Beyond Sovereign Debt

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Themes

- Theory: Sovereign Debt is Equity
- Practice: Geithner Doctrine
- Policy: New Approaches after Great Recession
- New Approaches: Sovereign Cocos
Sovereign Debt is Equity

- “Fiat government debt—debt that promises to pay only government issued paper—is much more closely analogous to equity issued by private firms than to debt issued by private firms.” [Sims, 2002]
- “The fiscal theory of the price level recognizes that nominal debt, including the monetary base, is a residual claim to government primary surpluses, just as Microsoft stock is a residual claim to Microsoft’s earnings. If surpluses are not sufficient, the government must default on or inflate away the debt.” [Cochrane, 2005]
- “Nominal debt walks like debt and quacks like debt, but it is really equity.” [Cochrane, 2005]
Rigid Debt Contracts: Sims’ Dollarization Example

- Higher nominal interest rates to compensate for inflation
- Governments may be tempted to inject surprise inflation [moral hazard], or raise equilibrium inflation with future governments bearing the costs
- Dollarization thought to eliminate that risk
- Sims: “Whatever the [elusive] gains from these sources, they need to be compared to definite losses from giving up the option of using the price level [or partial default] as a fiscal shock absorber.”
Contingent Sovereign Debt

• “Nominal debt is, in an accounting sense, exactly the same as a promise to split up the state-contingent stream of real government surpluses among holders of government bonds.” [Cochrane, 2005]

• “True equity-like securities, securities whose relative prices can soak up stochastic variation in government surpluses, without affecting the overall price level seem very useful.”

• “The development of such government equity seems a ripe challenge for financial innovation.”
Two Related Literatures

• Excusable Debt: Bad shocks will lead to debt overhangs (future primary surpluses will be inadequate to serve current debt). It is in the interest of the lender to forgive debt and resume new lending to take advantage of new investment and growth opportunities in the borrowing economy. [Grossman and Van Huyck, 1988 and Kovrijnykh and Szentes, 2007]

• Neglected Risks: Because of limits in representing uncertainty, improbable risks are excluded from pricing the security, leads to over-issuance of securities: ‘there are not enough cash flows in the neglected states of the world to make promised payments in full.’ Bad news can causes flight to safety and deleveraging. [Gennaioli et al., 2012].
Historical Examples

- Serial defaults by Philip II of Spain between 1566 and 1600; lenders repeatedly agreed to debt write-down and early resumption of new lending. Lenders made handsome profits.

- “At times of fiscal stress, governments under the gold standard would “suspend specie payment”, meaning that their liabilities, nominally promising payment in gold, could temporarily only be rolled over at maturity into new government liabilities. This contingency was not provided for explicitly in advance, but it was easy to implement.” [Sims, 2002].

- Between 1973 and 1980, “unanticipated returns, as would be expected of an optimizing government offsetting the negative fiscal shocks of the oil crises.” [Sims, 2002].
The Practice: Geithner Doctrine—no default during a crisis

• “… we did create some [creditor] moral hazard by protecting creditors and counterparties from the consequences of a Bear default,”:
  “[…] that was unavoidable. We wanted to avoid what we saw during the systemic panics of the nineties, when the fear of cascading defaults and haircuts for bondholders and other creditors greatly amplified the damage. Once a run is under way, anything that increases the uncertainty of creditors about if and when they’ll get paid will exacerbate the run. Crisis responders who get obsessed with moral hazard and Old Testament justice make crises worse.

• “After Lehman, I lost whatever minimal tolerance I might have had for letting [ creditor] moral hazard or political considerations impede our efforts to attack the crisis. We had to do whatever we could to help people feel their money was safe in the system, even if it made us unpopular, even if it helped individuals and institutions that didn’t deserve help.”
## Greece

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<tbody>
<tr>
<td>Growth Projections in May 2011</td>
<td>-4.5</td>
<td>-3.0</td>
<td>1.1</td>
<td>2.1</td>
<td>2.1</td>
<td>2.7</td>
<td>2.9</td>
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<tr>
<td>Most Recent</td>
<td>-5.5</td>
<td>-8.9</td>
<td>-6.6</td>
<td>-3.9</td>
<td>0.8</td>
<td>-2.3</td>
<td>-1.3</td>
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Policy: Déjà vu all over again

• During the crisis, Geithner doctrine operates: no debt restructuring now, but we will create a system of more orderly restructuring in the future;

• After the crisis: momentum fades.
  ○ Same forces push back, dilute proposals
  ○ Status quo for next crisis

• Next crisis: not the right time now, but after this crisis is over

• By induction, no change.
### Fate of Latest IMF Proposal

#### Before (April 2015)

<table>
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<tr>
<th>Current framework</th>
<th>Proposed framework</th>
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<tr>
<td>Unsustainable</td>
<td>• Definitive debt restructuring / concessional financing</td>
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<tr>
<td>Sustainable (but not with high probability)</td>
<td>OR</td>
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<td>Invoking systemic exemption</td>
<td>Maintain non-Fund exposure (e.g., reprofiling) to improve debt sustainability and enhance safeguards for Fund resources</td>
</tr>
<tr>
<td>Sustainable with high probability</td>
<td>• Exceptional access (catalytic role, no debt restructuring)</td>
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- **Goal:** no repetition of Greece, aka, no new official loans if debt is unsustainable. Instead …
- **“Reprofile,”** extend repayment maturities to private creditors.

#### After (January 2016)

- Adds possibility of “official financing,” other than Fund.
- “May not restore sustainability but improves sustainability and enhances safeguards to Fund.”
- Result: Greece will repeat.
Sovereign Contingent Debt [Sovereign Cocos]

- GDP-indexed bonds: measurement problems, can be manipulated, not necessarily correlated with repayment capacity, lagging indicator.
- Alternative: “cocos” in sovereign context, with ERN-like structure:
  - Contractually-embedded, no official discretion [impossible to price].
  - If [90-day] average of sovereign CDS spread rises above [500] basis points, pre-determined trigger: option of payment standstill.
  - Standstill continues until CDS spread falls below [500] basis points.
  - Thus, cushion to absorb shocks.
  - Creditors will price risk, limit excessive indebtedness due to current implicit guarantees.


Calomiris and Herring (2013) and Bulow and Klemperer (2013).
Something like this will happen…

Fixed exchange rates were unthinkable even in the 1950s: