

UNIVERSITI TEKNOLOGI MARA

**EXCHANGE RATE BEHAVIOUR
AND
MANAGEMENT IN MALAYSIA:
EMPIRICAL
STUDY ACROSS REGIMES**

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ABSTRACT

Given the heightened volatility in the financial market due to global economic developments, a study on exchange rate behaviour becomes crucial for the economic stability and achievement of macroeconomic objectives. There have been claims that fixed exchange rate regime is more prone to overvaluation and responsible for devastating currency crises. However, empirical studies on exchange rate behaviour do not seem to have established whether currency misalignment and the regime choice are the ones potentially responsible. This study thus examines the behaviour of exchange rates and its management given the unique experience in Malaysia during the 1997 financial crisis. Firstly, its objective is to measure real exchange rate misalignment (RERMIS) upon estimation of its equilibrium level. Secondly, this study tests the Fixed Exchange Rate Regime-Misalignment (FERRM) hypothesis in establishing whether the pegged regime contributed to the worsening of misalignment. The third objective looks into the exchange market pressure (EMP) and its associated intervention. It answers the question of “deliberateness” with regard to exchange rate management policy, specifically whether it is a resulting behaviour of deliberate action or merely due to the market forces. The fourth brings in the lead-lag relationship between Thailand and Malaysia to revisit the contagion issue based on a more advanced methodology, the wavelet. The first part that addresses the first two objectives employs the ARDL-UECM and Pesaran’s Bounds test. A model of the long run equilibrium real exchange rate (ERER) based upon macroeconomic fundamentals is employed to calculate RERMIS. It calculates the ERER and examines whether the real exchange rate departs from its estimated equilibrium. The second part addressing the third objective employs an EMP methodology advocated by Eichengreen, Rose and Wyplosz, and Jeisman. EMP and the degree of intervention (DI) indices are computed with the objective to assess the presence of intervention. Finally, the third part addressing the fourth objective applies wavelet tools to examine the presence of contagion and its associated duration. Findings suggest that the peg regime exhibited misalignment that did not worsen when compared to the period under floating. Thus rejecting the FERRM hypothesis that the misalignment worsens under peg. It concludes that the cost of switching policy regime is not detrimental to an economy, suggesting a sustainable peg. Work on the intervention indices unfolds the presence of consistent intervention suggesting “deliberateness” of exchange rate policy. Intervention is deemed commendable as long as it results in the tracking of ERER. The third part provides support to the establishment of contagion. There were evidences to suggest that the duration of contagion effects may have persisted up to two months before it is entirely abated. The lead-lag analysis concludes that Thailand’s currency market leads Malaysia. This study provides significance to the literature, both in terms of the sustainability of fixed regime and “deliberateness” of exchange rate management (ERM) in Malaysia. Contagion work contributes in terms of the identification of a duration benchmark for other studies. Methodologically, the wavelet analysis may contribute as an alternative to research on currency market contagion. Another contribution is manifested by virtue of it being one of the pioneering compilations of report examining exchange rate behaviour across regimes from the three major perspectives and its policy implication to enhance ASEAN exchange rate policy harmonization agenda.

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CHAPTER ONE

INTRODUCTION

This first chapter provides discussions on the background of this study. These include the preliminary explanations and justifications for this study, which provide direction towards a more extensive and analytical topics in the subsequent chapters. This chapter also presents the scope, significant contribution and the limitation of this research work.

1.1 Background of the Study

Exchange rate behavior analysis has been a perennial topic in international monetary economics (Clark & MacDonald, 1998). In particular, the role of exchange rates in the macroeconomic adjustment mechanism has been of central importance in various debates relating to economic development, growth strategies, and stabilization policies (Kemme & Roy, 2006). As a result, assessing the behaviour of exchange rate becomes an important responsibility of macroeconomic policymakers especially in the context of its critical influence on the sustainability and rate of growth of an economy.

The first branch of the exchange rate literature involves explaining the movements in nominal and real exchange rates relative to the relevant economic variables in the economy. Meanwhile, the other strand of literature focuses on examining the movements of exchange rates *vis-à-vis* its economic fundamentals and goes on to assess whether the currency is misaligned, either undervalued or overvalued. The latter branch of literature focuses on the assessment of equilibrium levels of exchange rates. It is in fact crucial to take heed of misalignment of the real exchange rate as it has been a source of serious economic distress for many developing countries over past decades (Edwards, 1988). Avoiding currency misalignment has long been urged for economies where there exist a large gap between the actual real exchange rate and some notion of equilibrium real exchange rate (Montiel & Hinkle, 1999).