Sovereign Bond Restructuring: Flexibility vs. Commitment

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The paper in one slide

What the paper is about

- change in restructuring risk vs. sovereign bond prices
- empirics focus on UK court's decision Azevedo vs. Imcopa
- model that fits data and leads to testable predictions

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- court cases as interesting laboratory to study various economic mechanisms
- particular case not studied systematically in academic literature...
- ... but courts well aware of economic mechanisms potentially at play...

Excerpt #1 from the court of appeal's decision

A company which faces financial difficulties, even in less severe circumstances than existed in 2008 and since then, may need to secure the agreement of various classes of creditors if it is to be able to survive despite not being able to comply to the letter with the terms of its debt obligations. It is likely to have some creditors who are banks, whether individually or on a syndicated basis, and it may well have others who are the holders of bonds or notes. These classes differ in a number of material respects. One is that the members of a syndicate of banks know what other banks are in the syndicate and they are likely to be able to collaborate (if they wish to) on an informed basis, in order to maximise their bargaining power. By contrast, the members of a class of bond or note holders will not know who the other members of the class are, and will not be able to collaborate with each other or to take decisions as to what would be in their own best interests on an informed basis as to the attitude of other members of the class. They are faced with a version of the **so-called Prisoner's Dilemma**. This arises in a situation in which two prisoners are being interrogated separately, neither knowing what the other will say or has said. Each is unable to tell how the other's conduct may affect his own position and therefore what conduct would be in his own best interests.

Excerpt #2 from the court of appeal's decision

Another graphic description of the uncertainty faced by an individual voter in this situation is called the **Trembling Hand Perfect Nash equilibrium**, as discussed in an article "Do Bondholders Lose from Junk Bond Covenant Changes?", by Marcel Kahan and Bruce Tuckman, Journal of Business (University of Chicago Press) October 1993 vol 66 page 499. (Neither this article nor that mentioned at paragraph [30] above was cited to us; neither affects my reasoning or my conclusion so I did not consider it necessary to invite submissions from Counsel about either.)

Empirics

Outcome variables

- bond spreads to swaps are a "fine" measure of $\lambda \times (1 - \text{haircut})$
- bond yields are NOT! (ccy and maturity-time FE help)
- suggestion 1: remove all empirics featuring bond yields
- suggestion 2: add empirics focused on reaction of sovereign CDS
- how are local ccy bond spreads measured? synthetic $ spreads?

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Azevedo vs Imcopa (May 30, 2012)

- decision about corporate debt restructuring, NOT sovereign debt
- empirical evidence that it affects spreads in corporate credit markets?
- can we see more direct evidence of the importance of this decision for sovereign spreads? (sell-side research reports for e.g.?)

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Sample period / set of events

- paper: May 2012 until Oct 2014 (to encapsulate additional events)
- suggestion 1: use shorter time-period around decision in baseline
- suggestion 2: additional events (appeal decision in Azevedo for e.g.)

Theory vs. Data

Data vs. model mapping

- Why do we map UK-law bonds (data) into “rigid” bonds (model)?
  - Consent payments quite common – are UK-law bonds that “rigid”?
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  - local ccy bonds have very different investor base
  - local ccy bonds exposed to very different types of risks
    - soft default via inflation
    - local ccy credit spreads $<$ hard ccy credit spreads: selective defaults/capital controls, quanto risk (Du & Schreger (2016))

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- If focus is EM sovereign debt, why include European countries? (specially given time period)

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- Dynamic model: more subtle analysis since $\uparrow$ in haircut means
  - $\downarrow$ future bond recovery rate;
  - $\downarrow$ debt-to-GDP default boundary
  - $\Rightarrow\downarrow$ current bond prices and $\uparrow$ credit spreads...

