

Discussion of
Sovereign Debt, Defaults and Bailouts

by

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The issue

Default on sovereign debt fascinates economists..

Lately, maybe driven by recent events or by theoretical developments, a new wave of research on the area searching for better answers to classic questions

- Why some countries pay back and some countries do not?
- What happen to countries that do not?
- What should we do about it?

This paper belongs to this wave and contributes both to the empirical and the theoretical debate

Outline of the discussion

What do we learn from the data

A mechanism design approach to default

Sovereign default, then and now.

The data

Use long history of sovereign defaults to assess:

-When does default happen?

-How's life after default?

Findings (1870-1914)

- Default is more likely to happen when

a) Borrower is in a recession

b) Lender (UK) opportunity cost of funds is high

- Life after default is tough (Median exclusion from international credit markets is 9 yrs)

A mechanism design based model of default

Each period the borrower has a productive opportunity $Af(.)$ but no capital.

The lender can get capital at cost R .

A and R are stochastic and observed privately (and noisily)

After borrower and lender announce \hat{A} and \hat{R} , k resources are transferred to the borrower, production takes place and a transfer P (possibly negative) is made to the lender

The borrower get $Af(k) - P$

The lender gets $P - Rk$

Allocations on the the pareto frontier

Set $k = k^*$, where $Af'(k^*) = R$ and set the P arbitrarily

Assume for example P is constant (does not depend of \hat{A} and \hat{R})

Is this incentive compatible? No!

Lender profits falling in k and k falling in \hat{R} : lender always reports high cost of funds

Borrower profits increasing in k , k increasing in \hat{A} : borrower always reports high productivity

Is it possible to find a function $P(\hat{A}, \hat{R})$ such that $k = k^*$ is IC?

In simple cases yes (see crlry 5.2) but in general no as IC might require punishment of both parties, which cannot be achieved with a transfer.

Money Burning

To punish both parties values need to move inside the frontier (common in two sided private information problem). How to do it? It is efficient and sufficient to do it in a single state (Risk neutrality is key), as in Fuchs (2005).

How is money burning done?

Since direct burning is ruled out it is done by setting an inefficiently low level of k .

In which state is this done?

In the state in which it is less costly. i.e. in the state in which there are the smallest gains from trade, i.e. in the state in which A is lowest and in which R is highest. Interpreting this double punishment phase as default, model loosely consistent with the historical facts. If A and R are persistent, then exclusion phase can be long (as in the data)

Issues

- From numerical example it seems that when efficiency is abandoned we do not see a drying up of capital flows but quite the contrary as too much capital flows. Does not look like default (see figures)
- The implementability of this mechanism crucially hinges on a unique borrower and lender. Maybe not a bad description of the world at the time of the Gold-Standard, much less appealing nowadays. If, for example lender is not unique, the borrower can switch to another lender, but then IC harder to satisfy. Modelling default in this way becomes very complicated.
- Also, I suspect, data are different for recent period: shorter exclusion periods (Gelos and al.), Default much more connected to defaulter condition and less to lender's condition (Argentina 2001)

Modelling modern default:

Dubey, Genakoplos, Shubik (2005). A standard GE model in which the fundamentals are a given set of assets (promises), penalties for not delivering the promises and short sale constraints on the promises.

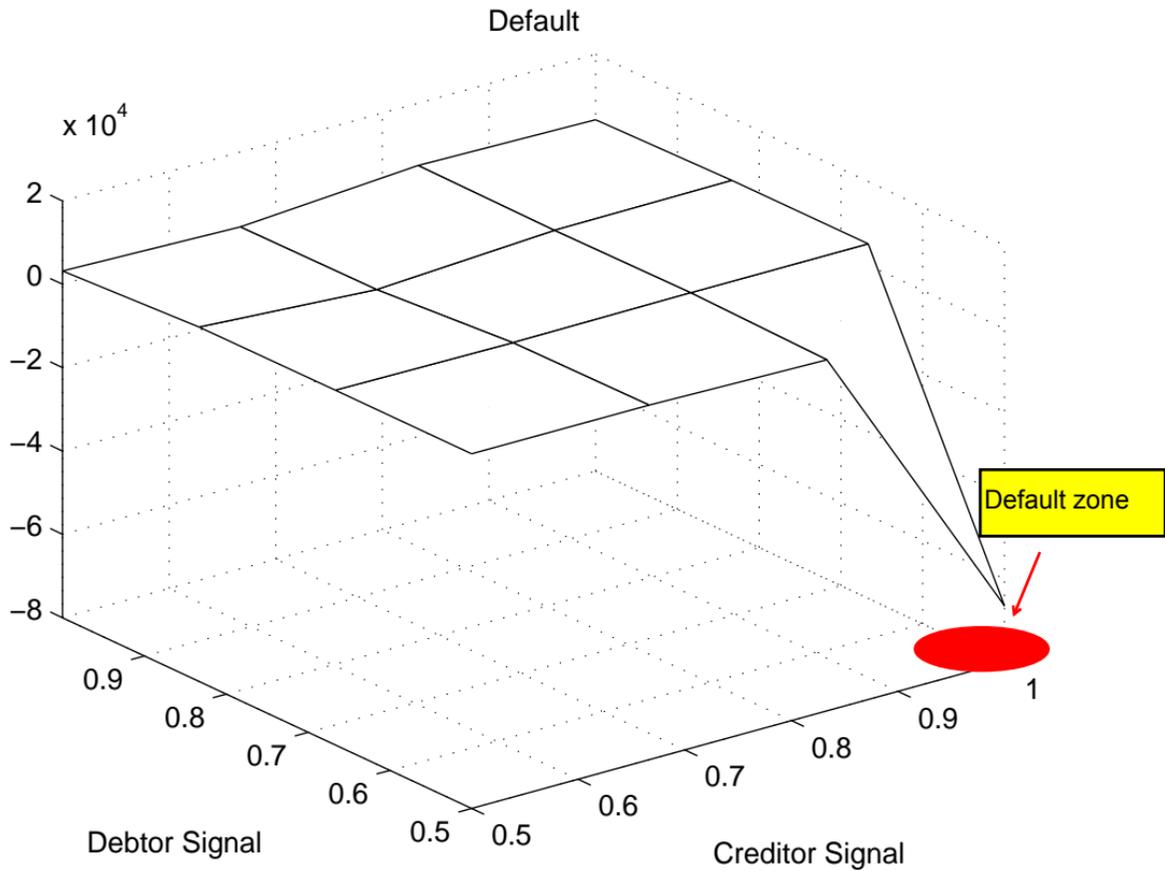
Seller of the asset can either deliver the promise or not deliver and pay the cost (default).

Buyer of the assets take as given the delivery rates on the asset (there is not direct negotiation between buyer and seller)

In equilibrium the expected delivery rates equal the actual delivery rates.

Special dynamic versions of the DGS set-up (starting with Eaton and Gersowitz to finish with at least 5 excellent job market papers in the last 2 years) seem to be promising way to understand recent episodes of default,

Tomz and Wright more promising for analyzing historical episodes..



Capital Stocks

