FINANCIAL CONTAGION AND VOLATILITY SPILLOVER:

AN EXPLORATION INTO INDIAN COMMODITY DERIVATIVE MARKET°

Rudra P. Roy[1&2] & Saikat Sinha Roy[3]

[1]Assistant Director, Bureau of Applied Economics and Statistics, Department of Planning, Statistics and Programme Monitoring, Government of West Bengal, India.

[2]Research Scholar, Department of Economics, Jadavpur University, Kolkata, India

[3]Professor, Department of Economics, and Joint Director, School of International Relations and Strategic Studies (SIRSS), Jadavpur University, Kolkata, India.

Correspondence: Rudra P. Roy, Department of Economics, Jadavpur University, Kolkata-700032, India. Tel: +91-9874660390. E-mail: rudraprosadroy@gmail.com

ABSTRACT

This study measures the extent of financial contagion in the Indian asset markets. In specific it shows the contagion in Indian commodity derivative market vis-à-vis bond, foreign exchange, gold, and stock markets. Subsequently, directional volatility spillover among these asset markets, have been examined. Applying DCC-MGARCH method on daily return of commodity future price index and other asset markets for the period 2006 to 2016, time varying correlation between commodity and other assets are estimated. The degree of financial contagion in commodity derivative market is found to be the largest with stock market and least with the gold market. A generalized VAR based volatility spillover estimation shows that commodity and stock markets are net transmitters of volatility while bond, foreign exchange and gold markets are the net receivers of volatility. Volatility is transmitted to commodity market only from the stock market. Such volatility spillover is found to have time varying nature, showing higher volatility spillover during the Global Financial Crisis and during the period of large rupee depreciation in 2013-14. These results have significant implication for optimal portfolio choice.

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Key words: Commodity, DCC-GARCH, Financial contagion, Portfolio, Volatility spillover.

JEL Classification: F36, G11, C58, Q02, G12.

1. Introduction

This paper investigates into contagion and transmission of volatilit