State-contingent debt instruments for sovereigns: Can they be made «to work»

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
State-Contingent Debt Instruments for Sovereigns

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Several developing countries have experienced debt distress recently

- **Grenada** – initiated OSI and PSI in 2014 (completed in 2015)
- **Mozambique** – initiated PSI restructuring in 2016
- **Chad** - initiated PSI in 2017
- **Gambia** - initiated OSI in 2017
- **Congo, Republic of** – considering measures to restore debt sustainability (2017)
- **Venezuela** – seems to have initiated restructuring discussions with some creditors (2017)
The culprit in most cases was a large, negative, *insurable* exogenous shock

<table>
<thead>
<tr>
<th>Country</th>
<th>Catalyst</th>
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<tbody>
<tr>
<td>Chad (2017)</td>
<td>Oil price decline (2014-15)</td>
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<tr>
<td>Mozambique (2016)</td>
<td>LNG price decline, adverse weather (2014-15)</td>
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**Actions taken ahead of the shock?**

1. Windfall funds established in some commodity-producers, but spent before the shock
2. Not much impetus to develop domestic debt markets in boom years (resort to external commercial borrowing instead)
3. Importantly, no significant ex-ante insurance taken out against these shocks
The accompanying pain in terms of growth and procyclical fiscal tightening has been considerable.

Plus undesirable debt management actions taken under stress:

- **Collateralized** debts (Chad and Congo)
- **Heavily discounted** debt (Venezuela)
- **Undisclosed** borrowing from aggressive lenders (Mozambique)

Source: IMF staff calculations

Note: GDP loss is estimated using the average real GDP growth +/- 5 years from crisis year
There must be a better way, but among existing avenues to strengthen resilience, there are limitations

**Buffers**
Inefficient solution globally; vulnerable to be spent in good times

**Long-term local currency bonds**
Many EMLICs can’t issue in needed amounts; can guard against refinancing but not solvency risks

**Natural catastrophe insurance**
Not a financing instrument, typically quite expensive

**Commodity hedges**
Only available over short-term, subject to counterparty risk

**Official liquidity support**
May not be available on a timely basis or accessible for all countries
Is inaction and restructuring an OK way to proceed?

• In **theory**, debt can be restructured to restore debt sustainability

• In **practice**, there are **delays**:
  • Recognition lag (gambling for resurrection)
  • Decision lag (too little too late)
  • Implementation lag (process takes time; need to deal with holdouts)

• And **costs**:
  • In terms of growth and market access
  • Very high for disorderly defaults!

• **Gaps in architecture** complicate collective action
  • Still large stock of CAC-less bonds, and countries may have other commercial loans
  • Blurred boundary between commercial and official claims
  • Rise of creditors with no established resolution mechanism (non-Paris Club, regional development agencies)
**Enter... State-Contingent Debt Instruments (SCDIs): “Automatic” debt relief when needed!**

- SCDIs tie sovereign’s debt service obligations to “state variable”:
  - *continuous* measure of repayment capacity: e.g. GDP, wages, commodity prices
  - *discrete* event affecting repayment capacity: e.g. natural disasters, export shock

- “Adjustment mechanism” can be designed to:
  - **reduce** debt payments: e.g. GDP- or commodity-indexed bond
    - Can stabilize debt/GDP or debt/exports ratio
  - **defer** debt payments: e.g. extendible maturity bonds; loans with adjustable grace periods
    - Can stabilize gross financing needs

- States facing large exogenous shocks would benefit most:
  - **Commodity exporters** ==> commodity-indexed bonds
  - **Small states** ==> “hurricane clauses” in conventional bonds
  - **Other EMLICs reliant on FCY borrowing** ==> growth-indexed fixed principle FCY bonds
Creditors do offer these in small volumes; and, for a price, might offer more

- *Domestic pension funds* $$\rightarrow$$ Uruguay’s wage-indexed bonds (2016)
- *International insurers/reinsurers* $$\rightarrow$$ Grenada’s “hurricane clause” (2014)
- *Agence Française de Développement* $$\rightarrow$$ Adjustable grace period loans to AFR countries
- [Plus, investors in “inflation-linked bonds”: $2.7tn globally (o/w $400bn issued by EMs)]

- *Sovereign wealth funds*: to diversify GDP risk globally
- *Natural hedge investors*: e.g. in commodity-importing countries
- *EM/frontier investors*: for yield/diversification across countries
- *Islamic finance investors*: Shiariah-compliant commodity-linked bonds

Investors exist already

And more seem interested

Pricing not prohibitive

- Shocks hitting EMLICs weakly correlated with major financial market indices
- Yield premium < 50 bps for GDP-linked bond
What does a country need to pursue these?

- Model contracts...
  - To set out clear methodology to calculate cashflows
  - Lay out contingencies where data availability or reliability concerns arise
  - “London Termsheet” offers a good example
- Independent/competent statistical agency
  - Data quality/integrity critical for government-controlled state variable (e.g. GDP)
  - Less important if SCDI linked to “exogenous” variable: international commodity price; natural disaster (e.g. assessed by CCIRF), trading partner GDP/imports...

Non-DMO

- Mandate for debt management offices
  - Finance ministries need to authorize DMOs to integrate SCDIs in their strategies
  - Willingness to bear some cost for risk-mitigation

DMO

- Strengthening DMO capacity
  - SCDIs can be complex to understand, explain to investors
  - Credible issuance plans in face of (likely more) pro-cyclical investor demand
How can a country better analyze cost-benefit options of various designs: **An IMF Toolkit**

**Calculates debt, deficit, gross financing needs under range of customizable scenarios:**
(i) types of SCDI; (ii) share in total debt; (iii) types/sizes of shocks; (iv) yield premium demanded by investors...

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<th>“Linker”</th>
<th>“Floater”</th>
<th>“Extendible”</th>
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<tr>
<td><strong>Example of state variable</strong></td>
<td>Level of nominal GDP, level of a commodity price index</td>
<td>Real GDP growth rate, commodity price change</td>
<td>commodity price shock, natural disaster, export shock</td>
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<tr>
<td><strong>Adjustment mechanism</strong></td>
<td>Principal linked to GDP. Coupon varies somewhat</td>
<td>Coupon linked to the growth, but principal fixed</td>
<td>Pre-defined extension of the principal by a few years</td>
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<td><strong>Main purpose</strong></td>
<td>Stabilizes debt/GDP</td>
<td>Provides debt service relief during recessions</td>
<td>Provides substantial liquidity support</td>
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**Example**

- **Debt/GDP**
  - Linker - 25% share of sovereign financing
  - 100% conventional bonds

- **Debt/GDP**
  - Floater - 25% share of sovereign financing
  - 100% conventional bonds

- **GFN/GDP**
  - Extendible - 25% share of sovereign financing
  - 100% conventional bonds
Thank you

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Please also visit us @ http://www.imf.org/en/About/Key-Issues/state-contingent-debt-instruments