“Sovereign Debt: 200 years of creditor losses”, Luckner et al.
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KEY RESULTS OF LMRT (2023)

• Extensive new database on sovereign debt restructurings on private external medium- and long-maturity debt. Haircut calculations.

• Beyond a binary classification of sovereign debt crises.
  – Median (cumulative) NPV haircut size 38-42% – full repudiations are rare (10/321). More than half of events are reschedulings.

• Creditor loss measures under constant renegotiation – the “Bulow-Rogoff (BR)” haircut.
  – “This cumulative metric captures the compound loss experienced by a passive investor who held a face-value weighted portfolio of all the securities or loans placed by the country, including those restructured in the previous debt restructuring deals”.

• Serial restructurings are costlier, and tend to
  – affect more first-time issuers,
  – affect poorer economies disproportionately,
  – follow “debt booms gone bust” episodes: “the pre-default debt surge was about twice as large in the cases that ended up with large haircuts (above the median) than for the cases where haircuts were small (below the median)”,
  – affect countries relying on external debt disproportionately,
  – affect restructurings during geopolitical distress disproportionately,
  – So countries behave like households (first time homebuyers).
GENERAL AND RELEVANCE

• Incredible temporal and spatial coverage; in a world of sovereign debt “safe asset” literature – LMRT remind us that sovereign debt is risky.

• The 2020-debt surge episode, and the return of geopolitics as a secular theme – perhaps therefore wave of “odious debts” (Buchheit and Gulati 2023)? In any case, we need history.

• “Kicking the can down the road”: trends in sovereign sector mirror trends in banking sector (guarantees over recapitalizations);

• The secular rise in repeat-negotiation dynamics, the rise of “shallow” interim restructurings.

• Confirms various of the stylized facts from the 1970-2020 view, see Cruces and Trebesch (2013), so:
  – “We find that the average sovereign haircut is 37 percent, which is significantly lower than for corporate debt restructurings in the United States. We also find that there is a large variation in haircut size (one-half of the haircuts are either below 23 percent or above 53 percent), and that average haircuts have increased over the last decades. These data and stylized facts are relevant both from an academic and a policy perspective. On the academic front, they invite us to rethink the influential theoretical models that feature a 100 percent haircut upon default… We also compute a cumulative haircut which takes into account repeated restructurings in the same debt crisis spell by one country...”
WHAT IS GOING ON?

• Why the rise in “shallow” / serial debt restructurings? Why should we care?
  – Is it a case of volatile FX / capital flow or twin-crisis dynamics (Reinhart and Rogoff 2011)?
  – Political frailty?
  – Market-institutional barriers? “The current contractual, market-based approach to debt restructuring is becoming less potent in overcoming collective action problems” (IMF 2013); CACs encourage bond-by-bond / s-by-s default resolution?

• Why should we care about B-R cases?
  – Are B-R events seeing more of a punishment ex post? (Market shut-out?) Is intermittent market access beneficial?
  – Are B-R events seeing more macroeconomic or financial market damage (prolonged risk premia, gdp gaps etc.)

• Debtors have an interest in B-R restructurings?
  – It unlocks (at least temporarily) market access. Short-term credit boom.
  – Kicking the can down the road (to the successor gvt).
  – Freeing (some) FX – distressed bond purchases (e.g. Brazil 1940).

• Creditors have an interest in B-R restructurings?
  – Recognizing lower (initial) haircut, opens distressed sales.
  – Opportunity to divest at favorable rate. Short-term credit boom.

All about politics?

Source: Smith and Mander, for FT (September 2020).
“It was not until Chile made an application for a $40 million loan from the IBRD in 1946 that it saw fit to renegotiate a more lasting debt readjustment plan. The Bank's policy on outstanding default was to take the country's attitude into consideration but not to play an intermediary role nor to disqualify the borrower. Nevertheless, its pressure on Chile to settle with its bondholders was sufficient to elicit a new plan in 1948 which the U.S. Council could see fit to recommend. The day after Chile announced its settlement, the IBRD announced its approval of a $16 million loan to Chile.”

“It is interesting to note that the longer a debtor held out, the better it fared in the conditions of settlement...”


Can we distinguish OSI-PSI, and “pure PSI”?
**WHAT IS GOING ON?**

Buchheit and Gulati (2023):

— “The debt restructuring technique employed during the period between 1982 (when the global debt crisis began) and 1990 (when the first of the so-called Brady Initiative deals signalled the end of the crisis) was therefore deliberately short-term and assiduously ruled out any reduction in the size of the debt stocks. Maturing principal amounts of the loans were serially rolled over for short periods of time throughout the decade. Interest rates actually went up during the early years. Any mention of the need for a reduction in the principal amount of the debt was anathema: a full bucket of scorn would be poured over the head of any commentator reckless enough to suggest otherwise. Many countries repeated this process three or four times during the decade. This debt restructuring technique had one overriding objective—to protect the balance sheets of the commercial banks in the developed world until such time as the possibility of deeper debt relief would not threaten the solvency of those institutions. It all looked rather different from the debtors’ side of the fence. The serial rescheduling of the principal amount of a country’s debt left that debt stock hanging like a miasmic cloud over the country’s economy. Foreign investment and voluntary capital flows into the economy were effectively blocked by that cloud.”

