Discussion of "Efficient Sovereign Default" by Alessandro Dovis

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The Kernel

- Default-like episodes can be rationalized by *ex ante* efficient risk-sharing
- Efficient allocations could be decentralized with non-contingent bonds
- Implied debt term-structure dynamics are realistic

A Missing Fact

Defaulting countries issued debts in foreign currency

More Generally...

Many dimensions of sovereign “risk” are observable

Question

Can unobservability of one dimension of risk explain "missing" insurance with respect to *observable* dimensions?

Answer

- Yes!

Answer

- Yes!
- ... but implied allocations are counter-factual.

Static Version of Dovis (2013) with Terms of Trade

- Taste shock, θ_s, unobserved
- Terms of trade shock, a_l, observed
- Risk-neutral lenders
- Borrower production function:

$$c_{s,l} + \frac{y^*_{s,l}}{a_l} \leq f(m)$$

- Borrower welfare:

$$\sum_s \sum_l \pi_s \pi_l \left[\theta_s U(c_{s,l}) + V(r_{s,l})\right]$$

Incentive Constraints

$$\theta_s U(c_{s,l}) + V(r_{s,l}) \geq \theta_s U(c_{s+1,l}) + V(r_{s+1,l}) \quad \forall l, s < N \tag{IC}$$

$$\theta_s U(c_{s,l}) + V(r_{s,l}) \geq \theta_s U(f(m)) + V(\underline{r}) \quad \forall l, s \tag{SUS}$$

$$\ldots \tag{PC}$$

Preliminaries

Lemma

If taste shocks are observable, the optimal contract perfectly insures against ToT shocks **only.**

To prove, notice SUS constraint binds for all states:

$$\theta_s U(c_{s,l}) + V(r_{s,l}) = \theta_s U(f(m)) + V(0) \quad \forall s, l$$

Preliminaries

Lemma

With unobservable taste shocks, the optimal contract perfectly insures against ToT shocks **conditional on the high taste shock only.**

To prove:

- SUS constraint binds for high taste shock only.

Note:

- Does not imply that allocations are the same.

Main Result I

Proposition

Consumption (and therefore domestic output) is lower when terms-of-trade are better.

Intuition

- High ToT $\rightarrow$ optimal to backload contract, now is a great day to get paid!

(Proven for log-utility with 2×2 states. But computer always agrees.)

Main Result 2

Corollary

Variance of borrower's welfare is higher conditional on

1. *Low taste shock (i.e. high productivity)*
2. *High terms-of-trade shock*

To prove:

- Follows from main result I, (IS), (SUS)

Conclusion

- Important contribution, highlighting insurance built into debt valuation.
- Challenges assumption that default episode are inefficient.
- Default-like allocations when observable dimensions are good?