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- Dynamic model: with choice of 2 types of debt...
  - bang-bang choice of debt type with risk-neutral sovereign
  - joint issuance of both debt types with risk-averse sovereign

Dynamic models' sensitivity to h

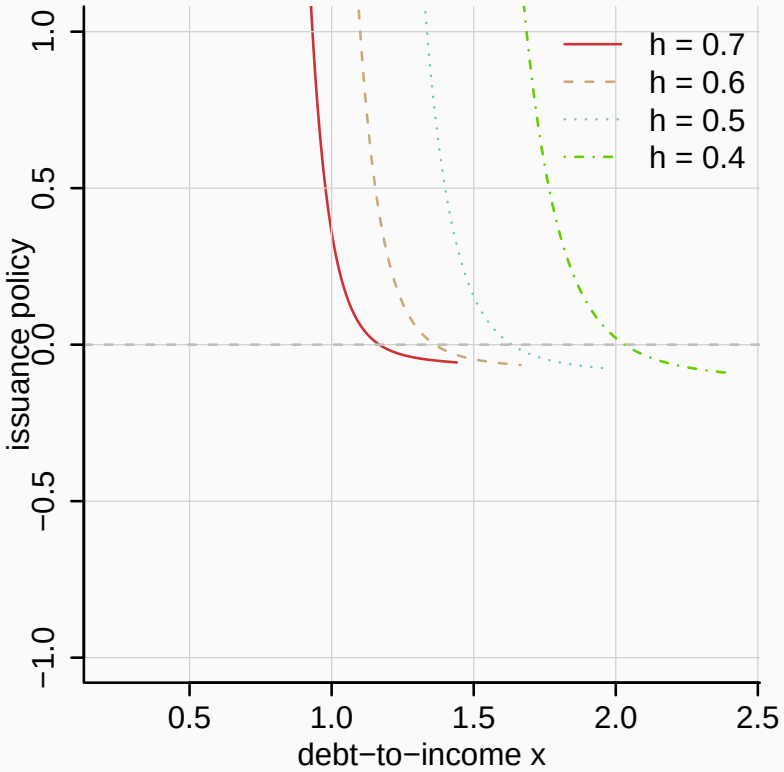

