

## Accepted Manuscript

Title: An analysis of directional spillover between crude oil prices and stock prices of clean energy and technology companies

Author: Wasim Ahmad



PII: S0275-5319(16)30271-9  
DOI: <http://dx.doi.org/doi:10.1016/j.ribaf.2017.07.140>  
Reference: RIBAF 830

To appear in: *Research in International Business and Finance*

Received date: 12-9-2016  
Accepted date: 6-7-2017

Please cite this article as: Ahmad, Wasim, An analysis of directional spillover between crude oil prices and stock prices of clean energy and technology companies. *Research in International Business and Finance* <http://dx.doi.org/10.1016/j.ribaf.2017.07.140>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# An analysis of directional spillover between crude oil prices and stock prices of clean energy and technology companies

## First and Corresponding Author

Wasim Ahmad

Designation: Assistant Professor

Indian Institute of Technology Kanpur, Kanpur, UP India 208016

Telephone office: +91-512-259-6838

Phone: +91-96347-25126

E-mail: ahmadwasimdu@gmail.com

wasimad@iitk.ac.in

## *Abstract*

This paper examines the directional spillover between crude oil prices and stock prices of technology and clean energy companies. The study uses the daily data over the period from May 2005 to April 2015. The estimated results exhibit following empirical regularities. First, it appears that technology stocks play vital role in the return and volatility spillovers of renewable energy stocks and crude oil prices. Second, technology (PSE) and clean energy indices (ECO) are the dominant emitters of return and volatility spillovers to the crude oil (WTI) prices. Third, the time and event-dependent movements are well captured by the directional spillover approach. Fourth, the application of directional spillover method seems to be more advantageous than MGARCH models as it not only establishes the inter-variables return and volatility spillovers but also helps in identifying direction of spillover through calculation of pairwise net spillovers. Last, the dynamic hedging results suggest that clean energy index can provide a profitable hedging opportunity in combination with crude oil futures than technology index. Many new findings further discussed and analysed.

*JEL Classification:* G11, G13, Q42

*Keywords:* Clean energy stocks, Multivariate GARCH, Directional spillover, Oil prices

## 1. Introduction

In the literature of clean energy finance, understanding the dynamic interdependence between return and volatility of oil prices and prices of clean energy and technology stocks has emerged as one of the important avenues of research. Although the theoretical models that explain the relationship between clean energy stocks and crude oil and between technology stocks and clean energy stocks along with other equity indices do not exist, empirical research suggests a relationship between prices of clean energy stocks and oil prices. A

Download English Version:

<https://daneshyari.com/en/article/5107276>

Download Persian Version:

<https://daneshyari.com/article/5107276>

[Daneshyari.com](https://daneshyari.com)