

F. Broner, A. Martin and J. Ventura

“Sovereign risk and secondary markets”

Discussion by Apostolis Philippopoulos

September 28-29, 2007

Santorini

What prevents defaults?

Why do sovereigns repay, when foreign creditors have so few means to enforce repayment?

The literature has focused on 2 mechanisms:

(a) Reputation: sovereigns repay to avoid future exclusion from international credit markets.

(b) Direct penalties: sovereigns repay to avoid embargos, military interventions, etc.

Problems with the reputation view:

- (i) historical evidence does not suggest that defaulting sovereigns are excluded from international borrowing for very long;
- (ii) in calibrated models, the welfare cost of exclusion is too small to support the observed levels of sovereign debt.

Problems with the sanction view: we do not exactly know what the creditor's sanctions are.

This paper:

foreign creditors are repaid because there is a **secondary market** that allows them to be treated like domestic creditors.

If the sovereign threatens to discriminate against foreign creditors, they will simply sell their claims to domestic investors.

The paper makes an interesting point, and it does so using a nice model.

Basic (one shot) model in section 1

(i) Without secondary market, there is a unique equilibrium without foreign debt.

Story: Tomorrow's debtor government does not force debtors to pay back since this lowers average utility in the region.

(ii) With secondary market, there can be an equilibrium in which foreign debt is paid back.

Story: Foreign creditors can sell their bonds to domestic investors (debtors) at a positive price, because domestic investors know that the government will find it optimal to enforce bond payments among debtors.

Actually, in this case, this equilibrium (called strategic enforcement equilibrium) coincides with the full enforcement equilibrium. Implementation of the first-best?

Key “assumptions”:

- (i) There is a secondary market.
- (ii) Debtor’s government finds it optimal, and has the ability, to enforce bond payments among domestic investors.

The above is a good equilibrium.

But there can be **another (bad) equilibrium** in which even with secondary markets there is no trade in foreign bonds.

More equilibria if the government makes different enforcement decisions for different groups of residents.

In other words, there is multiplicity (in the form of expectational indeterminacy).

That is,
if market participants are pessimistic and believe the government will not enforce any bond payments, they do not participate in the secondary market, and the government fulfills this eventually.

And vice versa, if there are optimistic beliefs that the government will find it optimal to enforce bond payments among debtors.

But what is the mechanism?

I think the possibility of secondary markets in foreign bonds, and the possibility that domestic debtors participate in this market by buying foreign bonds, generate some kind of **strategic complementarities** (which is a necessary condition for multiplicity in decentralized setups; see e.g. Cooper and John, 1988, QJE).

I feel that this is not shown and/or discussed clearly enough in the paper.

For instance:

- How do strategic complementarities arise?
And are they sufficient?
- Where is the key nonlinearity in the solution?
- Do you really need a government? What is the exact role/contribution of the government in the good equilibrium? Does it work like a coordination device? Does it matter whether it is individuals that borrow, or the government?
- Other ways of generating complementarities? (not only via this particular secondary market).
- Good and bad equilibria: Expectations, or persistence? (see e.g. Tirole, 1996, REStud).

The richer model in section 2

It confirms the results in a much richer setup.

The same questions as above apply, and also:

- Is it a Nash equilibrium in regional policies?
- Is it only a repeated game, or a dynamic game?
- Do you solve for Markov strategies (in a Nash equilibrium)?

Some facts that can motivate the paper

(Here I use some comments made by Olivier Jeanne, IMF and CEPR)

(i) Sovereigns issue different types of debt (in domestic markets or foreign markets, bank loans or bonded debt, in domestic or foreign currency, etc).

(ii) Domestic debt is issued in domestic markets, whereas foreign debt is issued abroad (this is also the distinction used in the paper).

(iii) International financial integration implies that domestic and foreign debt can be held by both residents and foreigners. In practice, domestic debt tended to be held mostly by residents, and foreign debt mostly by nonresidents (this is more the reflection of natural habitat than of restrictions).

(iv) Debt is bonded and traded to a much larger extent than before.

(v) Default is selective. Default on foreign debt is ten times more frequent than default on domestic debt.

See evolving patterns of selective default (Bolton and Jeanne, 2005, 2007). Note: inflation not counted as default for domestic debt.

(vi) Discrimination on the basis of the residency of the debt-holder almost never happened. It is the type of debt that matters. So why don't we observe discrimination on the basis of the residency of the debt-holder? The paper gives an answer!

(vii) Is there a negative correlation between development of secondary markets and foreign debt crises in developing countries? Important.