Fiscal Consequences of the US War on COVID

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How were "Wars" Financed

	taxes	\mathbf{bonds}	money
World War I	20.8	74.6	7.0
World War II	30.2	46.0	10.1
COVID-19	4.0	38.1	45.1

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What is "Money"?

Recall gov't PVBC:

$$W_{0} = \frac{R_{0}}{1+R_{0}}M_{0}^{S} + \sum_{s=0}^{\infty} E_{0}\left[z_{0,s+1}\left(T_{s+1} + \frac{R_{s+1}}{1+R_{s+1}}M_{s+1}^{S}\right)\right]$$

- Money is a special asset that earns seigniorage
- True for currency (cash)
- Mostly true for World War II money (bank reserves earned zero)

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• Not true for COVID financing: interest-bearing money

Alernative Definition of Money

- Money is liabilities of the central bank (as opposed to the Treasury)
- Still tricky: technically the CB bought government bonds, so just an intermediary

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- Need to think about separating budget constraints
- Need to think why it matters

Accounting for Interest Payments

• Bassetto and Butters:

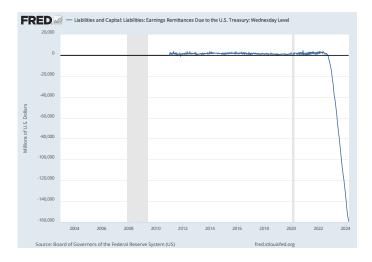
$$(R_t - \pi_t)B_{t-1}$$

• Hall and Sargent:

$$\sum_{j=1}^{N} D_{j,t-1} \left(\frac{1}{1+R_{j-1,t}} - \frac{1}{1+R_{j,t-1}} \right)$$

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Deferred Asset



Pattern and Comments

- Up to early 1990s, no big primary deficts during peacetime.
 - Something snaps after that, but remember that real rates are trending down

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- Wars financed with mostly debt
- Permanent government expansion after wars
 - True on spending side, but not tax side this time