Editorial Special Issue "ISEFI"

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Abstract

This editorial introduces the special issue of Energy Studies Review which features high-quality research papers that have been presented at the 1st International Symposium on Energy and Finance Issues (ISEFI-2013) that was jointly organized by EconomiX (University Paris Ouest Naterre La Défense) and IPAG Business School). This collection of five carefully reviewed papers deals with dynamics of energy and carbon allowance markets with insightful implications for the actions of various economic agents including market participants policymakers.

This Special Issue of ESR presents five contributions, which encompass the analysis of several markets and commodities: oil, stock markets, primary commodities, and European carbon trading permits. These papers explore several phenomena over a quite long time horizon, until the very latest available data, and different geographical areas. All contributions have in common methodological advances, in that the economic problems at stake are analyzed to the light of econometric techniques that have not been applied so far to study them. For this reason, each paper details the fundamentals of the estimation technique which has been used and justifies the choice of the empirical approach. In particular, Chevallier and Sevi (2013) use Variance Risk Premia augmented by several economic variables; Boubaker and Sghaier (2013) refer to Archimedean copulas functions; Creti et al. (2013) estimate the link between stock markets and oil by the means of the co-spectral analysis; Brémond et al. (2013) use a panel VAR approach; and Mansanet-Bataller and Sanin (2013) estimate a truncated mean model together with the analysis of abnormal returns. Attention has thus been paid to allow an interesting bridge between purely financial econometric methods and economic modeling. Copulas functions have been applied by few authors to study the dependence structure between oil price changes and stock market returns, an issue which is also studied to detect short- and medium-run links by the co-spectral analysis. The panel VAR approach also detects short-run relations between oil and stock markets. The Variance Risk Premia augmented by several economic regressors attain a very satisfactory performance in forecasting light crude oil prices. Truncated mean models capture the impact of supply shocks in the CO_2 permits market.

Another distinguishing characteristic of the papers collected in this Special Issue is that they study markets and/or commodities with the common objective to provide insights to markets participants and regulators. This objective is then developed taking into account some peculiarities which cover the study of specific group of countries (the major OPEC countries in Creti et al. (2013); the Gulf Cooperation Countries in Boubaker and Sghaier (2013)), environmental regulators (the European market for CO_2 permits in Mansanet-Bataller and Sanin (2013)), oil and stock markets (Chevallier and Sevi, 2013), and oil and commodities markets (Brémond et al., 2013). It results that each paper develops an investor and/or or a policy-oriented perspective, together with a very detailed analysis of pricing.

Despite the diversity of the techniques and the markets studied, a common result can be highlighted: turmoil periods largely affect all the studies relationships. This phenomenon increase the dependency between markets, becoming similar to contagion (Boubaker and Sghaier, 2013; Brémond et al., 2013), or increased dependence (Creti et al., 2013; Chevallier and Sevi; 2013), or volatility (Mansanet-Bataller and Sanin, 2013). These findings confirm a general trend that spreads off the market studied and characterize the dynamic analysis presented by all the papers: the financialization of oil, commodities, pollution permits and their link to stock markets, which seems to become a short-lived phenomenon.

Different aspects of the link between oil and stock markets are analyzed by Boubaker and Sghaier (2013), as well as by Creti et al. (2013)

Boubaker and Sghaier (2013) examine the dependence structure between daily oil price changes and six stock market returns, namely, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE from June 1, 2005 to February 11, 2013. They apply several copula functions, namely, Normal, Student-t, Gumbel, Clayton and Franck that present different tail dependence structures. The authors find evidence of asymmetric lower tail dependence in all countries, except Oman, perhaps due to its declining oil production. Creti et al. (2013) also look at the major oil exporting countries, including in their sample namely Emirate Arab United, Kuwait, Saudi, Arabia and Venezuela, over the period spanning from 03/09/2000 to 03/12/2010. The evolutionary co-spectral analysis as defined by Priestley and Tong (1973) reveals that co-movements between oil and stock markets can be either positive or negative. This interdependence is a medium-lived phenomenon, uncovered on a three years and one quarter horizon, being weak in the short-run (ten months).

The link between oil and other commodities is analyzed by Brémond et al. (2013). In particular, these authors consider daily data over the period from July 11, 2000 to July 15, 2011 and rely on thirty commodity series: crude oil West Texas Intermediate (WTI), and 29 other commodity prices (energy, precious metals, nonferrous metals, agro-industrials, food, oleaginous, exotic, and livestock). WTI and commodity prices are not linked in the long term, but short-run relations exist, mainly from the price of crude oil to commodity prices. The panel VAR estimation with an impulse response function analysis reveals fast co-movements and market efficiency.

Predictability of oil returns is the focus of Chevallier and Sevi (2013)'s paper. By using variance risk premia analysis on high frequency data and multivariate regressions on WTI light crude oil over the period 11/2001 to 12/2010, the authors construct a "fear predictability index" and show that variance risk premia can be understood as a volatility which has not been priced accurately in the crude oil returns – either due to option mispricing or to large movements in the historical volatility – and they should be understood as a volatility series as well.

The analysis of abnormal price is also investigated by Mansanet-Bataller and Sanin (2013) in a quite different market, the European Trading System of pollution permits. They show the importance of supply determinants in a market created by the need of environmental regulation. The robustness of this result is also confirmed by the estimated of a truncated mean model, which measures the abnormal returns in each day an announcement is released using a benchmark period of 10 days prior to it, since the inception of the pollution permits market (2005) to the end of its second phase (2012).