

Discussion of  
“Globalization and Risk Sharing”  
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Main Question and Approach

- What is the effect of globalization on risk sharing?
- Standard views:
  - Frictionless markets: both at home and internationally
  - Sovereign debt literature: no commitment internationally, but (implicitly) frictionless markets at home
  - This paper: same enforcement domestically and internationally, but actual enforcement is an endogenous variable

### Main Result

- On one hand, in states of the world when a country is “rich,” there is the usual temptation to default.
- On the other hand, the cost of default is that domestic risk sharing breaks down.
  - At a given level of “globalization,” this tradeoff determines the extent of risk sharing
  - More globalization can increase the relative scope of international risk sharing, which can have the perverse effect of destroying both international and domestic risk sharing.

### Sketch of the Argument

- Two-period endowment economy; symmetric countries, log utility
- Some scope for both purely domestic and international risk sharing
- Key Broner-Ventura assumption about default: not enforcing international repayment breaks all domestic payments also
- Minimum number of states of the world required for the argument: 4; minimum number of agents in the world: 4

## Endowments

		States			
		H rich		H poor	
		Home	H1	$A(1+\eta)(1+\omega)$	$A(1+\eta)(1-\omega)$
	H2	$A(1+\eta)(1-\omega)$	$A(1+\eta)(1+\omega)$	$A(1-\eta)(1-\omega)$	$A(1-\eta)(1+\omega)$
Foreign	F1	$A(1-\eta)(1+\omega)$	$A(1-\eta)(1-\omega)$	$A(1+\eta)(1+\omega)$	$A(1+\eta)(1-\omega)$
	F2	$A(1-\eta)(1-\omega)$	$A(1-\eta)(1+\omega)$	$A(1+\eta)(1-\omega)$	$A(1+\eta)(1+\omega)$

- $A$ =mean consumption of each agent and the economy as a whole
- $\eta$ =aggregate (internationally insurable risk)
- $\omega$ =idiosyncratic (domestically insurable risk)

## Risk Sharing

- Note: perfect insurance attainable in this world
- If the rich country defaults, the poor country does also – same as in the paper, though requires some additional assumptions here
- As a result, in this economy there is either perfect risk sharing or none at all
- The rich country will be tempted to default to consume the high aggregate shock  $\eta > 0$

### Risk Sharing (cont'd)

- Welfare with no default:  $\ln(A)$
- Welfare with default for the rich country:  
$$\ln(A) + \ln(1 + \eta) + \frac{1}{2} [\ln(1 + \omega) + \ln(1 - \omega)]$$

- Therefore, default if and only if:

$$\ln(1 + \eta) + \frac{1}{2} [\ln(1 + \omega) + \ln(1 - \omega)] > 0$$

- Key intuition: more likely to default if the aggregate shock is high relative to the loss of domestic risk sharing
- NB: never “default” if the international markets are closed

### “Calibration”

- What is the relative importance of  $\eta$  vs  $\omega$ ?
    - $\eta$  is the risk that is not insurable domestically = business cycle volatility
    - $\omega$  is the risk that is insurable domestically = individual earnings volatility
  - In the US, over the period 1960-2004, the variance of detrended log GDP per capita is 0.0006784 →  $\eta=0.0260$
  - In the US, the variance of individual-level wages is 0.43 (Gottschalk and Moffitt, 1994) →  $\omega=0.5762$
- not worth it to default on international payments if it stops domestic risk sharing

## Taxonomy of Assumptions and Alternatives

1. Frictionless markets: both at home and internationally
2. Sovereign debt literature: no commitment internationally, but (implicitly) frictionless markets at home
3. Broner-Ventura: same enforcement domestically and internationally, but actual enforcement is an endogenous variable – *policymaker view*
4. Attanasio-Rios-Rull (2000): no commitment domestically, commitment internationally
  - Introducing international insurance makes agents less willing to cooperate domestically – risk sharing breaks down
  - Levchenko (2005) version: some agents have access to international markets, others do not; aggregate and distributional consequences
  - *institutions view*

## Conclusion

- “All frictionless models are alike; every model with frictions is different from all others”
  - Lev Tolstoy, *Anna Karenina*
- What are we trying to explain?
  - Behavior of macro variables (consumption correlations, procyclical CA, etc.)?
  - Domestic financial development?
  - Distributional consequences of globalization within/across countries?
  - The world in general or cross-country differences?