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Empirical Evidence From Regime-Switching Models

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Uncertainty and the Stability of Financial Markets in Open Economies

Empirical Evidence From Regime-Switching Models

This study contributes to the empirical modeling of asymmetric information in open economies. The focus lies on the stability of financial markets and the dynamics of asset prices within an unifying empirical framework that allows to study economies subject to discrete regime shifts. We employ non-linear econometric techniques which are capable both to acknowledge structural breaks and regime shifts induced by information problems and to explicitly incorporate the formation of expectations. These models will be employed as an encompassing framework since they prove flexible enough to be applied to a range of problems.

Under uncertainty, agents form expectations about the future course of policy. We employ the Markov-switching VAR model with regime-dependent impulse response functions to disentangle the detrimental effects underlying exchange rate credibility. Based on data for EMS countries it is shown that the dynamics interest rate differentials exhibit strong regime-dependent behavior.

Moreover, credibility and sovereign risk are subject to external shocks. Due to uncertainty the impact of external shocks varies over time. The determination of interest rate spreads for Latin American emerging market economies reveals a strong non-linear transmission of financial shocks among countries within a Markov-switching VAR model.

Not only the amount of information available to market participants matters for the stability of financial markets, but also its distribution among agents. To assess the empirical relevance of heterogeneous information sets, the present study employs the regime-switching model with time-varying transition probabilities to analyze currency crises in the EMS. It is shown that the distribution of information between investors contributes to the likelihood of crisis. The more heterogeneous the distribution of information is, the higher the danger of a currency crisis.

Moreover, this study provides evidence on the role of official crisis lending to emerging markets for the incentives international investors face. It is shown that the risk-return considerations of investors are affected by IMF crisis lending. Investors demand a lower price of risk in anticipation of IMF assistance. However, the effect is empirically weak. Likewise, it is shown that official efforts towards private sector involvement into the resolution of sovereign financial crises raise the price of risk required by investors and, thus, are effective in solving the moral hazard problem.

Finally, the study draws upon the empirical results and derives selective policy implications.