

Volatility and a Century of Energy Markets Dynamics

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Abstract:

How similar is the price behavior of oil, natural gas, and coal? Are there any interactions among these three fuel prices and their volatilities? Using the Yatchew and Dimitropoulos (2015) annual data for the United States, over the period from 1870 to 2014, and state-of-the-art econometric methodology, we explore for spillovers and interactions among the three energy markets. In doing so, we use a range of univariate and multivariate volatility models. The key contribution to the literature is the estimation of a trivariate BEKK model that allows for the interdependence of oil, natural gas, and coal returns and volatilities, using the longest span prices that have ever been studied before.