PERFORMANCE EVALUATION OF COMMODITY MARKETS AND COMMODITY MUTUAL FUNDS

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Abstract: This paper examines the performance evaluation between the individual commodities and commodity mutual funds based on the returns and risk using the monthly data for the period 2011 to 2017. When managed properly, commodity investments have historically represented the asset class most highly correlated with inflation and least correlated with stock and bond returns. In other words, commodities are a hedge against inflation and a tool for diversification. Commodity mutual fund yield better return and minimised risk. Investing in commodities is one of the best means of hedging a portfolio that is otherwise dominated by stocks against unexpected financial or political crises or ordinary economic downturns. It's found evidence that differences in performance between individual commodity and commodity mutual funds persist over time and that this persistence is consistent with the ability of fund managers to earn abnormal returns.

Keywords: commodity, Funds, Mutual Funds, Performance, Return, Volatility, Growth.

1. INTRODUCTION

Commodity mutual funds offer an interesting, and potentially rewarding, way to diversify an investment portfolio beyond stocks and bonds. Since the prices of commodities tend to rise in step with inflation, they can be used as a hedge against inflation. This movement also runs counter to stock prices, which is a feature that also makes them attractive to investors.

Mutual funds provide investors with easy exposure to the commodities markets while avoiding the complications and additional risks of directly trading highly leveraged commodity futures. Commodity mutual funds typically invest in both the stocks of companies involved in commodities, such as mining companies, and in commodities proper. One advantage of this approach to commodity investing is that commodity mutual funds may perform well even when commodity prices overall are not. Mining company stocks may rise even during a period when the spot price of the mined commodity is falling. Other factors in addition to commodity prices that impact the stock prices of companies in commodities-related businesses include the companies' debt and cash flow situations.

Most investors' liabilities are linked to inflation. As inflation raises prices, the nominal value of these liabilities rises also. But, all too often, stock and bond returns decline amid rising inflation. In addition, by owning a highly diversified set of assets – assets with low correlations to each other – investors can help enhance the overall stability of their portfolio under most market conditions. To meet investors' needs for returns that are both diversified and resistant to inflation risk.

Global financial services company Morgan Stanley said recently that it would prefer commodities such as gold, silver and livestock feed to equities in 2012. Renowned commodity investor Jim Rogers says he is long on commodities and currencies because if the world economy improves, shortage of commodities will ensure he makes a profit, and if it does not, then too he will make money. After equity & derivatives, commodity trading has shown a significant increase in volumes as can be understood by the fact that the scale of the commodity business has grown from 5 lac crore to above 125 lakh crore in the last 5 years.

One of the attributing factors for the steep increase in business is that over the years investor knowledge has grown significantly in commodities & this has led to a wider participation by investors in the commodity markets. In the last

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couple of years most of the commodity prices specially gold & silver has seen an astronomical increase in the price. Gold in recent times has acted as a good hedge to balance investor portfolio & over a period of time various investments products have been introduced in the markets, which have further aided long term investors to actively invest & trade in commodities.

2. ROLE OF COMMODITIES IN A PORTFOLIO

Commodities provide a combination of diversification plus inflation hedging and have the potential to improve the risk/return performance of a portfolio. Direct exposure to commodity prices, via an index of commodity futures, is more effective than purchasing equity in commodity producers. The index directly reflects changes in expected future commodity prices. Share prices of commodity producers, on the other hand, can also be affected by the financial structure of the company, by management's price-hedging activities and by movement in the overall equity markets.

Because of their unique return characteristics, commodities can be viewed as part of the real return portion of a portfolio. If the portfolio does not have a real return allocation, then commodities can be viewed as a separate asset class entirely, to be evaluated alongside more traditional assets. If the objective is to provide both better risk/return performance and better tracking of real returns, then commodities can potentially benefit the investor.

3. TYPE OF COMMODITY FUNDS

There are a number of commodities which are actively traded globally, thereby giving rise to commodity funds which span a diverse spectrum. Some of the most common types of commodity funds are mentioned below.

- Natural resource funds These are funds which invest in companies/organisations which have access to natural
 commodities. The most popular ones are gold, silver, oil, etc. Technological developments have led to investment in
 renewable energy sources like wind energy as well.
- Basic/true commodity fund This fund predominantly invests in physical assets, like metals.
- Futures Commodity futures are a very popular option among investors, with physical delivery of the commodity possible only at a predetermined date. These are typically riskier on account of fluctuations in rates, with it possible to lose money if prices fall.
- Index funds This is a fund which is pitted against a standard market index, with the MF aiming to match or keep pace with market trends.
- Combination fund This is a fund which is a mix of the basic commodity fund and commodity futures.

