Comments on: Can We Predict the Next Capital Account Crisis?

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Aim of the paper

- The title says it all…
- The authors also aim to establish a pecking order of the reliability of many potential indicators
- They also wish to distinguish between the performance of their approach in- and out-of-sample

Methodology

- Use of Binary Classification Trees (BCTs)
- BCTs filter the data through various successive (ad-hoc) threshholds and groups the data into buckets of **high** and **low** probability of crisis
- The choice of the pecking order (i.e., what criteria comes first) can vary
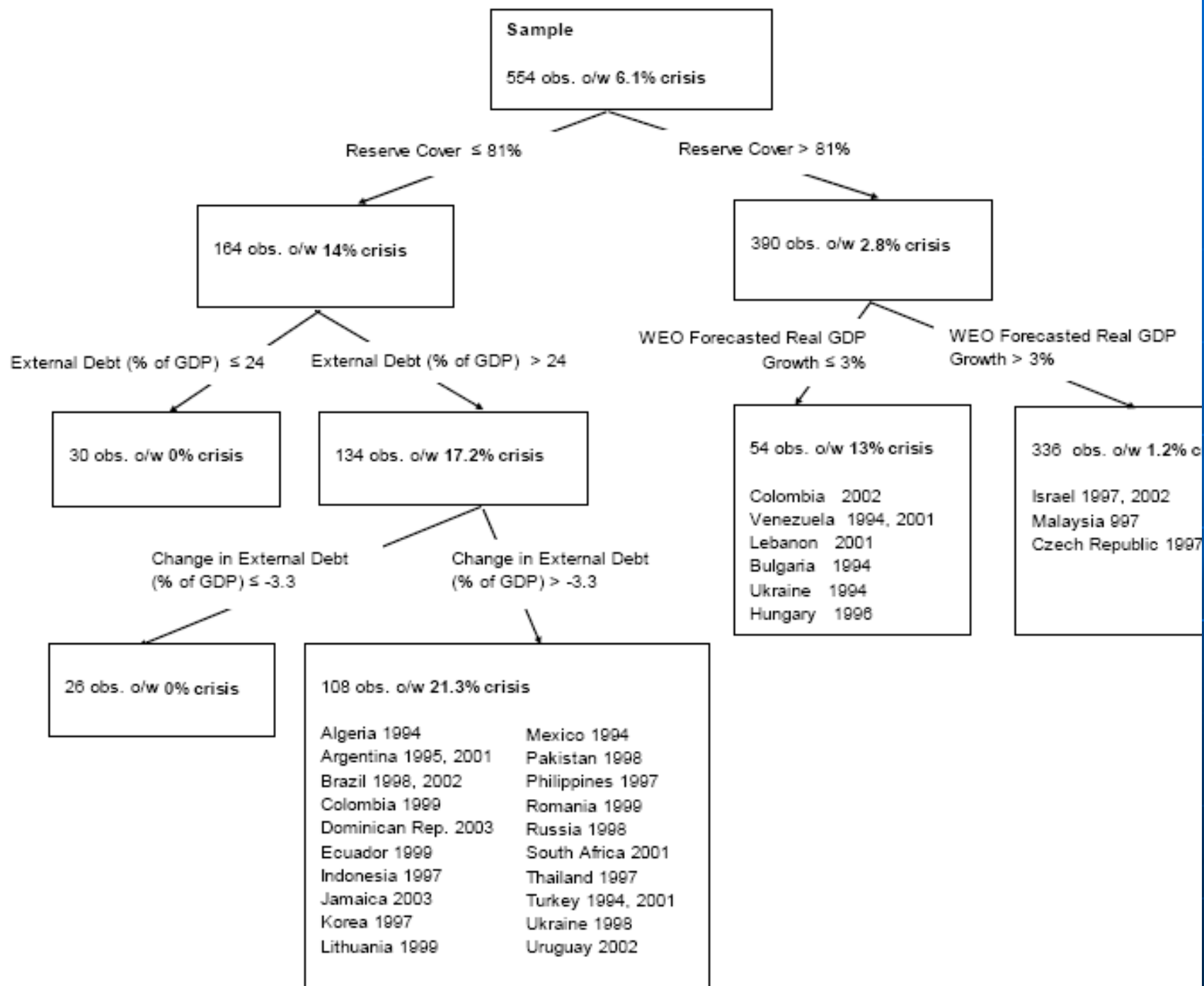
Methodology

- I like the main idea of applying BCTs to assess crises probabilities—so my main comments will focus robustness checks to vary the algorithm—more on that later.

