FINANCIAL LIBERALISATION IN ASEAN AND THE FISHER HYPOTHESIS

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Introduction

The Fisher effect forms the foundation to the theory for interest rates. It hypothesises that nominal interest rates adjust one-for-one with respect to changes in the expected inflation. Changes in inflation will be reflected in nominal rates, leaving the real rates constant over time, ceteris paribus. It implies that real interest rate will be affected by real factors. Indeed, if the data support the Fisher hypothesis then inflation is determined by real factors and cannot be influenced by monetary policy. This study examines the long-run relationship between inflation and nominal interest rates for the 5 ASEAN countries, namely Singapore, Malaysia, Thailand, Indonesia and the Philippines. The ASEAN-5 shares the mix characteristics of both the developed and developing economies. These five economies adopted different degree of financial liberalisation. While most of these countries have relatively open capital account in the past decade, the Philippines still maintained control over capital movement. Hence, it is interesting to investigate whether their past and current reforms have any impact on the interest rates-inflation relation.

Materials and Methods

Recent advancement in time-series analysis provides an ideal framework to analyse the interest rates-inflation dynamics. In this study the standard classical unit root procedures are employed, in the first step, to examine the time series properties of the data. Next, the Johansen multivariate cointegration procedure is utilised to determine the presence (or absence) of a long-run equilibrium relationship between after-tax nominal interest rate and inflation. The dynamic behavior of interest rates and inflation is also examined by vector-error-correction model (VECM). Specifically, VECM allows to discriminate the short and long-run Granger-causality. The adequacy of our models is checked by a series of diagnostic tests. Recent papers by Atkins (1989), Owen (1993), as well as Dutt and Ghosh (1995) have, for example, used similar approach to test the validity of the Fisher hypothesis. In general, the results obtained from all these studies are inconclusive.

Results and Discussion

Both nominal interest rates and inflation are found to be non-stationary but stationary in first difference. Interestingly, we found that taxes affect the relationship between nominal interest rates and inflation in the ASEAN countries. Test results based on the ASEAN-5 found that the Fisher hypothesis is upheld in periods of macroeconomic stability, that is, before the financial crisis for three of the ASEAN countries (Singapore, Malaysia and Thailand). Inflationary movements are fully absorbed in nominal interest rates in 1990-96 sample period for these countries. We also demonstrate that inflation is both weakly and strongly exogenous in these three systems. Thus, our results tend to suggest that the central banks of these countries cannot influence real economic activities, at least in the long run. There is also evidence of short-run causality between these two macroeconomic variables. The Fisher hypothesis is decisively rejected for inflation less liberalised financial systems of the Philippines and Indonesia. These two countries experience high and volatile rates of inflation and interest rates during the episodes of currency and financial instability.

Conclusions

Fisher hypothesis (strong form) was found to hold for countries with more efficient capital markets like Singapore and Malaysia. In addition, our results show that the Fisher effect is upheld for Thailand, which delayed their financial reform till 1990. The Fisher effect is easily rejected for the case of Indonesia and the Philippines. We conclude that in a deregulated environment, real interest rate is insulated from nominal shock and money is neutral.

References

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