ABSTRACT

An Examination of the Foreign Exchange Markets in the Commonwealth Caribbean: A Case Study of Guyana, Jamaica and Trinidad and Tobago.

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The liberalisation of the markets for foreign exchange rates in Guyana, Jamaica and Trinidad and Tobago has sparked renewed interest in the relevance of existing theories of exchange rate determination to Caribbean economies. This thesis explores and analyses the foreign exchange markets in Guyana, Jamaica and Trinidad and Tobago during the post liberalisation period. It assesses them with a view towards developing a structural model of exchange rate determination.

The thesis examines the statistical properties of the daily Caribbean rates and outlines alternative definitions of exchange rate volatility. The results indicate that Caribbean daily rates display some measure of volatility. The presence of non-linearity in the daily exchange rates is confirmed by the BDS test. This non-linearity conforms to a GARCH(1,1) specification, although variants of the original ARCH process are also applicable to the daily data.

A structural model of exchange rate determination developed for the Caribbean is tested on a four-market model of the Trinidad and Tobago economy. This model formulation consists of twenty equations and can be adjusted to the specifics of the Guyanese and Jamaican economies. The results of the structural model fail to beat the time series exponential smoothing technique in an in-sample forecasting exercise. Shocks to export earnings, petroleum earnings and domestic credit result in an overall depreciation of the exchange rate.

Keywords: Nicole Smith; Exchange rate volatility; Structural model of exchange rate determination; Stability; Target zone.