

**Contrarian Arbitrages and Market Efficiency:  
Evidence in International Interest Rate Futures Markets**

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**ABSTRACT**

In this paper, we examine the profitability of contrarian and momentum strategies for 33 long- and short-rate futures contracts that are traded in two US and ten non-US exchanges. Our methodology closely follows Lo and Mackinlay (1990) methodology for testing the profitability of return-based contrarian strategies except that in our study, ten symmetric strategies are implemented on a daily rollover basis for each spot-month quarters. Our main findings are as follows: (1) the results of {5,5} strategies that are based on 5-day evaluating and holding horizons are representative of the results of all other symmetric strategies; (2) in short-rate futures segments, momentum strategies were more successful in most exchanges during both the pre- and post-Euro subperiods; (3) in long-rate futures segments, momentum strategies were more successful in most exchanges during the pre-Euro period, whereas during the post-Euro period the contrarian (momentum) strategies were more successful in the exchanges of US (European) trading-time zones; and (4) these profits tend to be concentrated on certain weekdays. These findings are robust to, among other things, alternative ways of implementing the return-based strategies.