

# IWH Research Seminar in Economics

**Donnerstag, 4. Dezember 2014, 11:00 – 12:00 Uhr**

Institut für Wirtschaftsforschung Halle (IWH), Konferenzsaal im Erdgeschoss



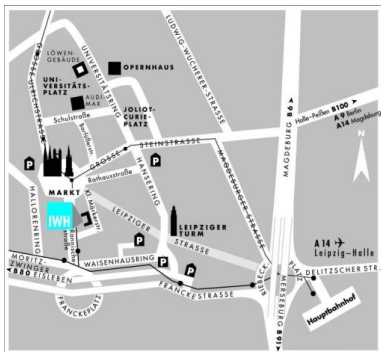
Exchange Rates and Commodity Prices: Measuring Causality at Multiple Horizons

**Professor Jean-Marie Dufour, Ph.D.**

McGill University, Montreal

Mitglied der

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Understanding and measuring the relative roles of different causal channels between commodity prices and exchange rates has important implications in financial decision making, especially for market participants with short horizons. From a macroeconomic perspective, this can also be useful for interpreting exchange rate movements, financial market monitoring and monetary policy. Basic economic reasoning on currency demand suggests that the currencies of countries whose exports depend heavily on a particular commodity should be strongly influenced by its price, so commodity price movements should lead (Granger-cause) exchange rate movements (macroeconomic/trade mechanism). In contrast, the present value model of forward-looking exchange rates suggests reverse causation, i.e. exchange rates should Granger-cause commodity prices (expectations mechanism). We examine empirically the causal relationship between commodity prices and exchange rates, using data on three commodities (crude oil, gold, copper) and three countries (Canada, Australia, Chile), over the period from 2000 to 2009. To go beyond pure significance tests of non-causality and to provide a relatively complete picture of the links, measures of the strength of causality for different horizons and directions are estimated and compared. Since low-frequency data may easily fail to capture important features of the relevant causal links in volatile financial markets – such as foreign exchange and commodity markets –, high-frequency (daily and 5-minute) data are exploited. Both unconditional and conditional (given general stock market conditions) causality measures are considered, and allowance for “dollar effects” is made by considering non-U.S. dollar variables.

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