Discussion of Sovereign default, domestic banks and financial institutions

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Good topic!

- Paper is unfortunately topical
- Theoretical part:
- Puts forward complementarity between public debt and banks leveraging
- Higher cost of default leads to being able to sustain higher level of debt. Higher leverage leads to higher losses given defaults
- Empirical part : links between public debt, financial institutions, default probability, credit.

Theory of sovereign defaults and credit crunches

- Underlying mechanism in sovereign debt literature: a higher cost of default implies one can sustain larger debt in equilibrium
- Literature often had problems to endogenize cost of default (reputation, access to markets), which has to be sizable to sustain lending
- Here it is public sector debt that enables banks to transfer resources towards states of high productivity.
- Cost of default is due to decline in investment and output caused by banks losses on their holdings of sovereign debt
- More public debt, more leverage (including through capital inflows), higher surplus and higher cost of defaulting (more public debt on balance sheet of banks)
- Sovereign tradeoff is balancing more domestic consumption versus output loss caused by decline in credit

Key assumptions

- There is no discrimination between domestic and foreign lenders (default cannot be selective and domestic banks cannot be shielded from default)
- Banks have a comparative advantage in channelling funds towards productive use
- Public debt is the only way to transfer resources towards productive states
- Higher level of leverage (higher credit) is always welfare improving

Key predictions

- Sovereign default leads to decline in credit
- Countries with better financial institutions can leverage more and therefore their banks pile up more government debt on their balance sheet
- This increases output
- These countries have a lower incentive to default
- If there is sovereign default, larger losses on balance sheet means sharper decline in investment

Tests performed

1. Default is followed by a decline in private credit
2. Decline the higher the better the financial institutions and the higher the level of public debt on bank balance sheets
3. Probability of default lower if good institutions
4. Determinants of public debt accumulation

The letter of the model

- Channel is holdings of public debt by banks
- Better institutions → more government bonds on balance sheets (and higher level of output in productive states) → higher cost of default given default (in non productive states)
- Ready to believe red arrow and I do not need many robustness checks on this

- Yellow arrow:

i) No empirical relation between institutional quality and holdings of public debt in emerging markets- in advanced economies, I suspect it may even go the other way

ii) evidence presented in the paper aiming at illustrating welfare improving properties of public debt holdings. Paper shows that for some emerging markets holdings of bonds exceed reserve requirements, but.... financial repression is NOT only about reserve requirements

iii) No evidence that type of leveraging emphasized in the paper leads to higher growth (in non default states)

The spirit of the model

- It is not only public bonds that enable transfer of resources towards productive states. Other private securities do the job
- Still, better financial institutions enable more leveraging
- [this should be looked at the in the data]
- But sovereign default triggers losses on those financial instruments as well [seems realistic and can be tested]
- Hence default cost in terms of decline of credit higher in countries with better financial institutions [seems true in the data in the paper+ intriguing results of positive effect on credit post default in countries with bad institutions]
- See also evidence by Giannone , Reichlin et al. that the countries which were hit most in the recent crises were countries with highest ranks in competitiveness of their financial system

The spirit of the model

- But for this to work, we need another theoretical mechanism through which public default affects private sector securities valuations --- liquidity dry up; bad signal on the state of the economy, sharp increase in cost of capital...

