Discussion of

"Measuring U.S. Fiscal Capacity using Discounted Cash Flow Analysis"

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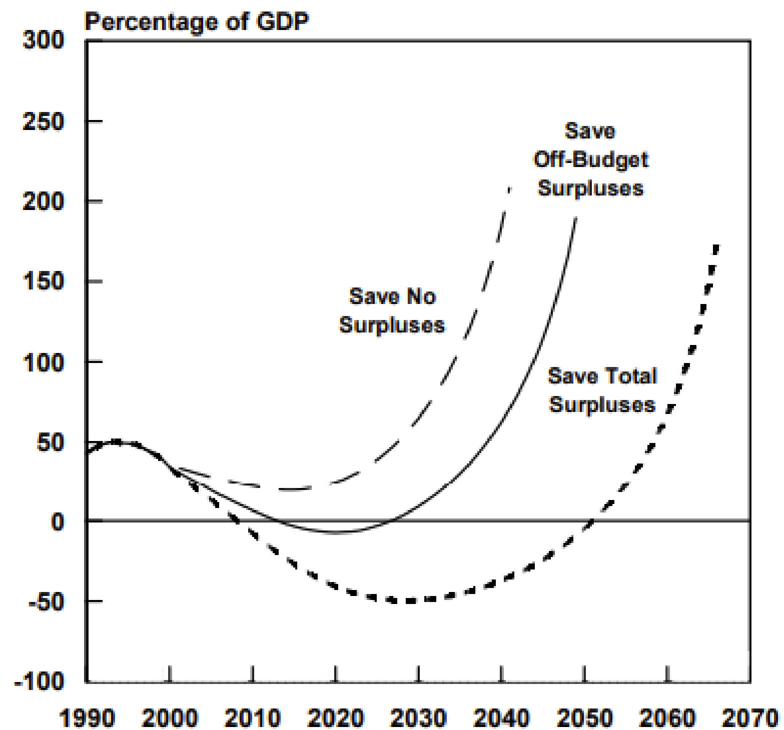
(When) will the U.S. run out of debt capacity?

