Predictability of ASEAN-5 Exchange Rates in the Post-Crisis Era

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ABSTRAK

Lima mata wang ASEAN telah diselidiki demi menentukan sama ada pertukaran wang asing negara tersebut selepas krisis kewangan lebih tepat diramal oleh dolar US ataupun yen Jepun. Keputusan kajian ini mencadangkan kesemua pertukaran asing sebelum berlakunya Krisis Kewangan 1997/1998 lebih tepat diramal oleh mata wang dolar US. Mata wang Singapura selepas krisis lebih tepat diramal oleh dolar US, sementara mata wang ASEAN yang lain lebih tepat diramal oleh yen Jepun.

ABSTRACT

Five ASEAN currencies are investigated in an attempt to determine whether the post-crisis ASEAN exchange rates are more predictable by the US dollar or Japanese yen. Results suggest that prior to the 1997/1998 Financial Crisis, all exchange rates were better predicted by the US dollar as the base currency. The post-crisis Singapore exchange rate continues to be better predicted in US dollar. On the other hand, Japanese yen better predicted other post-crisis ASEAN exchange rates.

INTRODUCTION

Exchange rates play an important role in the international trade because they allow us to compare prices of goods and services produced in different countries. One of the characteristics of exchange rate in the post-Bretton Woods era is that it tends to be more volatile than the macroeconomic (fundamental) variables. The fluctuations in exchange rates due to the changes in the market fundamentals and market expectations have damaging effect on less developed countries (LDCs) trade flows (Ian and Amusa 2002; Law and Tan 2000; Arize *et al.* 2000). These fluctuations have crucial impact on decisions of policy-makers, traders, speculators, households and firms. Hence, it is important to forecast the future exchange rates with some accuracy. Unfortunately, exchange rates are difficult to forecast with any precision and empirical evidence has so far proven illusive

(Meese and Rogoff 1983a,b; Berkowitz and Giorgianni 1997). This is simply because economic factors that affect exchange rates through a variety of channels are complex and measurements are either costly or problematic in nature (Carbaugh 2000).

In the past decades, many researchers who seek to predict exchange rates by econometric techniques have faced the same problem: while the results help to explain the past movements of exchange rates, the number of explanatory variables introduced on the right-hand side of the equations make them difficult to use for projection (Six 1989). To overcome this difficulty, various attempts had been made by employing advanced time-series analysis to gain further insights into the properties of exchange rate series. We note that, to this date, there is no clear superiority of time series analysis over other econometric analysis or vice-versa[1].

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[1] Earlier work of Wallis (1982), Lupoletti and Webb (1986), Litterman (1986), Keller (1989), Montogomery *et al.* (1990), Brooks (1997), Berkowitz and Giorgianni (1997), Palma and Chan (1997), Fildes *et al.* (1998) and others has demonstrated the superiority of (linear) time series model over other econometric models in terms of their predictability. However, recent empirical evidence shows mixed conclusion. For instance, Najand and Bond (2000), and Darbelly and Slama (2000), among others, suggest that advanced econometric models are able to outperform linear time series models. Nevertheless, Sarno (2000), Baum *et al.* (2001), Clement and Smith (2001) and others using nonlinear frameworks have rekindled the usefulness of time series analysis.