

Research review: Anomalies and irrationality

Ron Bird | University of Technology Sydney | 24 July 2017 | 1.00 CE

The first study in this Research Review evaluates mispricing across 36 equity markets, while the second study examines stock market crashes across 40 markets. Both studies provide widespread evidence of mispricings/irrationalities across world equity markets. Of course, such evidence raises the question of why professional investment managers may struggle to deliver outperformance when there are clearly mispricing opportunities out there to exploit.

1. Global market inefficiencies

- Söhnke M. Bartram, Mark Grinblatt | 10 July 2017

The authors study worldwide market efficiency using the mispricing measure of Bartram and Grinblatt (2017). The measure estimates fair stock prices worldwide using quantitative analysis of point-in-time accounting data on more than 25,000 firms from 36 countries over two decades. Trading on deviations from fair value gives statistically and economically significant risk-adjusted returns in most regions, with the largest returns in the Asia Pacific and emerging markets countries. Buy-and-hold variations of the strategy are also profitable.

The authors verify that the mispricing measure does not proxy for known anomalies.

The results suggest that global equity markets are not efficient, but are relatively more efficient in developed financial markets, except for Japan, and that the degree of inefficiency is tied to quantifiable market frictions that deter arbitrage.

2. Rational or Irrational? A Comprehensive Studies on Stock Market Crashes

- Tai Ma, Kuo Hsi Lee, Chien Huei Lai & Yang Shen Lee | June 2017

This study attempts to identify the contributing factors for different patterns of market crashes. In addition to fundamental macro–economic factors, the authors argue that the existence of herding behaviour, as well as the level of investor attention, are important factors affecting the pattern of stock price fluctuations. By differentiating the rational component and irrational component of these behavioural factors, more insight concerning financial crisis is drawn.

Patterns of crashes are defined by three dimensions: the cumulative decline; the speed of decline; and, the duration of the crash. Innovative measures and comprehensive analyses are conducted based on three sets of explanatory factors: macroeconomic factors; market microstructure factors; and, behavioural factors.



The analysis shows that behavioural factors are the most influential, explaining the magnitude as well as the duration of crash, while the speed of decline is mainly related to market microstructure factors. The analysis shows that investors' irrational behaviour is more important than fundamental factors in explaining or predicting market crashes.

The contribution of this study is threefold.

- First, crashes in 40 markets are defined, measured and categorised into eight types of crash patterns, providing interesting statistics for international market crashes.
- Second, the paper differentiates between rational and irrational components of behavioural factors in explaining the causes of market crashes, which are largely neglected in past writing in this area.
- Third, the threshold of each explanatory variable of market crash is estimated.

The results of this paper can provide policy makers, fund managers and investors valuable information in risk management and pre-warning systems.



Ron Bird is a Professor with the Business School of University of Technology Sydney. From 1989 to 1998, Ron held a number of non-academic roles include heading the asset consulting practice and global research unit of Towers Perrin, and investment positions with Westpac Investment management and GMO. Ron returned to academia in 1999 in the Finance department of UTS. For the past 15 years, Ron has also been the director of the Investment Management Analyst Course (IMAC), a key component of the Certified Investment Management Analyst® certification program for Australian candidates.