold and silver markets evolved in classical civilizations. At first the precious metals were valued for their beauty and intrinsic worth and were associated with royalty. In time, they were used for trading and were exchanged for other goods and commodities, or for payments of labor. Gold, measured out, then became money. Gold's scarcity, its unique density and the way it could be easily melted, shaped, and measured made it a natural trading asset.

Beginning in the late 10th century, commodity markets grew as a mechanism for allocating goods, labor, land and capital across Europe. Between the late 11th and the late 13th century, English urbanization, regional specialization, expanded and improved infrastructure, the increased use of coinage and the proliferation of markets and fairs were evidence of commercialization. The spread of markets is illustrated by the 1466 installation of reliable scales in the villages of Sloten and Osdorp so villagers no longer had to travel to Haarlem or Amsterdam to weigh their locally produced cheese and butter.

The Amsterdam Stock Exchange, often cited as the first stock exchange, originated as a market for the exchange of commodities. Early trading on the Amsterdam Stock Exchange often involved the use of very sophisticated contracts, including short sales, forward contracts, and options. "Trading took place at the Amsterdam Bourse, an open aired venue, which was created as a commodity exchange in 1530 and rebuilt in 1608. Commodity exchanges themselves were a relatively recent invention, existing in only a handful of cities."

In 1864, in the United States, wheat, corn, cattle, and pigs were widely traded using standard instruments on the Chicago Board of Trade (CBOT), the world's oldest futures and options exchange. Other food commodities were added to the Commodity Exchange Act and traded through CBOT in the 1930s and 1940s, expanding the list from grains to include rice, mill feeds, butter, eggs, Irish potatoes and soybeans. Successful commodity markets require broad consensus on product variations to make each commodity acceptable for trading, such as the purity of gold in bullion. Classical civilizations built complex global markets

trading gold or silver for spices, cloth, wood and weapons, most of which had standards of quality and timeliness.

II. NEED OF STUDY

The topic is mainly focused on commodity indices i.e., NCDEX, MCX which are compared with other indices like BSE, GOLD, TREASURY BILLS. All these 5 asset classes are compared by creating a portfolio. The portfolio analysis will be providing a best portfolio by these asset classes which gives the best return with less risk.

One way of approaching proprietary futures trading is to determine what economic service each strategy is providing to the market and to understand the risk being assumed by providing that service. Risk management is perhaps the most important element of a commodity program. Traditional asset classes rarely experience the type of volatility encountered in commodity markets.

The world of risk in commodities is bifurcated. There are normal times, and there are “eventful” times. Commodity returns tend to have fat tails and are sometimes serially correlated.

Commodity futures investors generally desire a long options-like payoff profile. In other words, they like trades that are expected to have positive outcomes and that allow them to participate in extreme price spikes during supply disruptions. As a result, there tend to be two sets of strategies. The first is outright longs, either directly or as intra-market spreads. And the second is long processing margin trades.

The investor is provided with choices for better investment. These 5 asset classes give the investor the best returns with low risk by providing best portfolio. A risk-averse individual has a low risk tolerance or a high risk aversion. These conservative investors are willing to accept little to no volatility in their investment portfolios.

OBJECTIVES:

1. To understand the concept of commodities market in the context of different asset classes.
2. To assess the risk, returns & consistency of different asset classes in Indian commodities market during the period 2009 to 2019.

SCOPE :

A Stock market and commodity market are the two main pillars of financial system of any country. Developing countries like India and china require huge investment in

commodities such as steel and oil to build their infrastructure, cotton and metals to boost their manufacturing sector, and food related commodities to feed their growing population. High demand and prices have attracted many investors towards commodity market who were formerly used to invest only in stock and bond markets. Always it has been an area of interest for researcher to investigate between stock market prices and commodity market prices to identify the relationship between them. With this background we have undertaken a study to analyze the volatility of non-agricultural commodity prices with respect to BSE sensx to understand the co movement between commodity prices and BSE sensx. This study has a scope for an investor to choose a better portfolio by comparing the agri and non-agri commodities.

