HIGH PUBLIC LEVERAGE AND FINANCIAL INSTABILITY

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FRB Boston conference on “The Implications of High Leverage”
Historically:

- after World War I: surpluses, but internationalization of the USD, Fed’s active role in trade credit

- after World War II: active ceiling on long-term interest rates, rise in inflation in 1940s

- Internationally: CBs very active participants in public debt market
Satiating the demand for liquidity

Surprising need for liquidity:
(i) September 2019
(ii) March 2021
(iii) “Establish a new Federal Reserve standing repo facility… providing funding against U.S. Treasury securities”
Task Force on Financial Stability (June, 2021)

New regime: unwinding on active asset holdings, elastic on lending programs.

Central bank digital currency and the elasticity of bank deposits
Public debt and financial instability

Public bonds are ubiquitous in the plumbing of financial markets. Debt has been sustained by “debt revenues”

Fiscal footprint of CB policy
(i) duration and interest rates
(ii) safety and fear of inflation
(iii) roll-over and deposits
(iv) foreigners and safe haven

Unpleasant financial stability (macro prudential) arithmetics

Table 1: Deficits versus Changes in the Debt-GDP Ratio

<table>
<thead>
<tr>
<th>Period:</th>
<th>With interest</th>
<th>Primary Deficit</th>
<th>Interest Charge</th>
<th>Nominal Growth Effect</th>
<th>Real Growth Effect</th>
<th>Inflation Effect</th>
<th>Change in Debt/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
<td>Deficit (1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>1792</td>
<td>2003</td>
<td>1.2%</td>
<td>0.3%</td>
<td>0.9%</td>
<td>1.3%</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>1792</td>
<td>1868</td>
<td>0.4%</td>
<td>-0.1%</td>
<td>0.5%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>0.1%</td>
</tr>
<tr>
<td>1869</td>
<td>2003</td>
<td>1.7%</td>
<td>0.5%</td>
<td>1.2%</td>
<td>1.7%</td>
<td>1.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>1792</td>
<td>1914</td>
<td>0.1%</td>
<td>-0.4%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>1915</td>
<td>2003</td>
<td>2.8%</td>
<td>1.2%</td>
<td>1.6%</td>
<td>2.4%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

\[ b_0 = - \int_{0}^{\infty} e^{-\bar{m}_t t} s_t dt + \int_{0}^{\infty} e^{-\bar{m}_t t} (\bar{m}_t - r_t) b_t dt. \]

Debt = PV (primary surplus) + Debt-revenue term

What makes government debt special in offering lower return?
The emerging global central bank

International coverage of network of liquidity lines is already vast. Stabilizing force over global flows.

Sources of instability:
- willingness to be world lender of last resort
- the ability to continue to distinguish banks from sovereigns
- the central role of the ECB and geopolitics