

Adaptive Pairs Trading Strategy Performance in Turkish Derivatives Exchange with the Companies Listed on Istanbul Stock Exchange

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Abstract

According to our adaptive trading performance analysis in this research we had tried to perform pairs trading strategy based on a comparative mean reversion of asset prices with daily data over the period 2005 through 2010 in Istanbul Stock Exchange (ISE) & Turkish Derivatives Exchange (Turdex). We did not categorize stock pairs by sectors and therefore it is possible to observe mean reversion characteristics of different stocks that are selected from ISE-30 index. As of in the Turkish futures exchange leverage rule of 1:10, we had to compare spot stock pairs formation with futures contracts pairs strategy and/or futures contracts with calendar pairs strategy. The initial formation period is 125 days (approx. 6 months) while we measure the performance results daily so that we had a adaptive trading formation each day. Both formation process and trading strategies have been structured as dynamic (rolling windows) market trading model through 2010. The results indicate that pairs produced average returns of % X daily comparing with individual stocks within the index and the index itself. Our trading constraints and trading commissions take away the excess return on pairs mostly. Furthermore, the performance analysis reveals that the pairs trading strategy yields excess returns with less volatility than the market portfolio.

Key words: mean reversion, pairs trading, distance method, market neutral portfolio, Istanbul Stock Exchange, futures exchange, trading strategies

JEL Classifications: G11, G12, G14.

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