III. LITERATURE REVIEW

Indian Commodity Market – A Performance Review
 Author RohitBansal, VarshaDadhich, Naveed Ahmad.
 Publication Details August 2014. Citation Bansal, R., Dadhich, V., & Ahmad, N. (2014). Indian Commodity Market– A Performance Review. International Research Journal of Management and Commerce, This document offers an overview of the commodity derivatives market in India. This document addresses the evolution and performance of the market, its current status and the scope of futures. This study helps those who wish to diversify their portfolios beyond stocks, bonds and real estate; the basic products are the best option. The history of the commodity derivatives market in India dates back to antiquity, but the first organized market was established in 1875. However, in the mid-1960s, the government took a drastic step by prohibiting trade in commodities. derivatives. The commodity derivatives market remained practically absent in the next four decades and was reinitiated only at the beginning of the 2000s.

Online Trading – An Insight to Commodities Trade with Special Reference to India. Author S. Selvanathan, Dr.V. Manohar, Publication Details June 2013. Citation Selvanathan, S., &Manohar, D. V. (2013). Online Trading-An Insight to Commodities Trade with Special Reference to India. Journal of Business Management & Social science Research (JBM&SSR), ISSN.This document discusses online commerce that involves investment activity. The investment can be made through the Internet and does not require any physical participation of the broker. An investor has to register through an online portal, for example: Sharekhan.com, etc., and enter into an agreement with the respective firm and can operate online in real time through the online trading portal that updates to the investor about the stock exchanges and the bank order process.

Commodity Futures Market in India: Development, Regulation and Current Scenario Author Dr. Shree Bhagwat, Angad Singh Maravi, Dr. HarisinghGour University Sagar, Ritesh More, Dr. H.S. Gour Central University, Deepak Chand. Publication Details February 2015. Citation Bhagwat, D. S., Maravi, A., Omre, R., & Chand, D. (2015). Commodity futures market in India: development, regulation and current Scenario. Journal of Business Management & Social Sciences Research,

The main objective of this study is to know the current scenario of the commodity futures market in India. This study evaluates to what extent the policies of basic products and the regulatory framework. With the current pace of growth, India would emerge as a major player in the international market in terms of consumption of commodities, production and trade. After gaining considerable popularity, the main commodity exchanges in India initiated the futures contract on several commodities from the previous year, which can preferably serve to manage the risk that may arise due to the adversity of the expected prices of the products. in addition to the price discovery tool.

Commodities Derivatives Market in India: The Road Travelled and Challenges Ahead. Author MeenakshiMalhotra Publication Details 2012. Citation Malhotra, M. (2012). Commodities Derivatives Market in India: The Road Travelled and Challenges Ahead. Asian Journal of Business and Economics, This paper traces the origin and growth of the commodity derivatives market. The discovery of prices, which is one of the functions of the futures market, has been investigated from a narrow Perspective of the quantitative analysis. India, now enjoys world ranking with respect to trade volume in certain products such as silver, gold, copper, guar seeds, etc. However, the operation has been distorted due to lack of understanding of the dynamic nature of the markets. With this enhanced function, there is a need to deliberate on additional research topics in the area in order to promote the growth and development of the market.

IV. DATA ANALYSIS

**TABLE 1:
COMMODITY ANALYSIS REPORT ON PULSES IN
INDIA:**

Commodity Analysis Reports

Insights Economic Calendar **Commodity Analysis** Call Performance

CROP CALENDAR Pulses Maize (Makka) India

BALANCE SHEET

5 YEAR PRICE PERFORMANCE	Years	Total Supply (Million Tonnes)			Total Demand (Million Tonnes)		
		Beg. Stocks	Imports	Production	Exports	Consumption	Ending Stocks
TECHNICAL ANALYSIS	2007-08	0.32	0.004	18.96	4.47	14.2	0.61
NEWS UPDATES	2008-09	0.61	0.013	19.73	2.61	17	0.75
	2009-10	0.75	0.024	16.72	1.94	15.1	0.45
KSTREET	2010-11	0.45	0.019	21.73	3.50	18.1	0.58
	2011-12	0.58	0.003	21.76	4.57	17.2	0.57
	2012-13*	0.57	0.010	22.23	4.80	17.4	0.61
	2013-14*	0.61	0.010	23.00	3.50	18.9	1.22

