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### ACCEPTED MANUSCRIPT

# Identifying excessive credit growth and leverage

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#### Abstract

Unsustainable credit developments lead to the build-up of systemic risks to financial stability. While this is an accepted truth, how to assess whether risks are getting out of hand remains a challenge. To identify excessive credit growth and aggregate leverage we propose an early warning system, which aims at predicting banking crises. In particular, we use a modern classification tree ensemble technique, the "Random Forest", and include (global) credit as well as real estate variables as predictors.

**Keywords:** Early Warning Systems, Banking Crises, Credit, Macroprudential Policy, Decision Trees. **JEL Classification** C40 · G01 · E44 · E61 · G21.

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