

World markets: log-periodic view on their past, present and future developments

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Detecting potential deterministic patterns in the financial dynamics and identifying their origin is a great intellectual as well as practical challenge. In this context the suggestion that financial dynamics may be governed by phenomena analogous to criticality in the statistical physics sense and, especially, the related subtle concept of log-periodicity proves promising but at the same time it still appears somewhat controversial. Based on our related "finance-prediction-oriented" methodology [1] which involves such elements as log-periodic self-similarity [2], the universal preferred scaling factor, and allows a phenomenon of the "super-bubble" [3] we analyze the leading world stock markets (represented by the S&P500, Nasdaq, Hang Seng and WIG) and the commodity - especially oil [4] and precious metal - markets development over the past several years. This analysis involves both the bull as well as the bear markets phases. We emphasize the subtleties of the related description and present some of our successful predictions as documented on the public fora [5] and/or placed at [6]. For instance, the present (as of May 2010) world stock market draw down has for instance been predicted [6] two month in advance. In the corresponding long-term - still bull market - scenario this draw down is considered a correction of the same significance as the previous two of June/July 2009 and of January/February 2010. An ultimate termination of this bull market phase that started in February 2009 is predicted to begin in around September 2010. Some other publicly documented examples of our previous successful predictions include the oil trend reversal in early July 2008 and some local trend (December 2009 and May 2010) reversals in the gold market (December 2009 and May 2010). In the present contribution we systematically elaborate on the related methodology and on the current world market status. We also present some further forecasting scenarios for the world stock market, for the oil and for the precious metals markets.

References

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