以時間數列ARIMA模式分析及預測台灣地區景氣對策信號

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摘要

Monitoring indicator uses five different signals which are similar to the traffic light to show the prosperity and recession of the market. Because of its simplicity and comprehensibility, the indexes declared monthly by Council for Economic Planning and Development are taken widely. It is not only an important data to present the situation and pulse of the market, but also a reference for governments to know the wane and wax of the market. Also, the governments can take the appropriate policy according to different signals. Monitoring indicator is a characteristic of the time series, so the purpose of this dissertation is to seek out the better forecasting model through the method of time series analysis, and to construct the most appropriate forecasting model for the market in Taiwan. Monitoring indicator data were taken from National Statistics, R.O.C.(Taiwan) from January in 1984 to September in 2008. Then, this research used the statistical software SPSS 11.0 to fit the ARIMA model. The time series ARIMA model which includes model identification, model estimation, model diagnostic checking and forecasting was offered by Box and Jenkins in 1970. The conclusion is because of the plague of global economic crisis in the second half of 2008, the predicted value from the best forecasting model of monitoring indicator is higher than the actual index.

關鍵字：time series analysis, ARIMA model, monitoring indicator