

**Connecting theory and empirics for animal spirits, returns and interest rates: A
clarification of “Risk-free rates and animal spirits in financial markets”**

Jukka Ilomäki*

Faculty of Management, FI-33014 University of Tampere, Finland

jukka.ilomaki@uta.fi

Abstract

I clarify and combine the results of Ilomäki (2016a) and Ilomäki (2016b) and find several interesting conclusions. First, the effect of the animal spirits component to the expected returns of investors depends on the risk-free rate. Second, there must be an upper limit for the risk-free rate, where the component that reduces the expected returns of informed investors in Ilomäki (2016a) disappears. Third, the empirical results of Ilomäki (2016b) indicates that the break-even level is as low as 3%.

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The theoretical model of Ilomäki (2016b) is primarily based on Ilomäki (2016a). Ilomäki (2016a) shows theoretically that, if uninformed investors include the animal spirits component in the trading rule, the expected returns of informed and uninformed investors become smaller when compared to the case where only the rational higher-order beliefs prevail.

Ilomäki (2016b) examines both theoretically and empirically what happens to the possible animal spirits profits, when the level of the constant risk-free rate of return (r^f) is changed.

The theoretical model of Ilomäki (2016a) is amended by allowing $\Delta r^f > 0$ and including

also the expected returns of the buy-and-hold strategy. Hence, if $\Delta r^f > 0$, the expected animal spirits profits for an uninformed investor decrease. The paper (2016b) tests the results empirically and finds that the animal spirits excess profits are explained negatively by the local risk-free rate, and positively by the volatility of daily returns.

Thus, by combining the results of Ilomäki (2016a) and Ilomäki (2016b), several interesting conclusions arise. First, the effect of the animal spirits component to the expected returns of investors depends on the risk-free rate. Second, there must be an upper limit for the risk-free rate, where the component that reduces the expected returns of informed investors (see Ilomäki, 2016a) disappears. Third, the empirical results of Ilomäki (2016b) indicate that the upper limit is as low as 3%.

References

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