

Discussion of  
**A Theory of International Official Lending**  
by Q. Liu, Z. Liu, and V. Yue

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IMF

Fiscal Policy and Sovereign Debt  
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# The *want* operator

This paper seeks a **theory** which

- rationalizes the **seniority** structure of sovereign debt
  - ... marketable debts: can default, high recovery
  - ... official bilateral (**Paris Club**) debt: can default, low recovery
  - ... multilateral debt: cannot default
- relates seniority to **information** and monitoring
  - ... official bilaterals provide debt relief in “justified” defaults
- helps understand and/or design the sovereign debt **architecture**

## Main result

- Market + PC + IMF decentralizes a constrained-optimal allocation
  - ... Constraints from information frictions + moral hazard

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## How it works

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# Decentralization

## Constrained-optimal allocation

- State variable: promised utility  $v$
- Goods  $c(v), m(v)$  at utility  $v$
- Values  $v^{z,s}(v)$  after TFP  $z$ , signal  $s$   
...  $v^{H,s}(v)$  constant
- Constraints
  - ... *PK*: deliver  $v$  at state  $v$
  - ... *IC*: no gambling for  $A_H$
  - ... *SUST*: no reverting to autarky
  - ... *P*: non-negative profits
- Timing is key!
  - can cheat before seeing type (*IC*)
  - can cheat and not export (*SUST*)
  - cannot cheat after seeing type

## Equilibrium with three types of debt

- Taxes to control consumption
- Three types of debt  
... to generate three cont. values
- Multilateral  
... undefaultable
- Bilateral  
... reduction when  $z = s = L$
- Market  
... defaultable (gov't choice after  $s$ )  
... when *SUST* binds
- Dynamics:  $v^H(v) > v \leq v^{L,s}(v)$
- Gov't and lenders share  $\beta$

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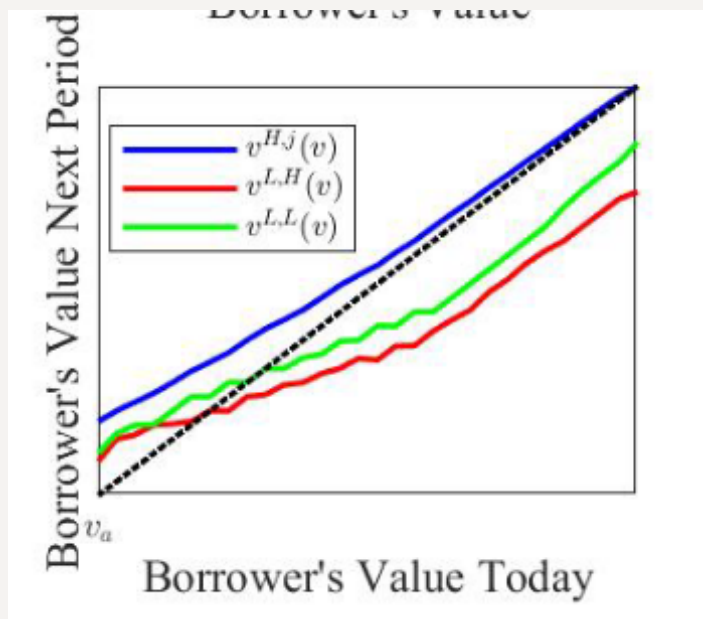
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## Three and a Half Comparisons

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# Efficient Sovereign Default

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- Setup reminiscent of Dovis (2019)
  - ... plus the **signals**
- Critical difference in timing: choose action **after** observing type
  - ... or TFP shock affects the consumption good rather than exports
- **Revelation** principle: gov't reports  $A$ , planner allocates subject to  $IC, SUST, PK, P$
- Decentralize with short debt and consol
- Can give  $m^*$  because when  $v$  is large, the country wants to keep going
  - ... here it is always tempting to **gamble**
  - ... **empirical** predictions about imports?

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# Non-Defaultable Debt and Sovereign Risk

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- Decentralization reminiscent of Hatchondo, Martinez, and Onder (2017)
  - ... plus the bilateral lender (signals)
- Critical difference: restriction to **Markov**-perfect equilibrium
- Multilateral lender increases gov't welfare, but only for a while
- In MPE, **pecking order** of lending sources
  - First max out risk-free lending, may take longer depending on  $\beta$
  - When  $m$  is exhausted, model isomorphic to one-lender,  $\tilde{y}(z) = y(z) - rm$
- Best equilibrium stipulates borrowing **pattern** from Multilateral
  - ... With uninformative signals, how different is borrowing from  $M$

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# The Perils of Bilateral Sovereign Debt

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- Roldán and Sosa-Padilla (2025) has market + bilateral lender
  - Bilateral lender is **undefaultable** but **bargains** over borrowing terms
  - Key result: bilateral interest rate aggressively decreasing in market spreads
  - Welfare is hurt by the presence of the bilateral lender
- Here adding both IMF and PC help
  - In best SPE, should be obvious
  - What about **worst** SPE? (as in DAVIS and Kirpalani, 2023)



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## Questions and Comments

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# Comments

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- How different is the **best SPE** from a **Markov** equilibrium here?  
... With two lenders, quite different
- Would like to see much more the **issuance** decisions and tradeoffs in equilibrium  
... how much myopic losses are there for the government?
- Quibble: is  $L(v) = \max_{\sigma \in \Sigma} L(\sigma)$  subject to  $v(\sigma) = v$  important?
- Clarification of **timing**  
... Mapping to untargeted features of the data?  
... When does official debt relief come? How does it **correlate** with default?
- What is the **incentive constraint** of the bilateral lender?
  - How do the three interest rates **compare**? Is  $r^{OM} < r^{OB} < r^M$ ?

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## Concluding remarks

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# A Theory of International Official Lending

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- Very nice paper!
- **Market** + **IMF** + **PC** decentralizes a best equilibrium  
... if the moral hazard + signal structure is the relevant friction
- **Who** is the **bilateral** lender? What are we asking of them?