The Mystery of the Printing Press: Monetary Policy and Self-fulfilling Debt Crises”

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Discussion by Marco Bassetto

UCL, Federal Reserve Bank of Chicago, and IFS
What is the Bank’s “Promise to Pay”? The words “I promise to pay the bearer on demand the sum of five [ten/twenty/fifty] pounds” date from long ago [...] But the value of the pound has not been linked to gold for many years, so the meaning of the promise to pay has changed. Exchange into gold is no longer possible and Bank of England notes can only be exchanged for other Bank of England notes of the same face value. Public trust in the pound is now maintained by the operation of monetary policy, the objective of which is price stability.
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A simplified environment

- No uncertainty
- Risk-neutral investors, requiring real return $\bar{r}$
- First period: exogenous borrowing requirement $B$
- Second period: will consider default $\theta$ or inflation $\pi$ separately
- Taxes only to repay debt, $T$, deadweight cost of taxation $z(T)$
Investor optimality

\[ \tilde{r} = \frac{\tilde{R}(1 - \theta)}{1 + \pi} \]
Equivalence between default and inflation
When the government can only default

- Default (deadweight) cost: $\alpha \theta B \tilde{R}$
- Optimality ex post:
  - Either $\theta = 0$
  - or $z'(T) = \alpha/(1 - \alpha) \implies T = \bar{T}$
Equilibria (with $B$ small)

- First eq.: no default, $T < \bar{T}$
- Second eq.: (partial) default, $T = \bar{T}$

Why higher taxes with default? Taxes have to pay both creditors and default costs:

$\bar{T} = \bar{r}B + \alpha \theta B \tilde{R}$
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- Why higher taxes with default? Taxes have to pay both creditors and default costs:

$$T = \bar{r}B + \alpha \theta B \tilde{R}$$
When the government can only inflate

- Deadweight cost: $C(\pi)$
- Optimality ex post:

$$\frac{B\tilde{R}}{(1 + \pi)^2} z' \left( \frac{B\tilde{R}}{1 + \pi} \right) = C'(\pi)$$

- Equilibrium, unique

$$B\bar{r}z'(B\bar{r}) = C'(\pi)(1 + \pi)$$
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- Standard to have convex distortions from tax rates... but tax rate is $\frac{1}{1+\pi}$.
Back to the picture
Agenda

- Provide deeper justification (microfoundations) for cost differences
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- Think about difference in coordination requirements across debt crises and inflationary crises