TIME VARYING CONDITIONAL CORRELATION BETWEEN STOCK AND BOND RETURNS: EVIDENCE FROM THE GCC EMERGING MARKET

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Abstract - This paper estimates long-run time variant conditional correlation between stock and bond returns of Gulf Cooperation Council (GCC) markets (namely, Kuwait, United Arab Emirates, Kingdom of Saudi Arabia, Oman, Qatar, and Bahrain). Further, aims to analyse the presence of asymmetric volatility effect in both asset returns, as well as, obverses increment or decrement in conditional correlation during falling oil prices period, which lead to make a reliable diversification decision.

As per existing arguments, the conditional correlation between stock and bond returns of emerging economies viewed to be strongly negative or weakly correlated, reflecting a high degree of diversification opportunities for both investors, domestic as well as international. Hence, the objective of this study is to assess the level of the estimated time variant conditional correlation in the GCC region and also to examine the direction of asymmetric volatility effect on assets' returns. Furthermore, the secondary objective of this study is to capture the changes in conditional correlation during high and falling oil prices periods in order to identify whether there are diversification opportunities in the market.

The Constant Conditional Correlation (CCC) GARCH model of Bollerslev (1990), the Dynamic Conditional Correlation (DCC) GARCH model of Engle (2002), and the Asymmetric Dynamic Conditional Correlation (ADCC) GARCH model of Cappiello, Engle, and Sheppard (2006) were implemented in the study.

The analyses present strong evidence of time-varying conditional correlation in GCC markets during 2011-2017. The results of this study recommend investors to include financial assets from these markets in portfolios, in order to obtain better stock-bond diversification benefits, especially during high volatility periods.

Keywords - Constant Conditional Correlation (CCC) GARCH model, Dynamic Conditional Correlation (DCC) GARCH model, Asymmetric Dynamic Conditional Correlation (ADCC) GARCH model, Gulf Cooperation Council (GCC). JEL Classification: M40, M41, G01, G12, G14

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