

***RISK PREMIUMS IN FINANCIAL FUTURES MARKETS:
PREFERENCE MODELS, BEHAVIORAL PUZZLES OR FRAUD?***

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ABSTRACT

This study measures the degree of predictive capability of financial futures instruments to forecast the underlined cash market (spot) that serves to establish hedging strategies and measure and justify risk premiums in a discovery process. Testing hedging effectiveness is assessed using the Unbiased Forward Rate Hypothesis (U.F.R.H.), which holds for most instrument co-integrated combinations using financial futures. Relative efficiency / convergence is documented for Fed Funds and Euribor futures to spot market combinations, but non-convergence for Eurodollar futures combinations at expiration dates, using daily data series from 2001 through 2011.

Risk premium discovery reveals that considering order flow activity, investor heterogeneity and market fraud events to account for risk premiums, downside risks and noise risk can help explain behavior of investors that supports and documents their investment related actions which in turn cause market prices and returns to deviate from their fundamental intrinsic values in the marketplace. An Error Correction Model (E.C.M.) combined with (exponential) E-Garch and/or (fractionally integrated) FIE-Garch is used to forecast one step ahead volatility accounting for conditional variance, persistence / long term memory and stylized effects decompose risk premiums based on convergence biases by using aggregate order flow activity and returns data.

Results uncover that mispricing occurs due to documented rate fixing market fraud, shifting of preferences and incompleteness of the futures market. Findings about investor's behavior reveals that order flow activity factors can explain partially the basis (forward) risk, downside risk and bias observed, and at least are related to changes in preferences of investors (risk aversion) due to their lack of willpower and heuristic / boundedly rational behavior when making investment decisions. This implies that future asset pricing requires the development of models that consider variable risk aversion and asymmetric volatility skewness, in order to account for risk premiums / excess returns not identified, due to misspecifications in previous methodologies. We propose an Error Correction model with E-Garch and exogenous order flow proxy drivers that measures risk premiums, subject to controlling for market fraud with governance controls and operating in complete markets.

Key words: long memory, behavioral finance, fractionally integrated Garch Process, corporate governance, market efficiency

E-Subjects: Behavioral Finance, Error Correction Model / Fractionally Integrated Exponential Garch, Long memory, UFRH; Convergence, Market Efficiency, Corporate Governance, Market Fraud, Risk Premium; Noise Risk; Forward Risk; Behavioral Anomalies; Order Flow Information

Classification Codes : G12, G13, G14, G15, G32