**TABLE 2:
COMMODITY ANALYSIS REPORT ON CEREALS IN
INDIA:**

Commodity Analysis Reports

Insights Economic Calendar **Commodity Analysis** Call Performance

CROP CALENDAR Cereals Maize (Makka) India

BALANCE SHEET

5 YEAR PRICE PERFORMANCE	Years	Total Supply (Million Tonnes)			Total Demand (Million Tonnes)		
		Beg. Stocks	Imports	Production	Exports	Consumption	Ending Stocks
TECHNICAL ANALYSIS	2007-08	0.32	0.004	18.96	4.47	14.2	0.61
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	2012-13*	0.57	0.010	22.23	4.80	17.4	0.61
	2013-14*	0.61	0.010	23.00	3.50	18.9	1.22

V. COMPANY PROFILE

KARVY COMTRADE LTD

Karvy Group: Karvy Group was started by 5 young men who were working for a chartered accountancy firm in 1982. At a point of time they were decided to quit the job and to start a new enterprise that would someday become an iconic organization in financial service industry. They had a lot of odds against them at the early days of Karvy. They did not have technology support, financial markets were largely unregulated, environment at that time was not good for entrepreneurship. They were based out of Hyderabad, while most of the key players were developed their organisation in Mumbai. Though facing all these odds, they didnt gave up and been stuck to their dreams and through vertiginous determination overcame their obstacles. The Karvy Group is today a well-diversified conglomerate. Its businesses include

not only financial services spectrum but also include data processing and managing segments.

Karvy Group ranked among the top-5 in the country across its business segments. The Group services over 70 million individual investors in various capacities, and provides investor services to over 600 corporate houses. Karvy Group established its presence through a wide network of over 450 branches, covering in excess of 400 cities and towns. Mission: To be the leading and preferred service provider to our customers, and we aim to achieve this leadership position by building an innovative, enterprising, and technology driven organization which will set the highest standards of service and business ethics.

Vision: Strive to be the leaders and experts through our processes, people and technology offering the unique blend that delivers superior value by establishing and maintaining the highest levels of services and professionalism. Karvy Stock Broking Limited, a member of National Stock Exchange of India and Bombay Stock Exchange, ranks among the top 5 stock brokers in India. Karvy Stock Broking Limited offers customized investment solutions to corporate, institutions and individual investors, through its wide network of offices across India. Services by the company are Equity Broking, Depository Participant, Distribution of Financial Products (Mutual Funds, FD and Bonds), Wealth Management Services, Currency Derivatives and Portfolio Management Services. KarvyComtrade Ltd: KarvyComtrade Ltd. (KCTL) is a part of the diversified financial services group Karvy, headquartered in Hyderabad and founded in 2005. KCTL provides superior trading platform and exclusive research services to its clients. KarvyComtrade holds memberships of the following leading commodity exchanges of India

- Multi commodity Exchange of India (MCX)
- National Commodities and Derivatives Exchange (NCDEX)
- National Multi Commodity Exchange of India (NMCE) .

Ace Commodity Exchange (ACE) and other exchanges Karvy capital Limited: Karvy Capital is the Asset Management arm of Karvy Group, a 30-year-old diversified financial services conglomerate in India with presence in Stock Broking, Registry Services, 60 NBFC, Debt Services, Commodities Broking, Data Management, Institutional Equities, Investment Banking, amongst others.

Karvy Investment Advisory services Limited: Karvy Investment Advisory Services Limited is a Public incorporated on 11 September 2003. It is classified as Non-govt company and is registered at Registrar of Companies, Hyderabad. It is involved in Activities auxiliary to financial intermediation,

except insurance and pension funding. Karvy Financial Services Limited: Karvy Finance is an NBFC established in 2009.

It is primarily focused on Micro and Small Enterprise Secured Business Loans with loan against property, loan against gold and loans for small commercial vehicles. It aims to provide fast, and flexible loan services to its targeted audience. Karvy Insurance Repository Limited: Karvy Insurance Repository captures KYC data, converts the policies into electronic mode, protects them and takes care of customers ongoing servicing needs of policy holders.

KarvyForex and Currencies Private Limited: KarvyForex activities include external Commercial Borrowings, Working capital arrangement, Bill Discounting & Short-Term Investment options etc. Intermediary services in Forex interbank broking and help companies/corporates/individuals to explore extra-ordinary opportunities, manage and sustain growth, and maximize their revenue by minimizing the risks in Forex transactions. Karvy consultancy Limited: Karvy Consultants Limited is a Public incorporated on 23 July 1981. It is involved in Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy.