2000



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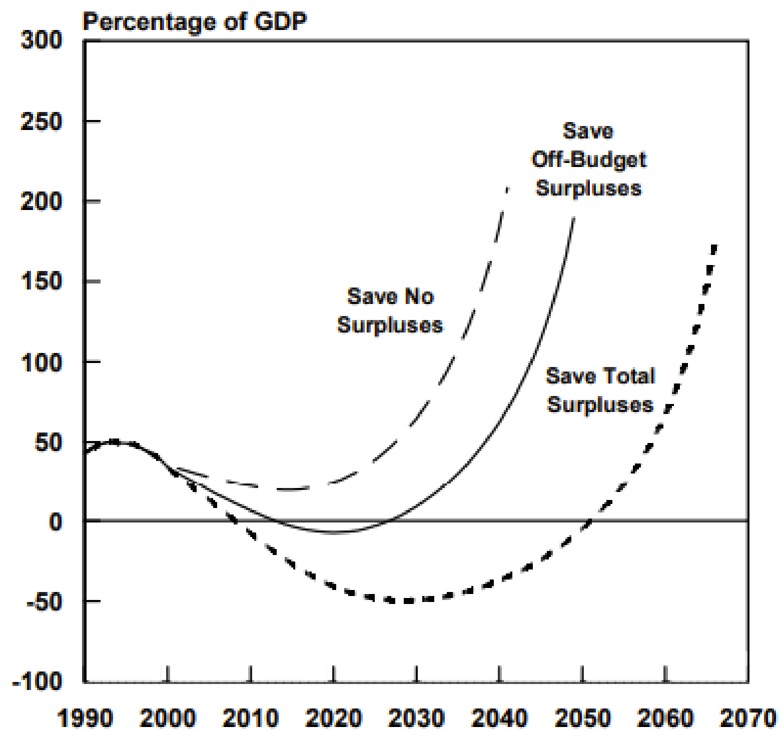
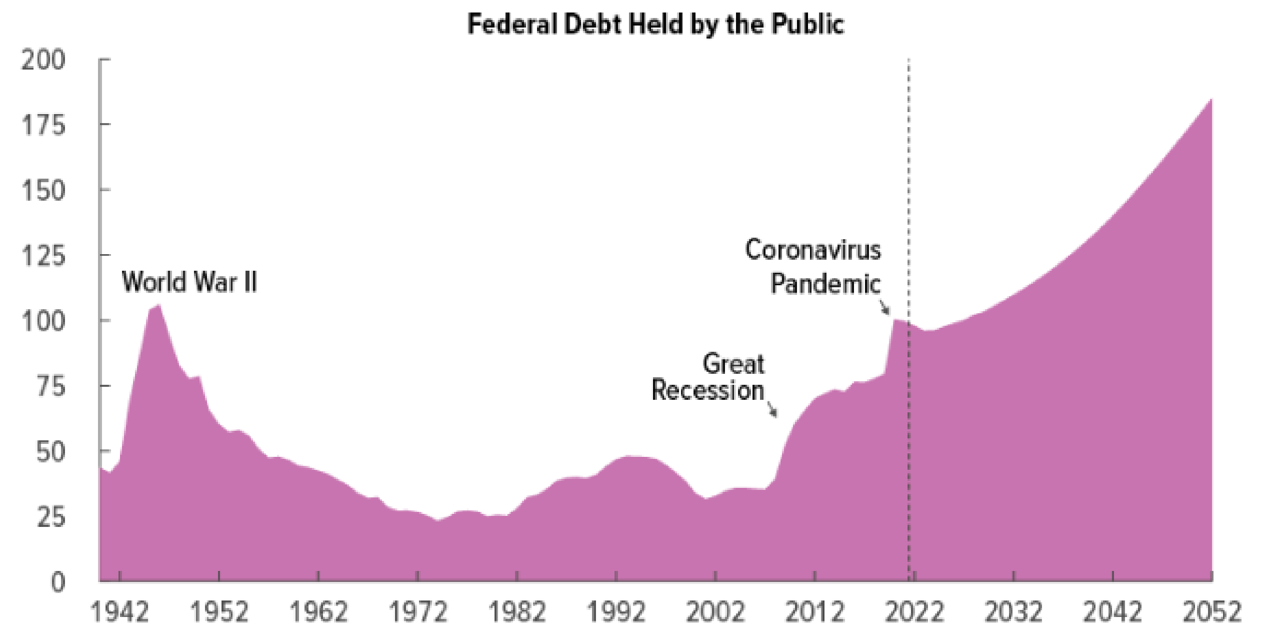


2022



Source: 2022 CBO Long-Term Budget Outlook

Why risk-adjust discount rates?

- State (Arrow-Debreu) pricing—future consumption is more valuable in future states of the world where resources are scarce, and conversely when resources are abundant
- Implication for discount rates is that:
  - Cash flows that are positively correlated with aggregate GDP should be discounted at above the risk-free rate, e.g., surpluses
  - Cash flows that are negative correlated with aggregate GDP should be discounted at below the risk-free rate (insurance value), e.g., deficits

What is the basic logic behind the calculations and results?

