Past and Future of Derivative/Future Market: Substantiation of Calendar Anomalies

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Abstract

The study examines the calendar anomalies in four major commodities namely, Crude Oil, Gold, Palm Oil, and KIBOR at Pakistan Mercantile Exchange (PMEX). This study uses OLS regression analysis technique which covers 6 years' time period from January 2011 to December 2016. By doing so; we have tested four major calendar anomalies namely; Monthly Anomaly, Turn-of-the-Year Anomaly, Day-of-the-Week Anomaly, and Turn-of-the-Month Anomaly.

Overall, results have supported the market inefficiency as prior researches documented. Strong evidence is discovered in favor of calendar anomalies in PMEX. The results of Monthly Anomaly show that the April effect and the January effect are found for Crude Oil and KIBOR. Likewise, the returns for Palm Oil outperform in February and March. However, there is no evidence of Monthly anomaly for Gold. The results of Turn-of-the-Year (TOY) anomaly show that Crude Oil has TOY anomaly and in KIBOR, Rest-of-the-year (ROY) anomaly exists. No significant evidence is found for Gold and Palm Oil regarding the same. Turning toward the results of third anomaly that is Day-of-the-Week Anomaly, we have found very interesting results for Gold and KIBOR. The Friday effect is found in Gold' returns and Monday effect is found in KIBOR' returns. Finally, the results of fourth anomaly Turn-of-the-Month (TOM) Anomaly document that the returns of KIBOR are significantly high particularly, for the days of Rest-of-the-Month (ROM).

Our results add value to the behavioral finance literature. It extends the research on calendar anomalies in commodity market. In addition, this study is very useful for investors, portfolio managers and hedgers who can make their investment decisions and hedging strategies based on seasonal effect. Furthermore, investors have little knowledge about behavior of commodities prices so, this study add value regarding the predictability of commodity returns for emerging market like PMEX and can take buy-and-sell strategy accordingly. We can do future research on the biases which cause these calendar anomalies.

Keywords: Calendar Anomalies, Pakistan Mercantile Exchange, Abnormal Commodity Returns, Behavioral Finance