KarvyFintechPvt Limited: KarvyFintechPvt Ltd (KFPL) is the largest registrar and a market leader, Servicing over 90 million investor accounts spread over 1300 issuers including banks, PSU's and mutual funds. 61 KFPL created leadership positions in the areas of issuers & corporate services and investment management services.

Karvy Investor Services limited: Karvy Investor services Ltd founded in 1995, and is a wholly owned subsidiary of Karvy Stock Broking Limited. Headquartered in Hyderabad, KISL has offices in Mumbai and New Delhi KISL is the part of diversified finance services group Karvy. It is one of the India's largest domestic investment banks, KISL provides entire scope of investment banking and corporate advisory services. These services include project advisory and loan syndication, structured debt placement, capital markets, Mergers & Acquisitions, Private equity and stressed assets resolutions.

Karvy Global Services Limited: Karvy global Services is a specialist knowledge process outsourcing services firm and arm of the Karvy group, one of the India's largest financial services companies. They have a comprehensive portfolio across the value chain ranging from high value research and analytics to large scale transaction processing. KarvyComtrade Limited KarvyComtrade Limited (KCTL) is the leading

organization in the commodities industry. It is the part of the diversified financial services group Karvy.

KCTL was founded in 2005 with a basic idea to provide high quality trading platform and exclusive research services to its clients. Now, KCTL has a decade long track record for providing reliable commodity market services and satisfying various customer investment needs across various zones, regions, and branches. KCTL is now present in more than 400 cities and towns of India. KarvyComtrade holds memberships of the following leading commodity exchanges of India • Multi commodity Exchange of India (MCX) • National Commodities and Derivatives Exchange (NCDEX) • National Multi Commodity Exchange of India (NMCE) • Ace Commodity Exchange (ACE) and other exchanges 62 KCTL with over decade experience in Indian commodities market has been providing trading solutions to its clients through their 900 strong office networks. KarvyComtrade limited services include commodities trading platform into futures, consultancy for spot markets and providing hedging solutions & arbitrage strategies. KCTL has an expert inhouse research team which provides in depth, timely and quality advice intraday and positional investments. The market coverage includes precious metals, Base metals, Energy, Oil seeds and soft commodities like Sugar, Cotton and other. KCTL helps and provide solutions to the customer who are looking for to diversify their portfolios other than bonds, mutual funds, real estate and equities.

Karvy delivers best commodity trading experience with world class unmatched research and customer friendly technology platform to its clients for trading by holding membership with MCX, NCDEX, NMCE, ACE. KCTL Services • Research • Smart Trade • Hedging • Physical Traders • Back Office Smart Trade: By taking into consideration of growing demand for tech-savvy, KCTL is offering smart trade platform for commodity trading in India where investors can trade from PC's, tablets and mobile phones even during transit. Corporate Desk: KCTL has developed corporate desk to help corporate clients in adopting comprehensive strategies to manage their price and exchange risk volatility since from the time of their inception. Corporate desk tries to develop customized risk mitigation solutions and strategies, adapt to protect company profits from excessive volatility.

63 Physical traders: Commodities which we basically divide between agricultural and non-agricultural group lays the foundation to venture into allied activities. In India non-agricultural commodities are mostly imported and therefore trading within India does not give much room. Again, India being an agricultural power house with a diverse set of

agricultural commodities, scope of trading will always be available. KCTL facilitates in guiding corporate/traders in physical trades under its various sub heads. Awards and Achievements of KarvyComtrade:

VI. INDUSTRY PROFILE

Financial Services: India has a diversified financial sector undergoing rapid expansion, both in terms of strong growth of existing financial services firms and new entities entering the market. The sector comprises commercial banks, insurance companies, non-banking financial companies, cooperatives, pension funds, mutual funds and other smaller financial entities. The banking regulator has allowed new entities such as payments banks to be created recently thereby adding to the types of entities operating in the sector. However, the financial sector in India is predominantly a banking sector with commercial banks accounting for more than 64 per cent of the total assets held by the financial system. Industry composition: The financial services are mainly involved the businesses providing services related to investment, banking, insurance, risk analysis, accounting, brokerage, real estate, and asset management.

