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Multifractal Analysis of Asian Foreign Exchange Markets and Financial Crisis GABJIN OH, Chosun University, OKYU KWON, National Institute for Mathematical Sciences, WOO-SUNG JUNG, POSTECH — We analyze the multifractal spectra of daily foreign exchange rates for Japan, Hong-Kong, Korea, and Thailand with respect to the United States Dollar from 1991 to 2005. We find that the return time series show multifractal spectrum features for all four cases. To observe the effect of the Asian currency crisis, we also estimate the multifractal spectra of limited series before and after the crisis. We find that the Korean and Thai foreign exchange markets experienced a significant increase in multifractality compared to Hong-Kong and Japan. We also show that the multifractality is stronge related to the presence of high values of returns in the series.

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