

**Discussion of  
Sublet (2023) “The Optimal Degree of  
Discretion in Fiscal Policy”**

**Alessandro Dovis**  
U Penn and NBER

IMF/ECB Workshop on Fiscal Policy and Sovereign Debt  
April 2024

## Context

- Governments over-borrow relative to social preferences
  - Political economy
  - Free-rider problem in fiscal and monetary unions
- **Design fiscal rules to align gov'ts incentives with society**
- Delegation approach:
  - Society can restrict policies that can be chosen by gov'ts
  - No transfers but punishments (money burning)
  - Trade-off commitment vs. flexibility
- Assumption: Society can somehow commit to enforcing rule

## Delegation problem

$$\max_{\mathbf{b}(\theta), P(\theta)} \int [\theta U(\mathbf{y} + \mathbf{b}(\theta)) + V(\mathbf{b}(\theta)) - \rho P(\theta)] f(\theta) d\theta$$

subject to

$$\theta U(\mathbf{y} + \mathbf{b}(\theta)) + \beta V(\mathbf{b}(\theta)) - P(\theta) \geq \theta U(\mathbf{y} + \mathbf{b}(\theta')) + \beta V(\mathbf{b}(\theta')) - P(\theta')$$

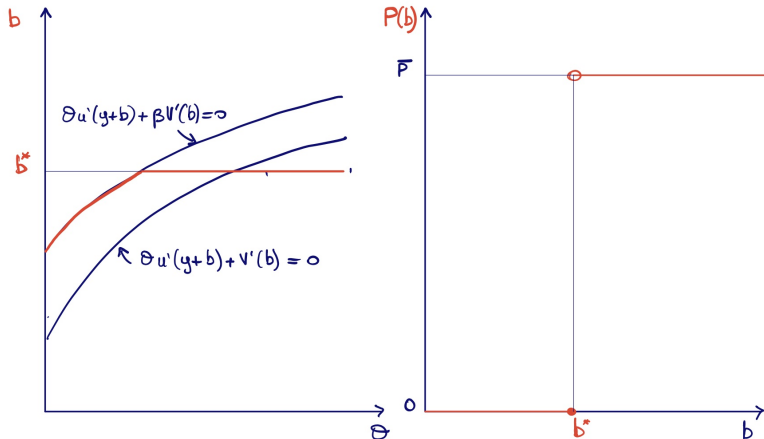
$$U(\mathbf{y} + \mathbf{b}(\theta)) + \beta V(\mathbf{b}(\theta)) - P(\theta) \geq \max_{\mathbf{b}} \theta U(\mathbf{y} + \mathbf{b}) + \beta V(\mathbf{b}) - \bar{P} \quad \forall \theta$$

$$0 \leq P(\theta) \leq \bar{P}$$

- Standard assumption:  $\rho = 1$
- This paper allows for  $\rho \neq 1$

## Standard policy lesson

- Under sufficient conditions, optimal rule has
  - Cap on debt,  $b \leq b^*$
  - Maximally enforced penalty

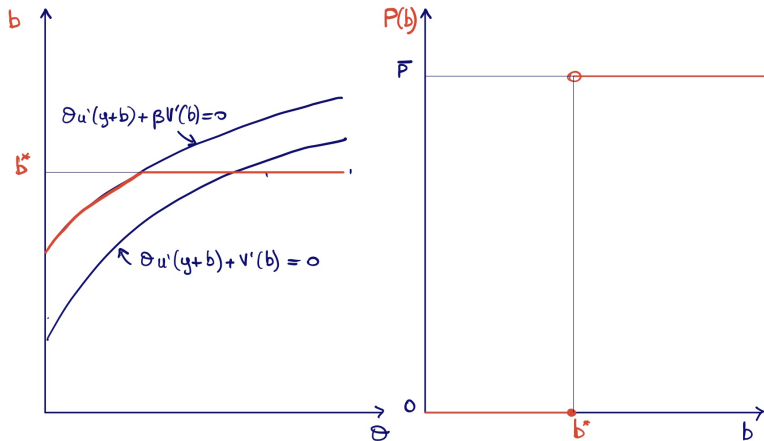


## This paper's contribution

- Clarify when cap+maximally enforced penalty optimal
- **It depends on tail of distribution for  $\theta$**

