The Reaction of Energy Markets to Public Announcements Following OPEC and Non-OPEC Ministerial Meetings

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ABSTRACT

This paper examines the impact of public announcements following OPEC and non-OPEC Ministerial Meetings on crude oil and natural gas markets. The event study methodology is used to estimate the significance of abnormal returns from WTI and Brent futures, and Dutch TTF and Henry Hub futures around the post-meetings announcements during the sample period from 2016 and 2024. The empirical evidence suggests that, on average, both the oil and natural gas markets are associated with negative abnormal returns during the event window. There is a lower likelihood for Brent futures and Henry Hub futures to exhibit negative abnormal returns, and higher likelihood for significant abnormal futures, for the WTI Futures and Dutch TTF Futures. Judging from the decreasing trends in cumulative average abnormal returns, it seems that apart from the Dutch TTF futures, energy markets are more likely to react negatively throughout the event windows. However, the asymmetric reactions within the energy markets suggest that OPEC and non-OPEC ministerial meetings serve as means to communicate the aggregate responses to changes in the geopolitical conditions and the real economy rather than attempts to manipulate the energy markets. Thus, it is important for policymakers and investors to gain a better understanding of the behaviour of energy markets around OPEC and non-Ministerial meetings as the announcements of unexpected changes in energy supply are bound to affect the real economy through abrupt adjustment to the levels of industrial production and household consumption. On aggregate, it seems that OPEC tends to behave reactively to the changing macroeconomic dynamics as the target volumes of production are decided based on the volatile global demand for energy, resembling thereby the behaviour of a competitive oil producer rather than a purely self-centred cartel.

Keywords: Energy Markets, Event Study Methodology, OPEC Ministerial and Non-Ministerial Meetings