How to predict financial stress? An assessment of Markov switching models, by Thibaut Duprey and Benjamin Klaus

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Summary

- Goal: study drivers (early warnings) of financial market stress
- Methodology: estimate a Markov Switching (MS) model
- Model setup:
  - Country Level Index of Financial Stress: two regimes
  - Prob. of transition depends on exogenous variables.
- Estimate model using data in 15 EU countries;
- Findings:
  1. parameters affect prob. from L to H
     - debt service ratio
     - property price-to-rent ratio
     - property price growth
  2. parameters affect prob. from H to L
     - credit-to-GDP ratio
     - economic confidence index
  3. one caveat: results driven by Global Financial Crisis sample
  4. MS model outperforms binary early warning model

Comments and Questions

- Interesting and important paper
- Questions and comments
    1. General comments: provide more explanations on results
        - theoretical work on the sign of parameters (?)
        - interpretation of results
    2. One result on the prob. from L to H
        - Higher property price deceases prob.
        - Higher property-to-rent ratio increases prob.
    3. Parameters on the prob. from H to L are not robust
        - hard to predict when will exit from crisis?