1. Debt(current) + PV of future deficits = PV of future primary surpluses

1. PV of future surpluses vary with GDP:

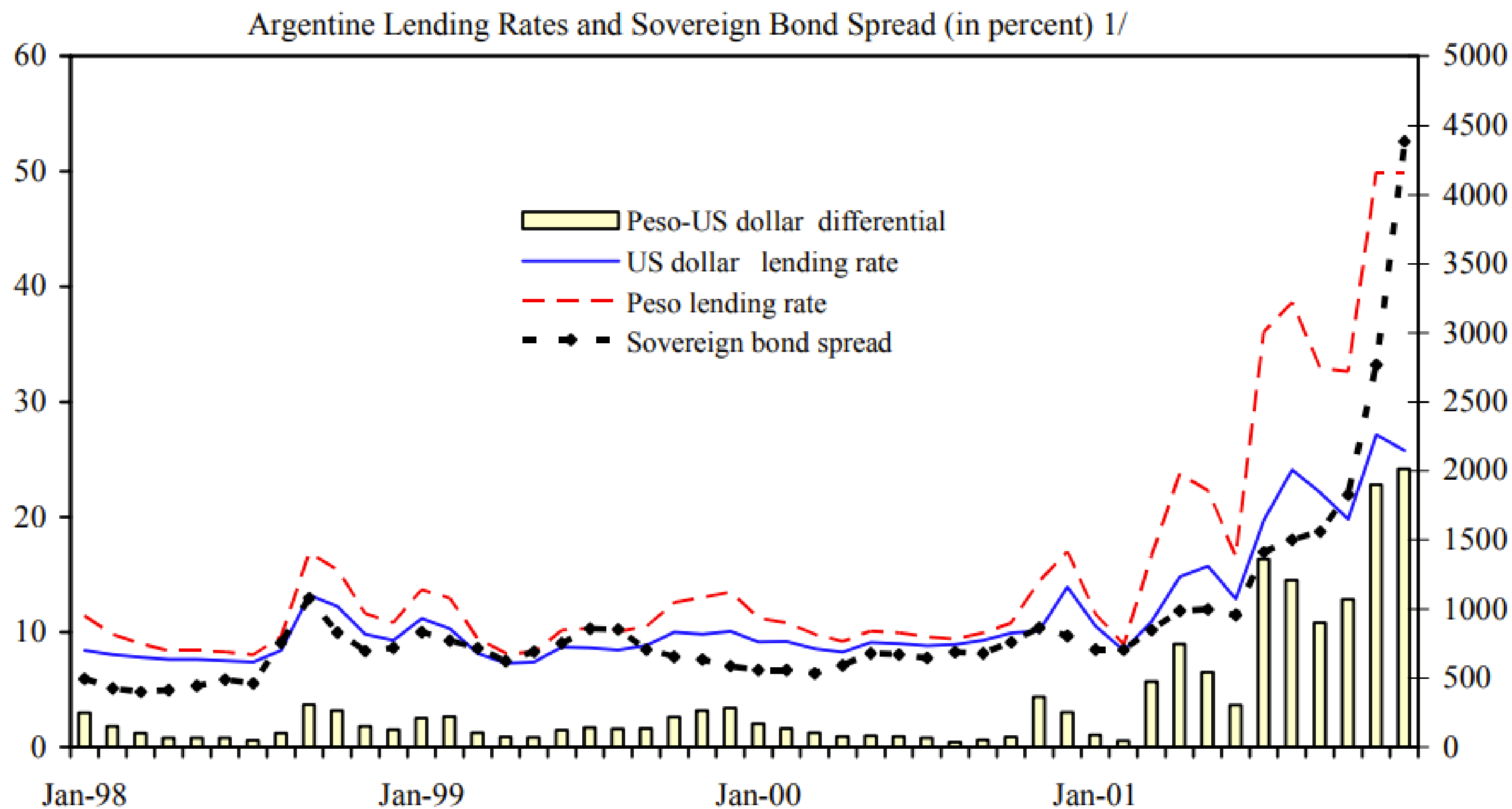
$$\frac{\bar{s} \times GDP}{r_{RA} - g}$$

=> higher PV surpluses = higher debt capacity when r_{RA} lower

All government debt is risky

- This time isn't different…
- Sources of risk:
  - Unanticipated inflation and interest rate changes
  - Debt ceiling causes payment delays
  - Exchange rate risk
  - Expropriation risk
- Interest rates can be relatively low even when those risks are present
  - Although the required rate of return on Treasury securities is lower rate than on most other assets,

Sovereign rates can rise suddenly



Sources: IMF, *Balance of Payment Statistics, International Financial Statistics* ; JP Morgan; Fund staff estimates.

1/ On 30 day loans to prime customers.

Reservations about lengthening debt maturity

- Proposal is to better match duration and hence interest rate sensitivity of assets (surpluses) and debt liabilities
- Doing so could backfire…
  - Do investors want very long-term debt?
  - If it were nominal, it is extremely risky
  - Relatedly, long-term debt creates a moral hazard problem for the government
  - If real, history suggests limited demand
  - Is term premium in long-term interest rates a cost to governments?

- And on first principles, the future liabilities of the government are much more adjustable than that of pension plans, suggesting that the government has other mechanisms at its disposal to manage interest rate risk, including its own influence on rates.