- Clearly, the exercise must start out by defining what a capital account crisis is (this is **not** a trivial issue)—more on this later.

Methodology: Crisis definition

- The authors focus on capital account reversals—or a close relative of what Guillermo Calvo has dubbed sudden stops

- Yet, we are all aware that crises come in many shapes and forms (banking, debt, exchange rate, etc. (as shown in Appendix Table 1)—more on this later

Data: 1995-2005, 37 crises, 49 countries

- Table 1. Capital account crisis episodes by year of inception
- Year Countries
- 1994 Algeria Bulgaria Mexico Turkey Ukraine Venezuela
- 1995 Argentina
- 1996 Hungary
- 1997 Czech
- Republic Indonesia Israel Korea Malaysia Philippines Thailand
- 1998 Brazil Pakistan Russia Ukraine
- 1999 Colombia Ecuador Lithuania Romania
- 2000
- 2001 Argentina Lebanon South
- Africa Turkey Venezuela
- 2002 Brazil Colombia Israel Uruguay
- 2003 Dominican
- Republic Jamaica
- 2004
- 2005

Main findings

- The BCT approach yields a better track record than other EWS models in both not missing crises and generating fewer "false alarms"
- Solid, if somewhat mixed, out-of-sample performance
- Three indicators top the charts in terms of their predictive power—these are:

Top performers

- Reserve coverage (relative to maturing debt and the current account)
- External debt (to GDP)
- Current account deficit as a percent of GDP
- External demand factors help but do less well

However…

Main comments

- The approach taken and the results shown in the paper are **mostly** quite intuitive. But, these are driven by a series of ad hoc assumptions on the specification of the BCT

- I will review some of these key assumptions

Crisis definition

- Capital account reversals do **not** always signal a crisis—Malaysia in early 1994 and Chile in 1990-91 had major reversals owing to the voluntary introduction of controls on capital inflows

- Some crises do not always entail a major capital account reversal– especially if these occur at the trough of the international capital flow cycle (see Kaminsky, Reinhart, and Vegh)

Crisis definition (concluded)

- Is the capital account reversal accompanied by default or a banking crisis? The authors may want to be more explicit which of the crises definitions in Appendix Table 1 was central.

- A "composite crisis" is bound to be more severe (Israel 2002 is not Argentina 2001)—when evaluating the performance of the model the authors may wish to disaggregate countries into milder and severe crises groups

The indicators

- Much emphasis is placed (both in the design of the BCT algorithm and in the discussion of results) on the key role played by external debt (to GDP)

- But, beware of domestic debt also!
  - The Mexican Tesobonos and Brazil's dollar- and interest rate-linked debt were at the heart of the crises studied here

The indicators

- The "Surprise Element" plays a big role in the severity of the crisis (and the potential magnitude of the reversal of flows)– the indicators selected in the paper (rightly) focus on what is wrong in the country.
- But, what about what is "too right"?
- Are spreads suspiciously low?
- Are price-earning ratios historically lofty?
- Speaking of surprises, where is overvaluation?

The indicators

- The "global" indicators used focus on growth in trading partners and terms-of-trade—but these lack a "capital account" dimension.

- For example, what about the availability of foreign bank lending or the demand for high-yield bonds in the center countries.
  - These variables may not be country-specific but some are certainly region-specific (i.e., Japanese bank lending to emerging Asia in the mid-1990s)

The thresholds in the BCT

- Are the thresholds really **common** for all countries?

- A comfortable reserve backing for highly dollarized Uruguay or Lebanon should be a priori higher than for India or South Africa.

- In the same vein, is the external debt threshold of 24% the same for a seven-time defaulter as for a country with no adverse credit history?

The thresholds in the BCT

- A 3 percent GDP WEO growth forecast may be viewed as low by some Asian economies—but it would be a boom by the dismal Latin American performance

- To sum up, some sensitivity analysis on the threshold levels and how these may vary across country types can address these and other similar questions

I enjoyed reading this paper very much.

To the authors I say that in line with my ever-cheerful interpretation of economic history, I expect you will get your wish to find out if:

"**Can We Predict the Next Capital Account Crisis**?"

After all, as Kindelberger noted in his classic book…

 "*financial crises are a hardy perennial*"