Credit-Based Early Warning Indicators of Banking Crises in Emerging Markets

Adam Gersl, Joint Vienna Institute; Martina Jasova, Charles University in Prague[1]

Abstract: This article explores the role of credit-based variables as early warning indicators (EWIs) of banking crises in the context of emerging economies. We collect data on bank and total credit to private sector in emerging markets and evaluate the signalling performance by using the area under the receiver operating characteristics (ROC) curve (AUC). Our results show that nominal credit growth and the change in credit-to-GDP ratio have the best signalling properties and significantly outperform the credit-to-GDP gap in almost all specifications for policy-relevant horizons. These findings are in stark contrast with the results on advanced economies where the credit-to-GDP gap is the single best performing EWI. Our results emphasize the importance of caution when applying statistical methods calibrated for advanced markets to emerging economies.

Keywords: early warning indicators; macroprudential policy; banking crises; credit growth