

VOLATILITY ESTIMATION IN BOLIVIAN OPEN MUTUAL FUNDS

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ABSTRACT

This paper presents the concepts and applications related to financial econometrics models. The main objective was to determine the level of volatility of yields reported by the Open Mutual Funds in Bolivia. By applying the GARCH, EWMA and Stochastic Volatility models, conditional and unconditional volatility could be determined. On the other hand, through the application of the GJR and EGARCH models the presence of asymmetry in the yield volatility was evaluated, finally the estimation of the GARCH-M model was made to establish the level of risk adjusted rate of return. The results obtained through the analysis of 28-time series over a period of 5 years allowed us to establish a base line for measuring the level of risk existing in the profitability achieved by the Open Mutual Funds.

Keywords: Volatility, Mutual Funds, GARCH, GJR, EGARCH, GARCH-M, Risk.

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