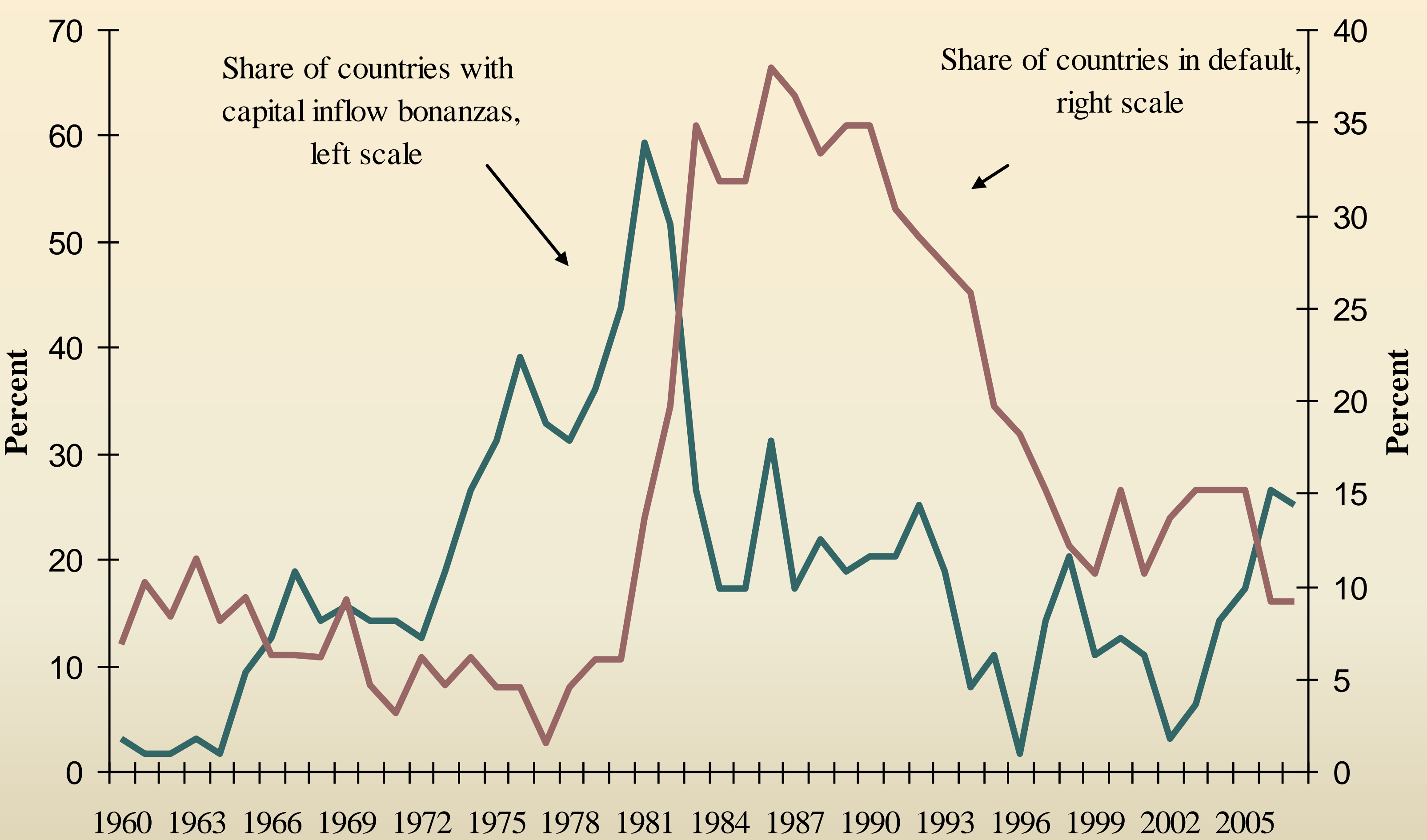
More on the empirics

- Probability of default and creditor rights:
- Endogeneity and reverse causation: serial defaulters weaken creditor rights for example
- No country fixed effect: problem of institutional variables being all correlated with one another
- Debt accumulation:
- problem of omitted variables (demography, banking crises etc...)
- Identification through time variation in credit rights indicator

More fundamentally

- Sequence in paper is low productivity, public default, banks balance sheet loss due to sovereign bond holdings, private credit goes down
- Fundamental issue is that credit growth and leveraging are always good by assumption in the model

- Sequence could be "bonanza" (Reinhart and Reinhart 2010) and excess risk taking and credit growth, slow down, banks balance sheet losses and public finance stress (due to bank crisis or not), public default, more banks balance sheet loss, private credit goes down
- Requires a model where risk is mispriced
- If this is the case, credit growth excessive before default, and needs an adjustment afterwards (and the stronger the boom the larger the adjustment)
- Welfare consequences completely different



Source: Reinhart and Reinhart (2010)

Conclusions

- Very interesting interactions between sovereign finances and private sector credit
- The paper sets up these issues very clearly
- Very stimulating paper
- More work in that area warranted