

Thesis Title	The Valuation of Currency Put Options in Thailand	
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Abstract

This study had two objectives which were (1) to understand the market structure, impacts, and problems and obstacles of currency options market in Thailand; and (2) to compare the valuation estimation ability of models which had different interest rate assumptions by testing the absolute percentage pricing error ratio and by testing for correlation between variables of the models and currency put options prediction errors using statistical regression.

Data used in this study included the Dollar, Pound, Mark, Yen, Swiss Frank exchange rates; the currency put options prices of these five currencies; the three month deposit rates; the interbank rates; and LIBOR during the years 1993 to 1995.

The study of the market structure found that in Thailand the currency options were traded in two markets, the Exchange-Traded and Over The-Counter markets. Those who had important roles in the markets were made up of Buyers, Writers, Commercial Banks, Clearing House, and supervising organizations. The results of these financial activities affected investors, financial intermediaries, foreign money and capital markets, and the Thai economy. The problems and obstacles arising from market transactions resulted from the lack of knowledge and understanding of currency options, the structural characteristics of money and capital markets, and the supervising rules and regulations.

The testing of absolute percentage pricing errors ratio found that the use of stochastic interest rate model provided a better prediction of currency put options values than the constant interest rate model, except Yen. This was especially true when using interbank rate and LIBOR as risk-free-rates.

Regarding the test for correlation between the model variables and currency put options price prediction errors, it was found that if the degree of being out-of-the-money of currency put options increased the prediction errors would decrease.

The increase in difference between domestic and international interest rates caused a decrease in price prediction errors, except Swiss Frank when interbank rate and LIBOR were used as risk-free-rate variables.

It was also found that increases in volatility caused increased price prediction errors.

Therefore, from the study of comparing the price prediction ability it was found that the stochastic interest rate model, when using the interbank rate and LIBOR as risk-free-rate variables, gave a better currency put options price prediction than models using constant interest rate. In order to generate benefits for investors, financial institutions, or the private sector, the stochastic interest rate model will give a good currency put options price prediction when the currency put options are out-of-the-money, the volatility used in the model is low, and the difference between domestic and international interest rate is high.