— “As we saw in the Argentine and Ecuador debt workouts earlier this year, such investors will be obsessed with the ‘recovery value’ of their bonds in a debt workout; that is, the anticipated market value of the bonds on the day that the deal closes. If a shallow debt restructuring produces a satisfactory recovery value today, little creditor sleep will be lost over whether the terms of the deal are likely to bestow on the country a durable financial position down the road. Today’s bondholder does not expect to be there for tomorrow’s debt restructuring.”
**Motivation: A “Severity” Measure for Sovereign Crises…**

- NPV losses (B-R basis) appear viable to introduce as severity measure, but
  - They are a lagging indicator of a sovereign crisis, in a world of (increasingly) leading indicator chronologies
  - Determine loss of market access instead?

<table>
<thead>
<tr>
<th>Crisis severity measure</th>
<th>Dating procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baron, Verner, Xiong</td>
<td>Bank equity decline</td>
</tr>
<tr>
<td>Metrick and Schmelzing</td>
<td>Intervention size</td>
</tr>
<tr>
<td>Laeven Valencia</td>
<td>Multiple – fiscal costs, NPL, debt/GDP</td>
</tr>
<tr>
<td>Luckner et al.</td>
<td>(final) sovereign debt haircut</td>
</tr>
<tr>
<td>Barro</td>
<td>Real p.c. consumption decline</td>
</tr>
</tbody>
</table>

*Source: Smith and Mander, for FT (September 2020).*
Motivation: A “Severity” Measure for Sovereign Crises...

- NPV losses (B-R basis) appear viable to introduce as severity measure, but
- “Haircuts” vs “discounts at issuance” – a way to evade usury ceilings
  - 1867 Honduras GBP loan – 73 pence on GBP (LMRT: 70% hc)
  - 1869 Honduras FFR loan – 41.3 FFR per 100 FFR
  - 1871 Costa Rica GBP loan – 72 pence on GDP
  - 1875 Haiti GBP loan – 80 pence on GBP (not in LMRT)

  - ~90% NPV haircut per LMRT
  - Ottoman default formally announced Oct 6, 1875.
  - British send warships to Dardanelles before 1881 “settlement” (“OSI”).

Ottoman foreign loans, 1854-1879, GBP.

Actual receipts at issuance = 52.9% of face value

This is NOT about the Sturzenegger/Zettelmeyer NPV approach per se!
**Motivation:** a “severity” measure for sovereign crises...

<table>
<thead>
<tr>
<th>Country</th>
<th>Value of bonds issued</th>
<th>Years issued</th>
<th>Amount outstanding at default</th>
<th>Amount bought during default</th>
<th>As % of outstanding at default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>$290 M</td>
<td>1923-28</td>
<td>$290 M</td>
<td>$3 M</td>
<td>5%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>$68 M</td>
<td>1937-28</td>
<td>$261 M</td>
<td>$56 M</td>
<td>10%</td>
</tr>
<tr>
<td>Chile</td>
<td>$75 M</td>
<td>1922-30</td>
<td>$75 M</td>
<td>$36 M</td>
<td>22%</td>
</tr>
<tr>
<td>Colombia</td>
<td>$70 M</td>
<td>1936-28</td>
<td>$70 M</td>
<td>$32 M</td>
<td>21%</td>
</tr>
<tr>
<td>Peru</td>
<td>$92 M</td>
<td>1927-28</td>
<td>$92 M</td>
<td>$27 M</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Table 6. National and Nationally-Guaranteed Dollar Bonds Issued in the 1920’s: Butches During Default**

- NPV losses (B-R basis) appear viable to introduce as severity measure, but
- Sovereigns have (historically) heavily traded on their own account...
  - Should this really count as a “haircut”?  
  - From PSI cash flow perspective, more like 39% of nominal principal cut (.52 *.75) vs 75% 1951 NPV cut in LMRT?  
  - Very hard to account for this in detail... (but desirable)

“Almost all of the original contracts allowed repurchases at market value, and prior to default, all repurchases were reported in a timely fashion to the fiscal agents. Buybacks during the period of default did not get reported at all to either the Council or the agent until settlement negotiations began and then only intermittently until a final settlement was reached and relations normalized. All of these countries initiated negotiations soon after default at which time total repurchases during the preceding period were confessed.”

*Source: Jorgensen and Savhs (1988).*
OTHER (SMALLER) QUESTIONS

• So what’s going on in between “shallow” and “final” restructurings?
  – DO MORE with regards to macro / financial variables
  – Is distance between loss of market access and restructuring and size of haircut related to
    • GDP gap, sovereign spreads (performance factors), FX regime, polities (structural factors)…

• More details about how FX components are treated – we are dealing with foreign-denominated debt…
• Tail event dynamics: restructurings of short-maturity debt may be key.
• Pre-1970, B-R haircuts understate actual investor losses? (table 1, 46 vs 51% losses)…
• Endogeneity: serial restructurings occur in more complicated/severe settings?
• What’s the volume-weighted share of serial restructurings, and what are the differences in maturity/FX/type of investors?

• Counterfactuals: alternative to serial restructuring: aggressive FX devaluation, domestic bail-ins (Turkey 2000s) – is this preferable?

• Policy recs
  – First-time, poorer borrowers better off tapping official lending?
  – Promotion of value recovery instruments (commodity-price linkers)? – to encourage overshooting of restructuring deals…