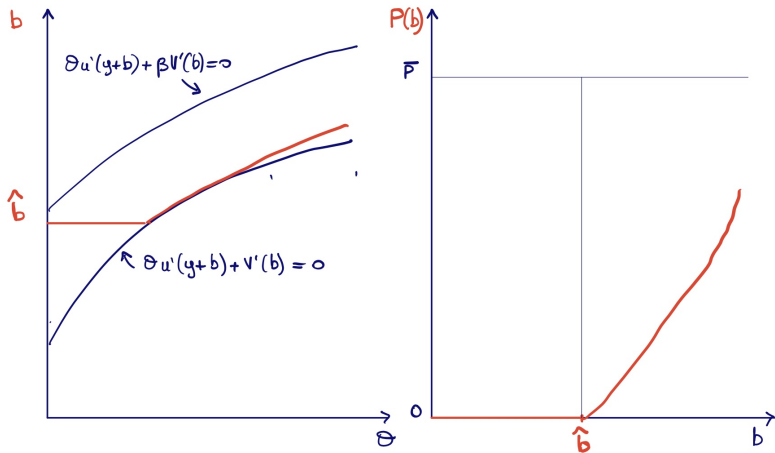
## This paper's contribution

- Clarify when cap+maximally enforced penalty optimal
- **It depends on tail of distribution for  $\theta$**
- If tail is thin  $\Rightarrow$  cap+maximally enforced penalty optimal



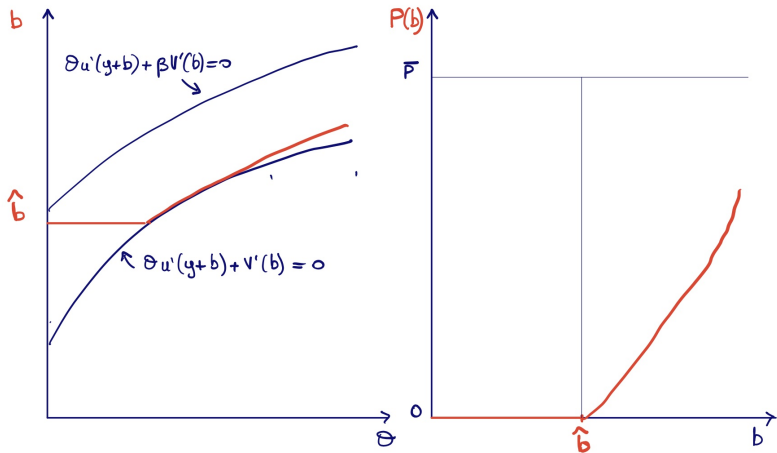
## This paper's contribution

- Clarify when cap+maximally enforced penalty optimal
- **If tail is fat  $\Rightarrow$  penalty is continuous**



## This paper's contribution

- Clarify when cap+maximally enforced penalty optimal
- **If tail is fat  $\Rightarrow$  penalty is continuous**



Back-of-envelope calculation for eurozone: suggestive of fat tail



## Outline of my discussion

- General comments about the approach
  - Source of the bias
  - How can commit to penalties?
- Interpreting estimate of tail parameters in eurozone
  - Fiscal needs or perceived pr of bailout?
  - Fiscal needs or time-varying bias?

## What is the source of the bias $\beta$ ?

- Preferences
  - Policy-maker/government:  $\theta u(y + b) + \beta V(b)$
  - Society:  $\theta u(y + b) + V(b)$
- Bias,  $\beta \neq 1$ , because
  - Literal interpretation: hyperbolic discounting
  - Political economy friction
  - Time-inconsistency problem
  - Free-rider problem (soft budget constraint)
- Matters because in last two cases bias arises from inability to commit
  - For example inability to commit to no-bailout (local) governments
- How can then commit to penalties?

## Credibility of rules

- How to write rules that incentivize
  - Policy-makers (local gov'ts)
  - Institutions oversee the rule (central gov't) to enforce rule
- Potential solution:
  - Reputation model
  - There exists one type of central gov't that enforce rule for sure
  - Other type wants to develop reputation to enforce rule
- DAVIS-KIRPALANI (2021,22) study this problem  
Also
  - Kostadinov-Roldan (2023)
  - Bocola-Chaumont-Davis-Kirpalani in progress for CB's mandate when gov't can take independence away
- Alternative: Riboni-Piguillem (2020)

## Dovis-Kirpalani, AER

- Bias arises because possibility of bailouts from central gov't
  - E.g. SGP
- Two policies
  - No-bailout clauses
  - Enforcing fiscal rules
- **When reputation is low** (low pr of commitment type),  
**Tighter fiscal rules can incentivize fiscal indiscipline:**
  - **Rules increase cost of maintaining good reputation**
  - With binding rules type of the central gov't is revealed earlier
  - Early revelation reduces cost of issuing debt for local gov'ts
  - Account for large debt issuance once SGP not enforced after Germany and France violated it

