# Sovereign Default and Government Reputation by S. Fourakis

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#### The want operator

#### A **theory** that

- reminds you of how people outside the model talk about sovereign risk
   ... Reinhart, Rogoff & Savastano (2003): countries differ in their 'debt tolerance'
- · features information and inference about sovereign default
  - ... Hamilton: assume the states' debts and pay them to ensure better terms
- · does not rely on failures of rationality or optimization
  - ... Discipline: agents apply Bayes' rule on equilibrium strategies

# Reputation and sovereign risk

## Standard model of sovereign debt, default, renegotiation

- · Two types for the government
  - One of them will face better borrowing terms ...call it a responsible type
    - ... Signalling target for the other type
  - Both types optimize
    - ... Responsible wants to separate, Irresponsible wants to pool
  - · Reputation is the *investors*' belief that the government is responsible
- Types alternate, information never revealed
  - ...  $0 < \underline{\pi} \le \text{Reputation} \le \bar{\pi} < 1$
- · Preference shocks everywhere, no observation is perfectly revealing
  - ... Reputation is a continuous variable
  - ... Cannot fully separate, cannot fully pool

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# Choosing the types

#### Who pretends to be which type?

- · Size of past haircut
  - ... does not affect spreads in first three years
  - ... correlates with higher spreads later on
- Higher  $\beta$  with higher cost of default
- → debt paths do not cross
- → debt choice reveals type

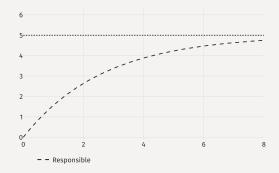
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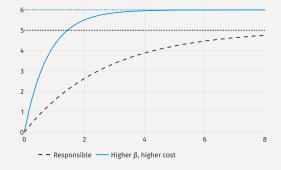
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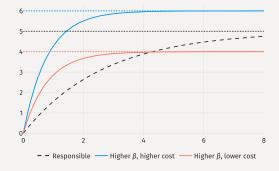
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Reputation

Theory

# Models with types

#### **Rational expectations**

- · If I want to convince you that I am of type au, type au must have a prior probability
- Need to think about each type's behavior
- · Signalling style is a hybrid of two polar styles

#### Political economy

- Alternating protagonists
- Full information
- Observe when the type changes
  - · Elections natural counterpart
- Evaluate other type's strategy with owr preferences

#### Game theory

- Multitude of behavioral types
- Prior > 0 but do not try to separate
- · One rational type (protagonist)
- · Often rely on announcements
- · Who to include?
  - ... lower types to separate
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**Applications** 

# How to do transparency?

- Evaluation of transparency initiatives
  - ... through making the types common knowledge
- Both types worse off!
  - $\cdot$  No confusion between types  $\implies$  Irresponsible cannot enjoy low spreads
  - $\cdot$  Debt dilution with perfect info  $\implies$  separation curbs overborrowing
- Model has a more direct way to do this
  - Just reduce the variance of preference shocks
  - Lower cover means:
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    - ... higher incentives to mimic
  - · Often reputation models have a discontinuity at zero reputation
    - ... Here Reputation  $\geq \pi > 0$ ...

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#### How to do fiscal rules?

If fiscal rules disrupt signalling motives, they could lead to higher borrowing!

· Different angle for the reputationally-minded

Game Theory style (blueprint from Kostadinov & Roldán, 2023)

- · Conceptualize fiscal rules as b'(b,z), proliferate behavioral types
- Add preference or control shocks
- $\cdot$  Announce optimally one type/rule. Take limit as probability of rational to 1
- · How closely does the rational type mimic the rule? measure of credibility
- Tradeoff between literal promise and credibility

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# Concluding remarks

- Fantastic work pushing the boundary on a first-order question ... Should there be an extra state in sovereign debt models?
- · Smart reinterpretation of elements in the literature
  - ... Especially on the data front to determine the types
- · Nascent literature on applications of reputation in macro
  - ... many open questions:
    - ... Loose reputations?
    - ... Global reputations?