4. PROS AND CONS OF COMMODITY FUNDS

Since commodity funds invest in stocks instead of commodities, their returns may not be in line with the underlying commodities. Commodity prices depend on demand and supply, while share prices of companies depend not only on availability of commodities they manufacture but also on fundamentals, the overall equity market sentiment and macroeconomic factors.

"The performance of commodity companies is prone to factors and sentiments driving equity markets in general which may not always play out favourably from investors' perspective. For instance, in 2011, major commodities such as gold, thermal coal, copper, aluminum and iron ore are up 20-30% year-on-year but stocks of companies dealing in these commodities have been beaten down due to the global macroeconomic uncertainty,"

A rise in commodity prices and a company's superior fundamentals can deliver better returns than the underlying commodity. For instance, gold prices have risen 31% annually on a compounded basis over the past three years, while AIG World Gold and DSP BlackRock World Gold, which invest in gold mining companies, have given returns of 41% and 38%, respectively.

Another point to remember is that most commodity funds invest in global companies either directly or through funds with exposure to these companies. Global funds expose investors to currency and country-specific risks. Any fluctuation in currency may severely impact gains. Suppose you buy units of a commodity fund that invests in a US commodity fund and at the time of redemption the rupee appreciates against the US dollar.

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5. FEATURES OF COMMODITY FUNDS

Some of the key features of commodity funds are mentioned below.

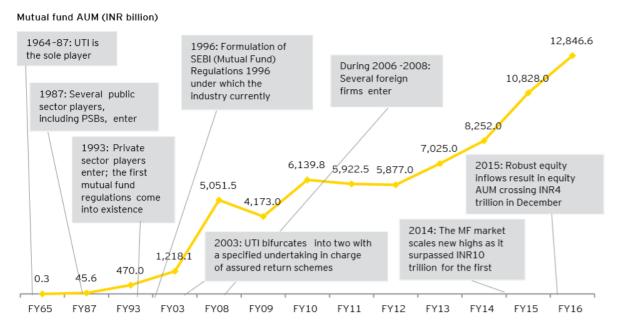
- **Flexible** Commodity futures can be used to meet both short-term and long-term investment goals, with investors having an option based on their requirements.
- **Multiple options** Commodity funds can invest in different commodities, helping investors meet their investment criteria. One can choose a fund based on his/her preference, with funds catering to different requirements.
- **Hedge against inflation** Most commodity funds work as a hedge against inflation, offering returns which are on par with global changes.
- **Protection against market fluctuation** Certain commodity funds (gold, silver) offer protection against market fluctuations. These commodities perform inversely when compared to the market, thereby providing high returns even if markets collapse or underperform, helping investors mitigate risks.
- **Risk** The risk associated with commodity funds varies, with certain funds overcoming market risks thanks to their nature. These funds are typically not high-risk, making them ideal for amateur investors. Certain investments could be prone to risks associated with a particular country. For example, a fund with investment in oil can face issues if there are global sanctions or political problems in the country which owns the oil reserves.
- Rate fluctuation The returns offered by a commodity fund might fluctuate with changes in the price of a commodity. This is especially true if the commodity supply or demand is hampered, with the performance varying proportionally.
- **Diversification of portfolio** A commodity fund helps investors diversify their portfolio, thereby reducing risk associated due to stagnant portfolios.
- **Strategic** Most commodity funds are managed by managers who are aware about market conditions, being experts in their own rights. Strategic investment on their part could help investors increase their wealth.
- **Stagnation** There is a possibility for commodity funds to stagnate if there is lack of demand from the market. This could result in lean returns, with other options seeming more attractive.
- **Indirect** Investing in a commodity fund reduces the direct involvement of an investor in the market, helping them concentrate on other aspects.

6. POPULAR COMMODITY FUNDS IN INDIA

- Axis Gold Fund
- Invesco India Gold Fund
- Reliance Gold Savings Fund
- Birla Sun Life Gold Fund
- Canara Robeco Gold saving Fund
- ICICI Prudential Regular Gold Savings Fund
- SBI Gold Fund
- IDBI Gold Fund
- HDFC Gold Fund
- Kotak Gold Fund

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Graph 1: Trend in growth and overview of the current state of India's mutual fund industry



There is huge growth in mutual fund industry India, from the year 2012 there is an positive rally in mutual fund investment which grown to 12846 billion rupees during 2016.