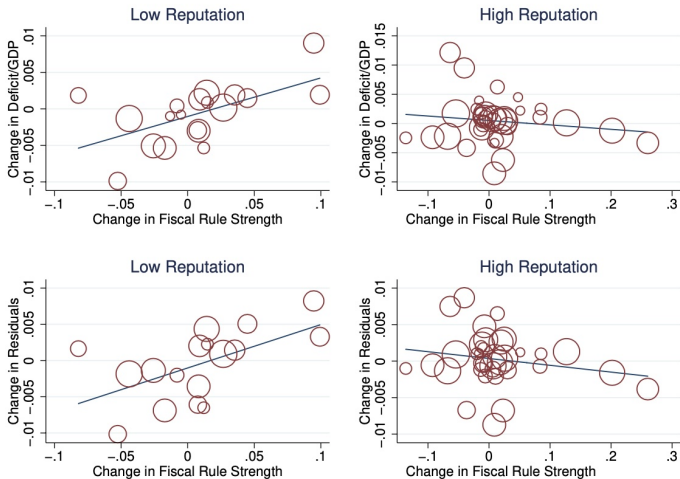


FIGURE 1. CHANGES IN FISCAL RULE STRENGTH AND PRIMARY DEFICITS

*Note:* The size of the circles corresponds to the average length of the regime across the two consecutive regimes considered. The countries are Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, and the United Kingdom. The countries with observations below the 15th percentile of reputation are Czechia, Estonia, Greece, Italy, Latvia, and Poland. The countries with observations above the 50th percentile of reputation are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands, Spain, Sweden, and the United Kingdom.

## Dovis-Kirpalani, RESTUD

- Study optimal rule design in abstract economy

If reputation low:

- More lenient rules to preserve reputation
  - Most stringent rule that will be followed by optimizing type
  - Uncertainty about policy maker's type beneficial
- Transparent rules optimal
  - Ability to monitor policy makers supports better outcomes

If reputation high:

- Opaque rules optimal
  - Want rules hard to monitor (hard to detect deviation)
  - Preserve uncertainty w/out static losses associated w/ leniency

## Merge two approaches

- Emphasize should be on credibility
  - In particular if bias arises from lack of commitment/free rider problem
  - As in the case of a fiscal/monetary union
- May be fruitful to merge two approaches
  - Maybe more discretion and low penalties to make rule credible
  - More discretion can be way to have opaque rules

## How to interpret result from eurozone?

- Assumption: Gov'ts have full discretion
- But SGP was present
- Never enforced despite deviations
- So maybe good assumption to ignore SGP
- But then why believe new rule is going to be credible?



## Fiscal needs or bailout expectations?

Spse uncertainty about debt mutualization:

$$\max_b \theta u(y + b) + \beta(1 - \gamma)u(y - b) + \beta\gamma u(y - B)$$

- $\gamma = \text{Pr of bailout/mutualization}$
- $\sum_i \frac{1}{N} b_i = \text{Total debt in fiscal union}$

Optimal debt issuance (full discretion)

$$\theta u'(y + b) = \beta(1 - \gamma)u'(y - b) + \beta\gamma \frac{1}{N} u'(y - B)$$

as  $N \rightarrow \infty$  we have

$$\theta u'(y + b) = \beta(1 - \gamma)u'(y - b)$$

- Identify  $\hat{\theta} = \theta / (1 - \gamma)$
- If  $\gamma \uparrow \Rightarrow \hat{\theta} \uparrow$  but want tighter limits not more flexibility

## Fiscal needs or time-varying bias?

Spse there are two parties/factions with preferences

$$U(b, z, \theta) = \theta u(y + b) + \beta z u(y - b)$$

Society's preferences

$$\theta u(y + b) + u(y - b)$$

- $z_i$  = faction's preferences, time-varying bias; spse  $E(z) = 1$
- DAVIS-KIRPALANI-SUBLET in progress

Optimal debt issuance (full discretion)

$$\theta u'(y + b) = \beta z u'(y - b)$$

- Identify  $\hat{\theta} = \theta/z$
- If  $z \downarrow \Rightarrow \hat{\theta} \uparrow$  but want tighter limits not more flexibility

## Conclusion

- Important paper clarifying when simple cap with maximally enforced penalties are *not* optimal
- If distribution of fiscal needs has fat tail then optimal rule has continuous penalties
- Evidence about fat tail in eurozone: treat it as back-of-envelope calculation
- Future work:
  - Understand role of rules credibility and how it affects how much discretion to leave to policy-makers