Figure 1: debt issuance vs. debt-to-GDP

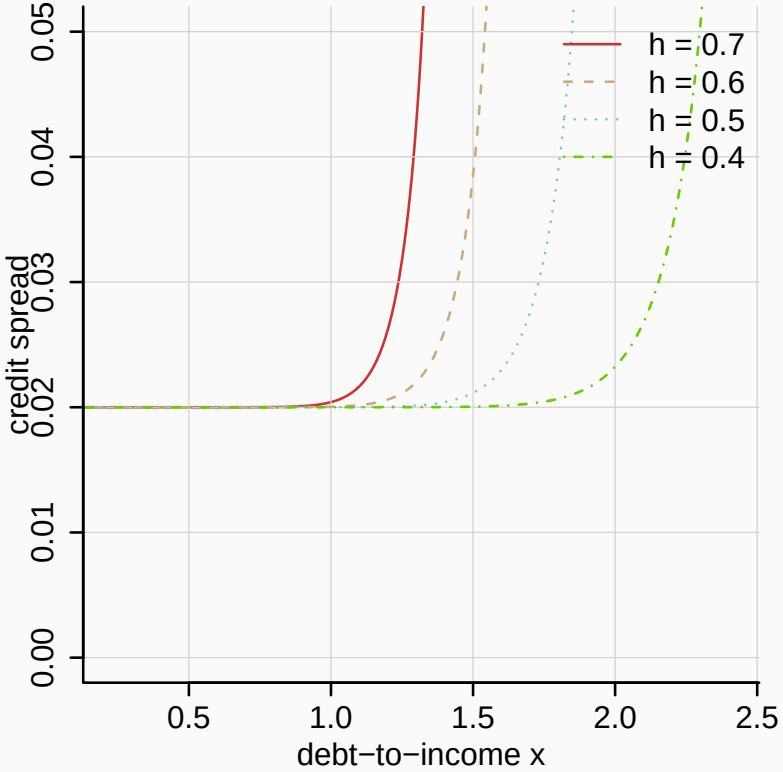

Figure 2: credit spread vs. debt-to-GDP

Dynamic models' sensitivity to *h*

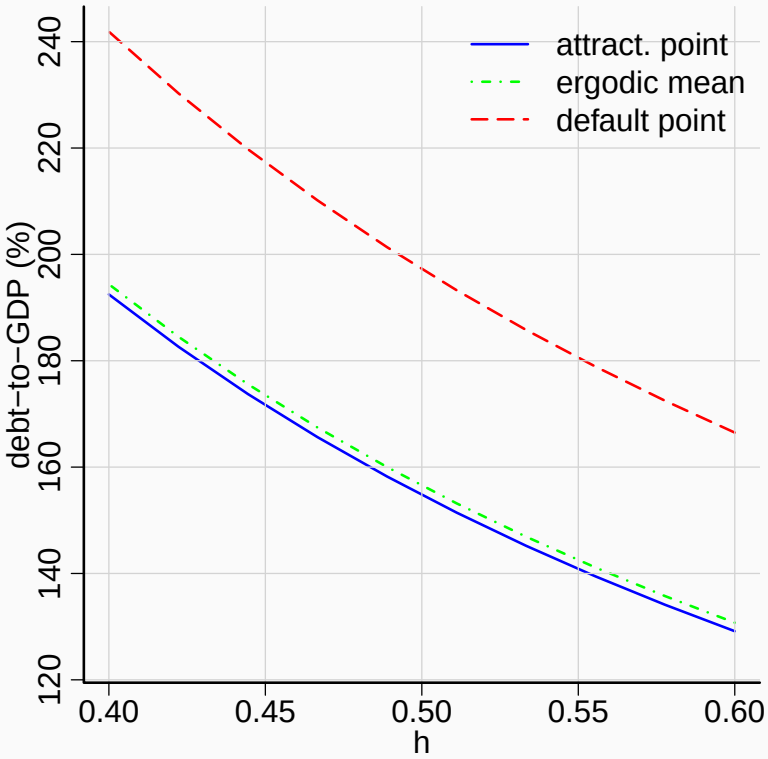

Figure 3: debt-to-GDP vs. *h*

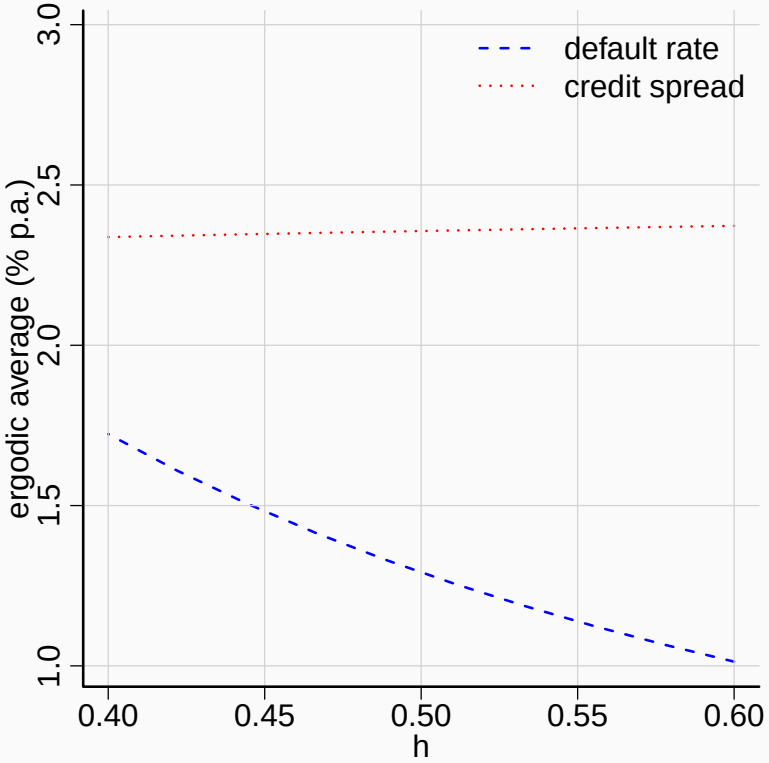

Figure 4: spreads and default rate vs. *h*