

Discussion of
Sovereign Default and Government Reputation
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IMF

Fiscal Policy in an Era of High Debt
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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
 - ... $0 < \underline{\pi} \leq \text{Reputation} \leq \bar{\pi} < 1$
- 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?

Evidence on **spreads** after countries recover market access

- Size of past **haircut**
 - ... does not affect spreads in first three years
 - ... correlates with higher spreads later on
- Higher β with higher **cost** of default
 - ⇒ debt paths do not cross
 - ⇒ debt choice reveals **type**

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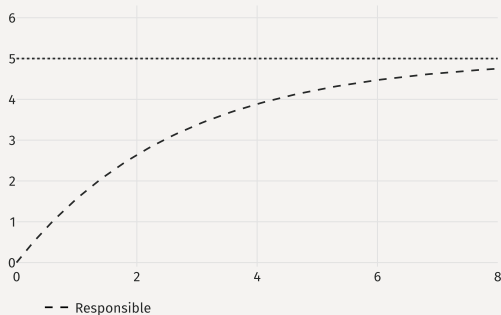
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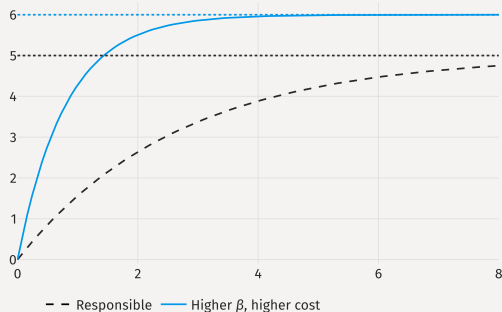


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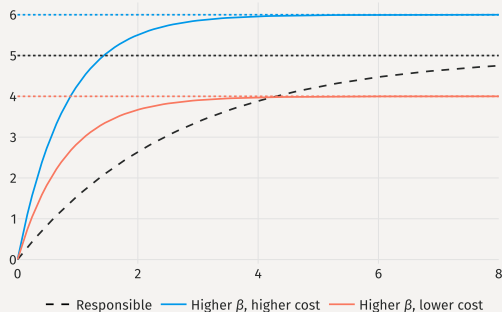


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Reputation: Theory

Models with types

Rational expectations

- If I want to **convince** you that I am of type τ , type τ 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 own 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
 - ... higher types to disguise

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Reputation: Applications

How to do transparency

- Evaluation of **transparency** initiatives
 - ... through making the types common knowledge
- **Both** types worse off!
 - No confusion between types \implies Irresponsible cannot enjoy low spreads
 - 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:
 - ... actions are more revealing
 - ... higher incentives to mimic
 - Often reputation models have a **discontinuity** at zero reputation
 - ... Here $Reputation \geq \underline{\pi} > 0$...

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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
- 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

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- 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?