Table 1: Shows the Returns of Fund of Funds - Commodity oriented

Mutual Fund Scheme	AUM (Rs. cr.) Mar 18	1mth	3mth	6mth	1yr	2yr	3yr	5yr
	* Return	* Returns over 1 year are Annualised						
Reliance Gold Savings Fund (G)	639.09	3.2	3.9	5.1	4.4	2.0	3.6	2.3
SBI Gold Fund (G)	354.90	3.2	3.9	5.3	5.4	2.0	3.8	2.0
HDFC Gold Fund (G)	186.28	3.3	4.3	4.7	5.2	2.1	3.8	1.9
Kotak Gold Fund (G)	158.71	4.7	5.6	3.2	6.0	2.4	3.6	2.2
Axis Gold Fund (G)	50.33	3.9	5.0	5.7	5.2		2.3	0.6
ABSL Gold Fund (G)	44.87	3.5	4.0	4.5	4.2	3.2	4.1	2.0
Canara Robeco Gold Savings (G)	42.44	2.9	3.9	4.7	5.0	1.6	3.6	2.0
ICICI Pru Reg Gold Savings Fund (G)	40.62	2.6	4.3	3.3	1.9	2.2	4.1	2.5
Reliance Gold Savings - Direct (G)	38.71	3.3	4.1	5.4	5.0	2.6	4.2	2.7
HDFC Gold Fund - Direct (G)	34.69	3.3	4.4	4.9	5.6	2.5	4.3	2.3
IDBI Gold Fund	34.67	3.0	3.3	4.7	2.9	0.1	2.5	1.5
SBI Gold Fund - Direct (G)	29.83	3.2	4.0	5.5	5.8	2.5	4.2	2.4
Quantum Gold Savings Fund - D(G)	13.37	3.5	4.3	5.3	4.9	2.9	4.0	2.4
Invesco India Gold Fund (G)	12.82	2.8	4.2	0.4	5.8	1.8	3.6	2.0
ABSL Gold Fund -Direct (G)	6.47	3.6	4.0	4.6	4.5	3.5	4.3	2.3
ICICI Pru Reg. Gold SavDirect (G)	4.89	2.6	4.4	3.5	2.3	2.4	4.3	2.7
ABSL Global Commodities-Dir (G)	0.78	6.6	-1.0	6.8	17.1	9.9	4.1	4.7
CATEGORY AVERAGE		4.0	3.8	4.4	5.4	2.6	3.4	1.9

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In long run the ABSL global commodities are given high return, reliance, SBI and Kotak also given good returns, its always better to invest in commodities mutual fund for better professional management with lower fund charges, where risk diversified on different commodities

Table 2: Shows the Indices return, Risk and Sharpe ratio

CALENDAR YEAR PERFORMANCE

Index Returns – By Year							
	2013	2014	2015	2016	2017		
THOMSON REUTERS - MCX ICOMDEX GOLD INDEX	-9.23	-3.81	-10.52	6.47	3.28		
THOMSON REUTERS - MCX ICOMDEX COPPER INDEX	-1.92	-19.21	-26.74	10.72	16.93		
THOMSON REUTERS - MCX ICOMDEX CRUDE OIL INDEX	15.03	-45.13	-44.51	6.07	-6.95		

ANNUALIZED PERFORMANCE

Total Returns - Annualized							
	3M	6M	1Y	3Y	5Y		
THOMSON REUTERS - MCX iCOMDEX GOLD INDEX	10.25	6.88	1.39	-0.74	-1.89		
THOMSON REUTERS - MCX ICOMDEX COPPER INDEX	0.25	14.17	4.98	2.22	-6.01		
THOMSON REUTERS - MCX ICOMDEX CRUDE OIL INDEX	75.21	54.27	2.34	-11.19	-18.55		

RISK MEASURES

Annualized Standard Deviation							
	3M	6M	1Y	3Y	5Y		
THOMSON REUTERS - MCX iCOMDEX GOLD INDEX	8.07	8.55	8.73	12.32	15.09		
THOMSON REUTERS - MCX ICOMDEX COPPER INDEX	16.97	16.82	17.79	19.25	18.77		
THOMSON REUTERS - MCX ICOMDEX CRUDE OIL INDEX	17.74	19.69	22.51	34.13	29.93		

Annualized Sharpe Ratio							
	3M	6M	1Y	3Y	5Y		
THOMSON REUTERS - MCX iCOMDEX GOLD INDEX	1.27	0.80	0.16	-0.06	-0.13		
THOMSON REUTERS - MCX ICOMDEX COPPER INDEX	0.01	0.84	0.28	0.12	-0.32		
THOMSON REUTERS - MCX iCOMDEX CRUDE OIL INDEX	4.24	2.76	0.10	-0.33	-0.62		

7. CONCLUSION

There is difference between trading and investment on individual commodity and commodity mutual funds, in changing scenario and also in developed economical condition commodity trading claiming importance and its growing rapidly. Commodity mutual funds shows the outperforming results in returns when compared with other individual commodities. When compared to commodity indices investment the diversified mutual fund investment is a better option for investors, because in long run the volatility and losses due to macro-economic factors can be managed, the unsystematic risk can be diversifiable.

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