# PERFORMANCE OF INDIAN COMMODITY FUTURES MARKETS: AN ANALYSIS



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#### Abstract

Over the past decade Indian commodity futures markets have grown at a rapid pace. Reopening of Indian commodity futures markets has provided an opportunity for investors to achieve diversification benefits. At the same time during periods of high inflation, trading in several commodity futures was stopped owing to the belief that investment in commodity futures markets contributes significantly to the increase in commodity prices. Studies have shown that growth in commodity futures markets has no direct role in increasing commodity prices. The present study looks at the developments in Indian commodity futures markets in the past decade. The first part of the present study examines the potential diversification benefits available to Indian investors when they allocate a part of their investable income to commodity futures. The second part of the study examines the inflation hedging potential of commodity futures in a conventional portfolio of stocks and bonds during inflation.

A number of portfolios were constructed with and without commodity futures to unveil the diversification benefits offered by commodity futures when incorporated in a conventional portfolio of stocks and bonds. To recognize the diversification benefits, which can be realized by investors on adding commodity futures, asset allocation strategies, namely, strategic asset allocation and tactical asset allocation (momentum and term structure strategy) were analysed from 2004-2012 on a yearly basis using monthly data of most liquid commodity futures contracts traded on Indian commodity futures exchanges. Momentum and term structure signals were used to formulate investment strategies, which exhibited positive returns on average. These investment strategies served as a tool for allocating commodity futures to conventional portfolio of stocks and bonds. Results show that inclusion of commodity futures to a conventional portfolio provided diversification benefits.

Inflation has an adverse impact on investors. The surge in inflation necessitates the search for assets with inflation hedging potential. Commodity futures have positive correlation with inflation and negative correlation with stocks and bonds. Thus, during high inflation, the presence of commodity futures in a conventional portfolio of stocks and bonds may possess potential to combat ill effects of inflation and act as an inflation hedge. The second part of the present study examines the inflation hedging potential of commodity futures during different inflationary regimes. We chose commodity futures that respond best to inflation and form inflation tracking portfolios. Analysis of conventional portfolios with and without inflation tracking portfolios shows that commodity futures act as an inflation hedge.

The present study reveals that it is possible to improve the performance of a conventional portfolio by investing in commodity futures and that these instruments provide inflation hedge to the conventional portfolio during periods of high inflation. In the present scenario, where RBI is likely to give permission to banks and FIIs to invest in Indian commodity futures markets and considering periods of high inflation, results of both the studies are relevant and important to investors.

**Keywords:** Commodity futures, momentum strategy, term structure strategy, portfolio, investment strategies, inflation, inflation tracking portfolio, inflation hedge

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