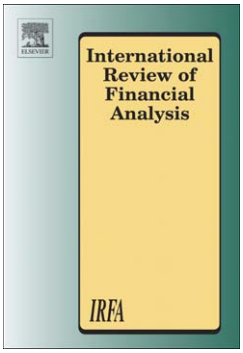

The impact of festivities on gold price expectation and volatility

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The impact of festivities on gold price expectation and volatility

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Abstract

A majority of gold worldwide is bought as jewelry. China and India together account for about 60% of worldwide gold jewelry consumption. Gold is a traditional gift in many cultures and often given away on the occasion of festivals, such as Chinese New Year, Diwali, and Ramadan Eid. These facts lead us to an obvious question: Do gold prices behave differently around festivals? This question has not yet been systematically discussed on the basis of stochastic models. The purpose of the present paper is to investigate the effects of a selection of festivals on the distribution of daily gold price changes. Dummy variables indicating the festival are modified to reflect anticipation and/or aftereffect of festivities, and they are used as covariates in a combination of regression and GARCH models to specify conditional expectation and volatility of daily gold price changes. We set up a model which measures the effect of festivities on the return distribution in terms of the magnitude of current volatility, which acts as a "news magnifier". After fitting this model to data, extensive robustness checks are undertaken to make sure our results are valid.

Differentiating between two periods (1991–2002 and 2003–2014) with distinct gold price characteristics, we find that several festivals (among them, the three mentioned above) are connected with gold price changes in specific ways. We also find evidence of an end-of-year effect. This research contributes to the problem of understanding and forecasting gold prices.

Keywords: Gold prices; festivals; gold jewelry; gold price volatility; GARCH with covariates; news-magnifying model

JEL classification: C32; C51; C52; G14; G15; L70; Q02

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