Macroeconomic Shocks and the Foreign Exchange Risk Premiums

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April 2003

ABSTRACT

Using a nonlinear structural Vector Autoregression model based on the general no-arbitrage condition, we examine the empirical relation between macroeconomic shocks and the foreign exchange risk premiums. We find that when the predictable excess returns from currency speculation are interpreted as time-varying risk premiums, more than 80\% of its volatility can be accounted for by the same fundamental macroeconomic shocks that impact output and inflation. The result implies that the deviations from uncovered interest parity mainly reflect macroeconomic risks across countries. The paper also revisits the issue of exchange rate overshooting. We find that the foreign exchange risk premium increases significantly in response to an exogenous expansionary shock to the U.S. monetary policy. However there are large variations in the magnitude of the response of the risk premium across different states of the economy. The often observed "delayed overshooting" of the exchange rate occurs when the increase in the risk premium outweighs the decline in the interest rate. But if the response of the risk premium is smaller than that of the interest rate, the exchange rate will exhibit the standard overshooting behavior in response to the monetary shock.

KEYWORD: macroeconomic shocks; time-varying risk premiums; exchange rate overshooting; nonlinear VAR.

JEL CLASSIFICATION NUMBER: E44, F31, G12.