

## COMMODITY BASICS

The world is witnessing a new trend wherein developing countries like India, China, Brazil & other emerging markets are driving the global economy with their rising domestic consumption patterns. This sustained increase in consumption has led to investment analysts realizing the growth potential of a new asset class namely Commodities.

### What are Commodities?

Commodities are raw materials that are used to create consumption related products, right from food to furniture to petroleum. The table below gives a snapshot of the broad commodity sectors and their constituents:

Commodity Sectors	Constituents
Agriculture	Grains, Vegetable oils, Fertilizers, Crop protection, Genomics
Metals & Materials	Base Metals: Aluminum, Copper, Nickel, Zinc, Tin Bulk Commodities: Iron Ore, Coking Coal, Bauxite Steel Others: Soda Ash, Chemicals, Rare Earth Metals
Precious Metals & Materials	Gold, Silver, Platinum, Palladium
Energy	Crude Oil, Natural Gas, Refining, Integrated Energy, Thermal Coal, Alternate Energy
Services	Oil Services, Mining Services and Others

Commodities have also evolved as an asset class with the development of various commodity future indices. The performance of commodities as an asset class is usually measured by the returns on a commodity index, such as the Rogers International Commodity Index (RICI), which tracks the return in 36 different commodity products. In the last 9 years, the RICI Index has given compounded annualized returns of **18.31%** as compared to **17.22%** returns given by BSE SENSEX (Source : Bloomberg as on 31st March 2008)

### Benefits of Commodity as an Asset Class

- a) **Strong Performance Track Record:** The table alongside reflects positive performance of RICI Index during falling & rising market phases. In fact, the RICI INDEX has outperformed all other indices since 1999.

Indices	Falling Market (2000-2001)	Flat Market 2002	Rising Market (2003-2007)	Year to Date	Since 1999 (1999-till date)
SENSEX	-34.55%	4.04%	490.68%	-17.32%	443.94%
MSCI Emerging Markets	-28.06%	-8.55%	249.98%	-3.23%	274.04%
MSCI APAC ex-Japan	-27.57%	-8.12%	181.81%	-7.09%	162.32%
MSCI WORLD	-22.13%	-21.00%	73.74%	-4.02%	31.50%
RICI INDEX	13.50%	33.26%	109.90%	20.16%	454.83%

Note: RICI Index - The Rogers International Commodity Index is acting as a proxy for commodity asset class. All above returns are in INR and in absolute terms

(Source: Bloomberg as on 23rd April 2008)

- b) **Portfolio Diversification:** Adding commodities to your investment portfolio helps you take advantage of the benefit of diversification. In a diversified portfolio, assets do not move in sync with each other, as commodities exhibit low/ negative correlation with respect to equity and bonds. Low/ negative correlation means commodities can play an important role in portfolio diversification by reducing overall portfolio risk. This should improve the consistency of returns over time.

### Correlation coefficients of RICI Index (Commodities) with respect to Equities and Bonds

Correlation Coefficient	1999	2000	2001	2002	2003	2004	2005	2006	2007
Equity	-0.04	-0.08	-0.16	0.06	0.002	-0.08	0.13	0.21	0.09
Bond	0.14	0.09	-0.12	-0.04	-0.02	-0.07	0.01	0.03	-0.02

Note: CRISIL Fund-dx which tracks debt mutual fund returns has been used to represent bond asset class, while BSE SENSEX has been used to represent equity asset class

(Source: Bloomberg & Crisil Investment Manager)

- c) **Inflation Hedge:** Commodities tend to react to changing economic fundamentals in ways that are different from traditional financial assets. For example, commodities are one of the few asset classes that tend to benefit from rising inflation. As demand for goods and services increases, the price of those goods and services usually rises as well, so do the prices of the commodities that are used to produce those goods and services. Since commodity prices usually rise when inflation is accelerating, investing in commodities may provide portfolios with a hedge against inflation. As shown in the table overleaf, commodity has a positive sensitivity to inflation as compared to asset classes like stocks and bonds.

## Inflation Sensitivity

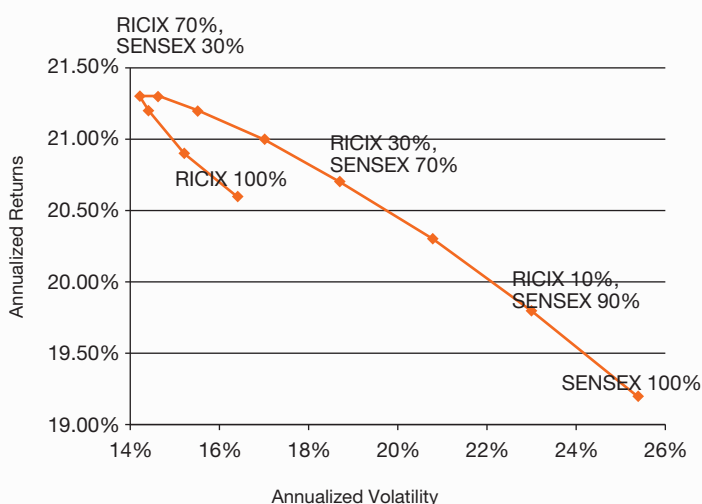
	Stocks	Bonds	Commodity
Monthly	-0.10	-0.10	0.09
Quarterly	-0.19	-0.30	0.28
Semi-Annually	-0.04	-0.53	0.43
Annually	-0.02	-0.03	0.49

Stocks : S&P500, Bonds : Lehman Aggregate Bond Index, Rogers International Commodity Index

Date 31.12.1999 - 31.12.2007 Source: Mirae Asset MAPS

### d) Role of Commodities in Optimizing Portfolio Returns

An exposure to commodities in your portfolio can help you optimize its returns considerably. The graph below indicates how with a prudent mix of commodity and SENSEX stocks in a portfolio, one could enhance portfolio returns while at the same time reducing the volatility of investments.



(Source: Bloomberg, data calculated from 1st Jan 1999 to 11th Apr 2008)

### Investing in commodities - Routes

Traditionally in India, investor exposure to commodities has been through futures trading. However, offering commodity exposure to investors through popular platforms like mutual funds which invest in commodity stocks is the way forward. Exposure to commodity stocks through mutual funds offers

investors the prospects of achieving gains similar to that possible from direct exposure to commodities. This is considering that commodity stock prices generally move in line with commodity indices which track physical commodities as shown in the graph below.



Source: Bloomberg, Data as on 1st Jan 2000 to 9th April 2008

\* NAV rebased to 100

### Risks associated with Commodity Investing

While the positives associated with commodities are many, commodity markets are susceptible to volatility with changing demand supply dynamics causing variation in commodity prices. Also climatic aspects like floods, droughts, etc. and other factors like competition, acreage & yields, geopolitical considerations, etc. could impact the performance of commodities as an asset class. As such it is important that effective risk management and risk modelling methods are followed while investing in this avenue.

### In sum...

Commodities are a distinct asset class with returns that are largely independent of equity and bond returns. Therefore, taking broad commodity exposure can help in portfolio diversification, lowering risk and potentially boosting returns. According to estimates from Barclays Capital Research, total assets held by institutional investors globally amount to US\$50 trillion while direct commodity investments are miniscule at US\$120 billion, i.e. less than one percent of the global investment portfolio. With long term fundamentals of commodity companies appearing bright given the supply demand mismatch, rapid industrialization of emerging economies & emphasis on infrastructure development in many developing economies, we believe commodity as an asset class deserves a lot more weightage in any investor's portfolio.

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