

UNIVERSITI TEKNOLOGI MARA

**EXCHANGE RATE EXPOSURE
REFINEMENT APPROACH ON
LARGE NON-FINANCIAL FIRM'S
SHARE RETURN IN SELECTED
ASIAN COUNTRIES**

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ABSTRACT

The purpose of this study was to investigate the stylised exchange rate exposure among large non-financial firms on the selected Asian economies (Indonesia, Malaysia, Philippines, Thailand, Bangladesh, Pakistan, Sri Lanka and Vietnam). Other than relationship assumptions (symmetric, asymmetric and time varying), this study provided an insight how market thinness affects the efficiency of exchange rate exposure model. This study applied different types of methods namely the Autoregressive Distributed Lag (ARDL), the Nonlinear Autoregressive Distributed Lag (NARDL) and a time-varying coefficient approach with GARCH (1,1) specification. Additionally, the Dimson-Fowler-Rorke (DFR) method was applied to correct bias Ordinary Least Squares (OLS) market betas. The findings mainly support the exchange rate exposure theory indicating that exchange rate is one of important factors in decision-making policy. Even though, symmetric relationship assumption is still valid, examining the exposure from different approaches such as asymmetric and time varying is important to explain or weaken the exchange rate exposure puzzle. In addition, refinement in existing exchange rate exposure model at a certain extent has improved the efficiency of the existing exposure model. Furthermore, sample countries especially in Indonesia, Vietnam and Malaysia remained supported by an asymmetric exchange rate exposure with a positive exchange rate shocks (a weaker home currency) having a stronger effect on share returns, as compared to a negative exchange rate shocks (a stronger home currency). Furthermore, both symmetric and asymmetric analysis showed that a majority of the exposed firms had negative coefficients implying net-importers especially in emerging market. The results also supported the argument of multiple exchange rate movement exposure. Furthermore, there was evidence that some firms across sample countries tended to have bias market OLS betas. The alternative beta estimator (via the DFR's method) had appeared to reduce the bias OLS market betas, especially in the frontier market. Even though there were no significant result changes between the unadjusted and adjusted exchange rate exposure models except for symmetric approach, diagnostic tests revealed that the adjusted model tended to be more stable. Moreover, the results also showed evidence that the exchange rate exposure is time varying for most sampled countries, where the size and direction of the exposure coefficient also change over time. In addition, there is a significant number of exposed firms during the Global Financial Crisis (GFC) periods (2008-2010) implying the importance of macroeconomic shocks on exchange rate exposure among firms. Given the overall results, the study results provide evidence consistent with the good market theory indicating that exchange rate is one of important factors in decision-making policy. In addition, market characteristics such as thin trading at the certain extent affect the efficiency of the exchange rate exposure model suggesting that adjustment is needed especially in the segmented market in order to capture the true value of firm exchange rate exposure. Looking ahead, these moderate findings in selected Asian countries coupled with broadly supportive evidence specific to each market, should help policymakers, firms and investors to understand stylised exchange rate exposures in preparation for kick-starting the much-needed mitigation strategies. Moreover, researchers may develop or modify the exchange rate exposure models to suit various global markets in order to capture the stylised effects of exchange rate movements on share returns.

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