Evaluation of Conditional Autoregressive Value at Risk by Regression Quantiles (CAViaR) for international reserves of Central Bank of Bolivia

Luis Marcelo Carvajal Amusquivar

Abstract

Among the most important measures of market risk developed in foreign exchange reserves management, we find the Value at Risk (VaR) methodology, which is periodically checked. Nonetheless, given the actual global environment and the assumptions this methodology relies on, it is possible that outcomes from this methodology may not be suited enough for a robust market risk management. Under this situation, in order to enhance actual market risk management developed by Central Bank of Bolivia, Conditional Autoregressive Value at Risk by Regression Quantiles methodology is proposed.

Keywords: Foreign exchange reserves, market risk, Value at Risk, Conditional Autoregressive Value at Risk by Regression Quantiles