IBIMA Publishing Communications of International Proceedings https://ibimapublishing.com/p-articles/42ECO/2023/4233123/ Vol. 2023 (7), Article ID 4233123

Exploring the Dynamics between Gold and Crude Oil: An Empirical Study of Their Interrelationship on the Commodity Market*

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* Presented at the 42nd IBIMA International Conference, 22-23 November 2023, Seville, Spain

Abstract

Gold and crude oil are classified as raw materials. The shaping of their prices results, on the one hand, from their use in the economy, and, on the other, from the investment demand for these assets. The purpose of this article is to indicate the reasons for the existence of a relationship between gold and crude oil on the commodity market, as well as to empirically determine whether there is a long-term stable relationship between these assets. A comprehensive review of the publication of research results was used, as well as the author's own research based on the DCC-GARCH model. The relationship between the rates of return (prices) for oil and gold was found to be mostly positive and relatively weak. However, many publications indicate the non-linearity and asymmetry of the studied relationship.

Keywords: commodity markets, crude oil, gold, DCC- GARCH, investments.