

Discussion of
“Renegotiation Policies in Sovereign Defaults”
by Cristina Arellano and Yan Bai

Javier Bianchi

University of Wisconsin & NBER

AEA Meetings, January 3-5, 2014

Overview

- Wide discontent with architecture of sovereign debt restructuring:
 - “Debt restructuring have often been too little and too late, thus failing to re-establish debt sustainability and market access in a durable way”, IMF 2013

Overview

- Wide discontent with architecture of sovereign debt restructuring:
 - “Debt restructuring have often been too little and too late, thus failing to re-establish debt sustainability and market access in a durable way”, IMF 2013
- **This paper:** focus on sovereign debt restructuring policies when multiple countries default simultaneously

Overview

- Wide discontent with architecture of sovereign debt restructuring:
 - “Debt restructuring have often been too little and too late, thus failing to re-establish debt sustainability and market access in a durable way”, IMF 2013
- **This paper:** focus on sovereign debt restructuring policies when multiple countries default simultaneously
- Very interesting and policy relevant paper!

Summary

- Static Model (one-period version of Arellano-Bai 2013)
- Linear utility (unlike AB 2013)
- One lender, two borrowing countries
- Countries start with an initial exogenous level of debt
- If countries default, parties renegotiate over recovery rates

Summary (ctd)

- When countries default together, three parties negotiate simultaneously: \Rightarrow less bargain. power for lender \Rightarrow more defaults ex-ante

Summary (ctd)

- When countries default together, three parties negotiate simultaneously: \Rightarrow less bargain. power for lender \Rightarrow more defaults ex-ante
- Paper considers a social planner:
 - Sets directly the recovery rate in renegotiation and parties borrowers choose whether to default and renegotiate
 - No lump sum transfer (redistribution only via default)

Summary (ctd)

- When countries default together, three parties negotiate simultaneously: \Rightarrow less bargain. power for lender \Rightarrow more defaults ex-ante
- Paper considers a social planner:
 - Sets directly the recovery rate in renegotiation and parties borrowers choose whether to default and renegotiate
 - No lump sum transfer (redistribution only via default)
- Key results:
 - Centralized solution entails less defaults for given rec. rate
 - Recovery rates should be indep. of default of other borrower

Comments

Strict Pareto improving policies?

- If planner increases recovery rate, this may induce repayment: \rightarrow borrowers are weakly worse off and lender are strictly better off

Strict Pareto improving policies?

- If planner increases recovery rate, this may induce repayment: \rightarrow borrowers are weakly worse off and lender are strictly better off
- If planner reduces recovery rate, this leaves the lender strictly worse off

Strict Pareto improving policies?

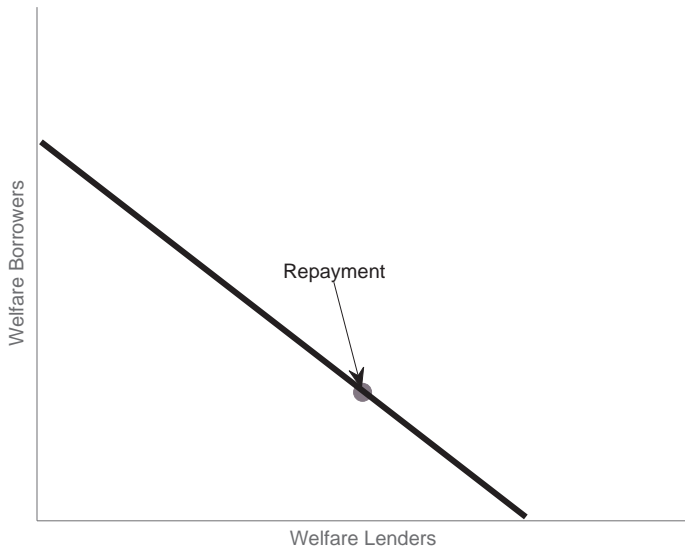
- If planner increases recovery rate, this may induce repayment: \rightarrow borrowers are weakly worse off and lender are strictly better off
- If planner reduces recovery rate, this leaves the lender strictly worse off
- But policies do predict average welfare gains

Strict Pareto improving policies?