- Insurance firm offer insurance to other investors in order to cover their risk.
- Banks their primary activity is to accept deposit and to lend loans, they can be commercial, private, national or regional or community level banks.
- Brokerage firms act as mediators between consumers and sellers for a variety of financial assets or products such as debt, equity, commodities and other investment services.
- Real Estate firms deliver services such as developing, operating, purchasing, selling and handling real estate. 66 Financial servicing companies in India:

Muthoot Finance Limited is a gold financing company. The company is a non-banking financial company (NBFC), which is engaged in providing loan (financing) against collateral of gold jewellery.

VII. INTERNSHIP

JOB ROLE:

I have been worked as an internship trainee at karvycomtrade Limited. As an internship trainee, I learnt about a career in finance with the regular duties and responsibilities given to me.

LEARNING:

In the process of training i have learnt about commodity market and stock market, which are the two main pillars of financial system of country. In India there are over 17 stock exchanges. Out of these major stock exchanges these are two leading stock exchanges in India which helps us to trade. The two leading stock exchanges are National Stock Exchange (NSE) and Bombay stock exchange (BSE), where as the companies deals with both agri and non agri commodities which could provide the consistency and better return compared to other portfolios.

The current study focuses on inclusion of commodity asset class to conventional asset classes such as equity, money market and gold. The portfolio analysis attempts to provide the best portfolios based on three perspectives—highest return, lowest risk and consistency in return. The commodity market includes physical trading and derivative trading using future market, forward market and options.

EXPERIENCE:

During my internship the industry exposure that I received will always be valuable guide for me in the future. The work environment was one the encouragement, friendly in nature and the staff supported in learning things. These 30 days of internship helped me to enhance my skills and abilities and in learning how to face the challenges.

FINDINGS:

A derivative is a product whose value is derived from the value of one or more underlying variables or assets in a contractual manner. The underlying asset can be equity, commodity or any other asset.

Derivative contracts are of different types. The most common ones are forwards, futures, options and swaps. Participants who trade in the derivatives market can be classified under the following three broad categories: hedgers, speculators, and arbitrageurs.

I. Hedgers face risk associated with the price of an asset. They use the futures

or options markets to reduce or eliminate

II. Speculators: Speculators are participants who wish to bet on future

movements in the price of an asset.

III. Arbitrageurs: Arbitrageurs work at making profits by taking advantage

of discrepancy between prices of the same product across different markets.

The study looks at five asset classes i.e., commodities are related to agri & metals. The highest return is for the combination of four asset classes (i.e., agri, equity, metals, money market). The lowest risk is for the combination of five asset classes (i.e., agri, equity, metals, money market, gold). The correlation is least for the return of MCX. The study looks at combining different asset classes for varying risk, returns, profiles of investors of these six portfolios created (i.e., (equity & agri), (equity & metals), (agri & metals), (agri, equity & metals), (agri, equity, metals, & money market), (agri, equity, metals, money market & gold)) I. The highest return is for the portfolio of four asset classes i.e., agri, equity, metals and money market. II. The lowest risk is for the portfolio of five asset classes, i.e., agri, equity, metals, money market & gold. III. The consistency is best for the portfolio of five asset classes i.e., agri, equity, metals, money market & gold.

VIII. CONCLUSION

The study concludes that the investor can choose the best portfolio i.e., both agri and non-agri commodities which could provide the consistency and better return compared to other portfolios. The investor makes choices by taking into consideration the return and risk of the portfolio. Commodities can be an important way to diversify a portfolio beyond traditional securities – either for the long term or as a place to park cash during unusually volatile or bearish stock markets, as commodities traditionally move in opposition to stocks. It used to be that the average investor did not allocate to commodities because doing so required significant amounts of time, money and expertise. Today, there are several routes to the commodity markets, some of which facilitate participation for those who are not even professional traders. From this study I can say that commodity market has a scope in the market for investment. The data available in the website for research is less. So, in order to know much about the 90 commodity market the information should be sufficient to have a clarity about the commodity market. Markowitz portfolio theory says that the investor chooses less risky stock which is known as risk aversion. When 2 stocks have the same level of risk then investor chooses stock with higher return which is known as insatiable.