Foreign Exchange Exposure and Exchange Rate Arrangements in East Asia

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Summary

As recent international financial events have demonstrated, an exchange rate crisis can expand quickly into a broader financial and economic crisis. The rapid expansion of exchange rate crises beyond the foreign exchange markets reflects in part the importance of the exchange rate to the prospects and profitability of the business sector. Exchange rates affect profitability through many routes. First, they affect directly those firms with financial assets and liabilities (most notably debt) denominated in foreign currency and those firms with foreign operations. However, through their effect on foreign competition and domestic macroeconomic conditions, exchange rates also impact the profitability of firms with no nominal foreign exposure at all. Thus, a potentially wide range of firms could be exposed to movements in foreign exchange rates, regardless of their direct financial exposure.

This paper evaluates the extent of the foreign exchange exposure of firms in nine East Asian countries: Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. These countries differ in terms of their size, their participation in international trade and borrowing, their financial development, and – at times – their foreign exchange rate arrangements. For most of these countries, the 100 largest publicly traded firms are studied. For each firm, foreign exchange exposure is measured in terms of the sensitivity of the firm's equity price to fluctuations in the firm's home country exchange rate. The paper examines the overall exposure of the firms in each country, and then it describes how the extent of exposure has changed in these countries over the last dozen years. Finally, it examines whether the exposure appears to be linked to the exchange rate arrangements of the countries.

The paper presents three key findings. First, many East Asian firms show significant exposure to fluctuations in one or more of the four major currencies: the U.S. dollar, the deutschmark, the yen, and the pound. This finding contrasts with the results of past studies, most of which focus on large, industrialized countries. Such studies have documented little, if any, exchange rate exposure. Second, while the exposure has varied over time, it has not diminished over time. The most widespread exchange rate sensitivity (not just the most exchange rate fluctuation) occurred during the Asian Crisis period. This is evident even after accounting for local macroeconomic conditions that affect aggregate local returns. Finally, there appears to be no evidence that countries with exchange rates that are fixed against a single currency (as is usual) exhibit less exposure against the other major currencies.