Commodity Prices and Currency Rates: An Intraday Analysis

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Abstract: We investigate the intraday relationship between two important pairs of commodities and currencies: gold/Australian dollar and oil/Canadian dollar. Gold (oil) and the Australian dollar (Canadian dollar) prices have been highly correlated over a long time period as widely reported by the news media. Using transactions data of exchange-traded funds from January 2008 to December 2009, we do not find evidence of Granger causal relations between commodity and currency asset returns. However, we find bi-directional volatility spillovers, indicating that there is information flow between markets. Thus, our results are consistent with market efficiency during short horizons such that information is efficiently incorporated into asset prices in both markets.

JEL Classification: G13, G14
Keywords: Commodity prices, Currency rates.

1. Introduction

The Australian and Canadian dollars are among the most actively traded currencies in the foreign exchange market. As of April 2010, the Australian and Canadian dollar accounted for approximately 7.6\% and 5.3\%, respectively, and ranked 5\textsuperscript{th} and 7\textsuperscript{th}, respectively, in global foreign exchange transactions in terms of percentage shares of average daily turnover (Triennial Central Bank Survey, 2010). Australia and Canada are major producers and exporters of gold and oil, respectively, and their currencies exhibit a strong cross-market correlation with their