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Characterizing exchange rate policy in East Asia: A reconsideration

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Abstract

Frankel and Wei [Frankel, J. A., & Wei, S.-J. (1994). Yen bloc or dollar bloc: Exchange rate policies of the East Asian economies. In I. Takatoshi & A. Krueger (Eds.), *Macroeconomic linkages*. Chicago: University of Chicago Press] developed and popularized a method for uncovering the implicit weights assigned to major international currencies constituting a currency basket. We extend the methodology in two dimensions: include regional competitive pressure and employ a vector autoregressive (VAR) model to overcome simultaneity bias. With these modifications, we confirm the prominent role of the US dollar in the exchange rate policy of East Asian economies beyond the short run. However, despite the high degree of commitment to nominal exchange rate stability prior to the crisis, fluctuations in most East Asian currencies are also significantly influenced by country specific shocks. The findings of the post-crisis period suggest that East Asian exchange rate regimes have become more diverse, with the crisis countries (except Malaysia) exercising even greater flexibility in their exchange rate management. Overall, there is weak evidence that the East Asian economies have been benchmarking their currencies towards regional competitors' currencies over the longer term.

JEL classification : F33; F41

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1. Introduction

The choice of exchange rate regime is a perennial issue in international finance. Indeed, the frequent occurrences of financial crises and speculative attacks on the adjustable peg system

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underscore the need for a judicious choice of a country's exchange rate regime. Various East Asian countries such as China, Korea, Malaysia, Thailand and Singapore are known to have ever pegged to or are currently targeting broad baskets of currencies,[1] not least because of their geographically diversified trade patterns. Under a basket peg system, the weights assigned to various currencies are usually not publicly announced and often subject to manipulation. In this paper, we investigate the exchange rate policy as practiced in East Asia.

In a seminal paper, Frankel and Wei (1994) developed and popularized a method of uncovering the implicit weights assigned to major international currencies that constitute the currency basket. Each weight picks up both the direct effect of the major currency on the East Asian currency as well as the indirect effect of the major currency via the regional currencies. This regression method has been applied to the East Asian countries and the weight assigned to the US dollar is found to be way above that for the yen. As a result, the region has been characterized as a ''dollar bloc'' rather than a ''yen bloc''. However, such *de facto* pegging of the regional currencies to the US dollar is blamed by some for contributing to the 1997 financial crisis by inviting excessive capital inflows and moral hazard problems (Frankel, 2003). Consequently, many economists have called for greater flexibility in the exchange rate movement of regional currencies (Fischer, 2001; Mishkin, 1999).

Although nominal exchange rates in East Asia are more flexible in the immediate aftermath of the crisis, the variability of their fluctuations has by now diminished to the pre-crisis level. According to McKinnon and Schnable (2004), many East Asian countries have returned to a dollar peg system, termed ''the East Asian Dollar Standard''. We note that the empirical evidence provided in both McKinnon and Schnable (2004) and Frankel and Wei (1994) are obtained by using high frequency data such as daily or weekly nominal exchange rates series. As such, their findings may not adequately describe longer-term exchange rate policy. After all, official intervention operations in the foreign exchange markets are typically carried out with the US dollar and this could affect the analysis involving high frequency data.

Moreover, preceding research that uses the Frankel and Wei's methodology tends to focus only on the major international currencies such as the US dollar, the German mark and the Japanese yen (see, *inter alia*, Baig, 2001; Kawai & Akiyama, 2000). In view of the intense competition amongst the East Asian economies, questions remain as to whether they have been benchmarking their currencies towards regional competitors' currencies and whether any shift in exchange rate policy has occurred following the crisis. The renewed focus on regional integration in trade and investment in recent years also highlight the need to explicitly consider regional currencies when determining East Asian exchange rate policy.

This paper attempts to characterize the exchange rate policy in East Asia by extending the Frankel and Wei methodology in the following two dimensions. First, in addition to the G3 currencies, we incorporate in the currency basket a measure that captures the competitive pressure in the third market from regional neighbors. We explicitly include regional competitors' currencies in the model in light of the export-orientated nature of East Asian economies and the real specter of competitive devaluation within the region. Second, in order to overcome simultaneity bias, we replace the regression model by a vector autoregressive (VAR) model that allows for endogenous interactions among the exchange rate variables.

[1] See Tan (2003) for a classification of the exchange rate arrangements in East Asia.