Independent Study Title PREDICTING BEAR AND BULL STOCK

MARKETS IN THAILAND WITH DYNAMIC

BINARY TIME SERIES MODELS

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ABSTRACT

This paper aims to study the predictability of the future bear and bull in Thailand stock markets using dynamic binary time series models. The monthly data sets of financial and macroeconomic variables ranging from 1990 and 2013 comprise of money supply, inflation rate, crude oil price, manufacturing production index (MPI), interest rate (RP1Day), term spread and real effective exchange rate (REER). The bear and bull periods in stock market can be identified by applying nonparametric methodology based on Bry-Boschan (1971) turning point dating rule.

We compare the performance between static probit model and dynamic probit models and find out that interest rate is the most powerful variable for predicting bear and bull stock market in Thailand and dynamic autoregressive probit model is the best in term of forecasting accuracy among alternative models.

Keywords: bear and bull stock markets, dynamic binary time series models, bryboschan