EFFECTS OF EXCHANGE RATE CHANGES ON INVESTMENT:
A STUDY WITH U.S. FIRM LEVEL PANEL DATA

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ABSTRACT

In this paper I investigate the effects of exchange rate changes on firm investment through the export channel and imported input channel using U.S. manufacturing firm level data for 1998 ~ 2007. For this study, I create a ‘small’ sample, where the export ratio is ‘export to sales ratio’ obtained from financial statements, and a ‘large’ sample using industry level ‘export to shipment ratio’ as a proxy for the ‘export to sales ratio’. Considering the possible dynamic panel bias problem in the empirical model, I use the ‘difference’ GMM and the ‘system’ GMM for the econometric methods.

The findings of my study are as follows: appreciation (depreciation) of domestic currency reduces (increases) firm investment through the exports channel. Also appreciation (depreciation) of the domestic currency increases (reduces) firm investment through the imported input channel.

Firms with low markup rates are more sensitive in their investment responses to the movement in exchange rate changes both in terms of the exports channel and imported input channel.

Low cash flow firms are more sensitive in terms of investment responses to the exchange rate changes than high cash flow firms. Also smaller firms are more responsive in their investments to exchange rate changes than larger firms. The findings on the role of cash flow and
firm size indicate that U.S. firms are exposed to widespread financial constraints.

With regard to the role of leverage, overall estimation results imply that leverage does not affect the relationship between the exchange rate changes and firm investment.

In most of the results in this paper, the coefficients associated with the export channel are more significant than those of the imported input channel. This suggests that firms’ responses to the movement of exchange rates are more sensitive through the export channel than through the imported input channel.