U. S. Federal Debt in the 21st Century

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Outline

Structure of U.S. Debt?

1. Fixed-value floating rate.
2. Nominal perpetuities
3. Indexed perpetuities
4. Taxable + tax free
5. Variable coupon
6. Swaps
7. Fed/Treasury accord on maturity, real/nominal, etc.

Goals

1. Funding debt at least cost. Easy to borrow when needed.
2. Providing liquid and useful securities, where the Government has a natural advantage. Both policy and #1.
3. Managing interest rate and other risks to the U. S. budget.
4. Tools for optimal fiscal (-monetary?) policy.

Goals today

1. Why not? Unforeseen problems? Objections? Additions?

Short debt

Features

- Fixed-value ($1.00), floating-rate, electronically transferable, arbitrary denominations, perpetual. Sexy name?
- Fixed value: Buy/sell freely ($1 reserves = 1 bond). Accept for taxes.
- Rate = interest on reserves. (Depends on Fed policy. Auctions, index, if not?)

Why

- No rollover, no rollover costs. (Sorry, dealers.)
- Basis for better retail electronic transactions.
- Best fills "liquidity (collateral?) demand" for government debt.
- Run free interest-paying electronic money = 21st century currency.
- "Optimal quantity of money." Reserves for all!

Objections

- Q: Demand? A: Fed innovations popular, and useful if small.
- Q: Quantity not perfectly controlled. A: A problem?
- Q: Price level control? A: MV=PY a lost cause. Fed retains (strengthens) i control.
- ?

Long debt

Perpetuities

- \$1 coupon forever. Repay by repurchasing.
- Pay with fixed value debt?
- Let current debt roll off.

Why

- Liquidity. One security! No on/off run spread.
- Much historical precedent.

Objections

- Q: Desire for coupon debt? A: Why? Easy for banks/funds to synthesize coupons or zeros for retail customers.
- ?

Tax status

Tax-free debt

- Issue both taxable and tax free flavors.
- Free of all Federal tax including personal and corporate income tax and estate taxes. Press states/local to exempt as well.

Why

- The point of debt is to get money now at expense of future taxes. Tax free debt has a higher yield, collect the future taxes now.
- Investors may prefer to overpay now and avoid complex legal and tax avoidance costs later.
- Removes intertemporal distortions, can supplant much complex tax-sheltered investing.

Objections

- Q: "Lose tax revenue." A: No. Collect it sooner.
- ?

Inflation

Indexed debt

- Perpetual. Coupon pays \$1 times$\times CPI$.
- Example: CPI today $= 230$. Coupon pays \$2.30.

Why / alternatives

- One security, independent of issue date. Should increase liquidity.
- Symmetric treatment of inflation / deflation.
- (Tax free) Indexed perpetuity $=$ ideal risk free asset. $\rightarrow$ Large demand, low yield.
- For other countries: Domestic vs. foreign currency debt. U.S?

Objections

- ?

Government equity

Variable coupon debt

- Perpetuities with the right to raise or lower coupon payments without legal default.
- Politics: Treasury? Act of Congress?

Why

- Seamlessly reduce payments in times of fiscal stress.

Alternatives

- Rules vs. reputations. Trills. Corporate dividends. Voters = shareholders?
- Analogy: Suspensions of Convertibility.
- All debt (better ex post, fewer kinds of debt)? Or part only (cheaper yields ex ante)?

Objections

- ?

Risk management

Swaps

- Fixed-floating; Indexed-nominal.
- Others? Taxable-nontaxable? All?

Why

- Separate liquidity provision, meeting market demands for specific bonds, from risk exposure.
- Example: Market wants lots of floating rate "money-like" debt. But if interest rates rise, interest costs rise. Solution: issue lots of floating-rate, swap to fixed.
- Implicit: demand for characteristics beyond maturity. Demand for bonds $\neq$ demand for swaps.
- Allows quicker adjustments of maturity/index/tax structure than buying and selling bonds.
- Tradeable treasury swaps should be liquid and popular in the secondary market.

Objections

- Q: Swap counterparty risk? A: Collateralized, and what is all this regulation for anyway?
- ?

Accord

Needed: New Fed-Treasury Accord

- No more we sell, you buy.
- Who is in charge of the maturity/index/tax structure of debt? (Treasury?)
- Who is in charge of short term interest rates? (Fed, via IOR?)

How do we use these tools?

- Optimal (state-contingent) maturity structure (bonds+swaps)? Index vs. nonindex? Or target spread? Taxable vs tax free? (Or target spread) How much variable coupon debt? When to raise/lower the coupons?
- Long but unconcluded optimal-taxation, optimal-debt literature (e.g. Lucas-Stokey.)
- Once you know the answers, most have macro (Fed) and budgetary (Congress) as well as debt-cost (Treasury) implications. Accord/coordination is not simple.