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

Adam Gersl, Joint Vienna Institute; Martina Jasova, Charles University in Prague¹

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

⁻

¹ Contact: adam.gersl@gmail.com. The authors thank Jan Babecky, Mariarosaria Comunale, Petr Jakubik, Christian Schmieder, participants at the CNB-IES Conference Challenges for Financial Stability in Europe, Prague, Oct 6-7, 2016, and two anonymous referees for useful comments. The study was supported by the Grant Agency of the Czech Republic P402/12/G097. Usual disclaimers apply.