

Abstract

The thesis investigates the pricing efficiency of the commonly used cost of carry model in pricing stock index futures and its applicability on the German blue-chip index DAX and related futures contracts in recent years. The work considers the deviations of the observed futures prices from their theoretical counterparts as well as the fitness of the model through regression analysis. The results show that while there are many deviations from the fair values suggested by the model these are small in magnitude when compared with the potential transaction costs implying the contracts are efficiently priced. It is confirmed that there is a cointegrating relationship between futures and spot index values, however, given the regression analysis results the prices do not entirely follow the model design. The other part of the analysis focuses on the behaviour of the basis throughout the life of the relevant futures contracts. The results suggest that there is indeed a decreasing tendency towards the expiration of a contract, nevertheless, it is subject to considerable fluctuations. The paper also documents other factors that might impact stock index futures prices yet not included in the standard pricing formula.

JEL Classification

C12, C14, C22, G13

Keywords

stock index futures, futures pricing , cost of carry, basis, basis convergence, DAX index

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