

Forecasting of International Financial Markets with Neural Networks: a New Approach

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Abstract

The Mediterranean peripheral countries cannot afford to be passive viewers of the fundamental changes that are taking place in Europe after the introduction of the Euro. The new developments pose formidable challenges and opportunities. It will be argued that no single group of developing countries will be more affected by these changes than the Mediterranean countries given their geographical proximity to the region and their long historical record of extensive and large economic interactions (trade, finance, and migration).

Fluctuations of stock prices and stock indices are another example of a complex, multidimensional, but in some circumstances at least partially-deterministic phenomenon. The objective of our work is to forecast how shocks in the US, CGG markets can effect the others' countries stock markets.

In our study we use database from EU countries, Mena markets, USA, China and Japan. As a methodology, we use Non linear modeling using Neural networks which offers a promising approach for studying the forecasting of time series data and are being used by many technical analysts to make predictions about stock prices based upon a large number of factors such as past performance of other stocks and various economic indicators.

Key Words: Stock markets, forecasting, Non linear modeling, Neural Networks.