Title:

An Econometric Analysis of ETF and ETF Futures in Financial and Energy Markets using Generated Regressors

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Abstract:

It is well known that that there is an intrinsic link between the financial and energy sectors, which can be analyzed through their spillover effects, which are measures of how the shocks to returns in different assets affect each other's subsequent volatility in both spot and futures markets. Financial derivatives, which are not only highly representative of the underlying indices but can also be traded on both the spot and futures markets, include Exchange Traded Funds (ETFs), which is a tradable spot index whose aim is to replicate the return of an underlying benchmark index. When ETF futures are not available to examine spillover effects, "generated regressors" may be used to construct both Financial ETF futures and Energy ETF futures. The purpose of the paper is to investigate the co-volatility spillovers within and across the US energy and financial sectors in both spot and futures markets, by using "generated regressors" and a multivariate conditional volatility model, namely Diagonal BEKK. The daily data used are from 1998/12/23 to 2016/4/22. The data set is analyzed in its entirety, and also subdivided into three subset time periods. The empirical results show there is a significant relationship between the Financial ETF and Energy ETF in the spot and futures markets. Therefore, financial and energy ETFs are suitable for constructing a financial portfolio from an optimal risk management perspective, and also for

dynamic hedging purposes.

Subjects:

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co-volatility spillovers
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Diagonal BEKK

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