- If planner increases recovery rate, this may induce repayment: \rightarrow borrowers are weakly worse off and lender are strictly better off
- If planner reduces recovery rate, this leaves the lender strictly worse off
- But policies do predict average welfare gains
- Stochastic model with risk averse lenders would be interesting as intervention would affect risk-sharing (Arellano-Bai, 2013)
- A dynamic model would also produce gains in terms of commitment (better borrowing terms)

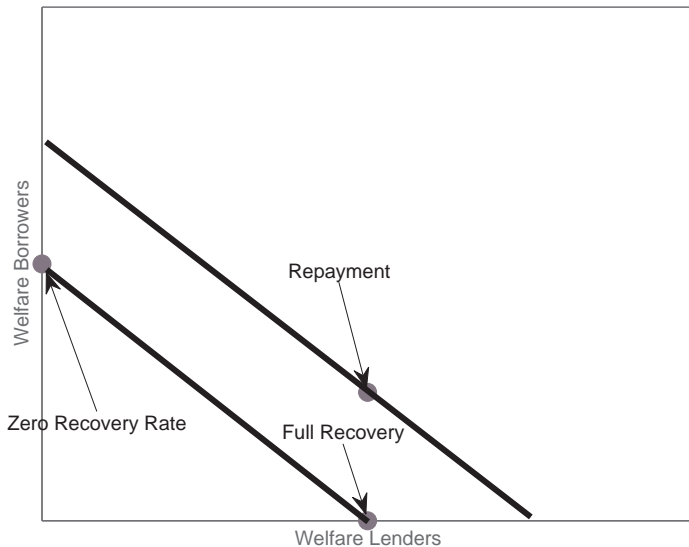
Pareto Frontier

With lump-sum transfers



Pareto Frontier

Without lump-sum transfers + Default



Alternative Renegotiation Protocol

- Instead of renegotiating three parties together, consider simultaneous and independent decentralized renegotiations

$$\phi_1^* = \arg \max_{\phi_1} \{ [(y^d - \phi_1) - y^{NR}]^\lambda [(\phi_1 + \phi_2^*) - \phi_2^*]^{1-\lambda} \}$$

$$\phi_2^* = \arg \max_{\phi_2} \{ [(y^d - \phi_2) - y^{NR}]^\lambda [(\phi_2 + \phi_1^*) - \phi_1^*]^{1-\lambda} \}$$

Alternative Renegotiation Protocol

$$\phi_1^* = \arg \max_{\phi_1} \{ [(y^d - \phi_1) - y^{NR}]^\lambda [\phi_1 + \cancel{\phi_2} - \cancel{\phi_2}^*]^{1-\lambda} \}$$

$$\phi_2^* = \arg \max_{\phi_2} \{ [(y^d - \phi_2) - y^{NR}]^\lambda [\phi_2 + \cancel{\phi_1} - \cancel{\phi_1}^*]^{1-\lambda} \}$$

- Each recovery rate becomes **independent** of other country's recovery rate, **as in centralized solution**

Alternative Renegotiation Protocol

$$\phi_1^* = \arg \max_{\phi_1} \{ [(y^d - \phi_1) - y^{NR}]^\lambda [\phi_1 + \cancel{\phi_2} - \cancel{\phi_2}^*]^{1-\lambda} \}$$

$$\phi_2^* = \arg \max_{\phi_2} \{ [(y^d - \phi_2) - y^{NR}]^\lambda [\phi_2 + \cancel{\phi_1} - \cancel{\phi_1}^*]^{1-\lambda} \}$$

- Each recovery rate becomes **independent** of other country's recovery rate, **as in centralized solution**
- This would not be the case without linear utility for lenders

Alternative Renegotiation Protocol

$$\phi_1^* = \arg \max_{\phi_1} \{ [(y^d - \phi_1) - y^{NR}]^\lambda [\phi_1 + \cancel{\phi_2^*} - \phi_2^*]^{1-\lambda} \}$$

$$\phi_2^* = \arg \max_{\phi_2} \{ [(y^d - \phi_2) - y^{NR}]^\lambda [\phi_2 + \cancel{\phi_1^*} - \phi_1^*]^{1-\lambda} \}$$

- Each recovery rate becomes **independent** of other country's recovery rate, **as in centralized solution**
- This would not be the case without linear utility for lenders
- ...BUT for the planner, recovery rates would also be linked

Other comments/questions

- Paper assumes that lenders collude. What prevents free-riding problem in practice?
- What about collusion on borrowers (Paris club)?
- Implications for restrictions on borrowing (Maastricht treaty)? Should they be restrictions on gross/net borrowing?
- Asymmetric countries seem to be inessential

Final Remarks

- Thoughtful and timely paper!
- Clarify sensitivity of some of the policy conclusions to modelling choices