Transitional Dynamics of Oil Prices

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April 2013

INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS

ISSN: 1450-2887

Issue 106
February, 2013

International Research Journal of Finance and Economics

Issue 106 February, 2013

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International Research Journal of Finance and Economics
ISSN 1450-2887 Issue 106 (2013)
http://www.internationalresearchjournaloffinanceandeconomics.com

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Abstract

There has been a well-known relationship between macro financial fundamentals and oil prices, yet there is also ample evidence that this relationship weakens during some periods. In this paper, we investigated whether the relationship between oil and macro financial fundamentals vary depending on gold price of oil. To achieve this, a Markov model is implemented to the monthly data for the period 1974 - 2010. In the Markov model utilized in this paper, transition probabilities are endogenous and governed by the volatilities of oil, gold, stock market and exchange rate. This allowed us to endogenously model the switching process. Our results provide evidence that the link between oil price and macro financial fundamentals disappears in the periods of inexpensive gold price of oil. Our findings also provide evidence that the volatilities of the variables matter only when gold price of oil is inexpensive.

Keywords: Oil Price, Gold Oil Ratio, Exchange Rates, Interest Rates, Stock Market Yields, Time Series Analysis, Markov Switching Regimes
JEL Classification Codes: C22, E44, G12

1. Introduction

Oil, beyond being the most crucial and indispensable commodity to economic activities, it is also considered as a financial asset, which is widely speculated, and is often used as a hedge. For this very

[1] The views expressed are those of the authors and should not be attributed to their institutions. We would like to express our very sincere gratitude to Janet Margaret Chafe for her vaulable support.

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