

Quarterly Refunding Discussion Charts August 2, 2005

30-Year Bond Issuance

Three Fundamental Issues

- Financing Needs
- Flexibility
- Cost Considerations

Financing Needs

- Existing securities can finance projected needs
- Bond issuance is not projected to crowd out other securities

Debt Portfolio Flexibility

- Average maturity has declined in recent years; modest 30-year issuance would not adversely impact flexibility
- Roll-over is within the historical range; 30-year issuance would reduce short-term funding needs while maintaining short bias in financing
- Reintroduction of the 30-year diversifies funding
- The reintroduction of 30's increases the investor base

<u>Costs</u>

- Term premium partially offset by reduced event and operation risk, improved cash management, and broader customer base
- Market consultation indicates potential structural demand from real money accounts, pension funds, and asset-liability managers
- Previous presence in market eases market acceptance

DEBT MATURITY MEASURES





Distribution of Marketable Debt Outstanding by Security

Projections are based on current CBO budget estimates through FY2015 (except internal Treasury estimate for FY2005). Future residual financing needs are spread equally across auctioned securities to maintain constant maturity of issuance. Approximately \$25-\$30B of bonds are included starting FY2006.



Percentage of Debt Maturing in Next 12 to 36 Months

Projections are based on current CBO budget estimates through FY2015 (except internal Treasury estimate for FY2005). Future residual financing needs are spread equally across auctioned securities to maintain constant maturity of issuance. Approximately \$25-\$30B of bonds are included starting FY2006.

Security Characteristics of Treasury Debt Portfolio

Attributes of Different Treasury Security Offerings, Jan 1959-May 2005

	Average	SD of	Correlation to	Correlation	Average modified duration for	Average convexity for 100
	Spread to 3-	spread to 3-	3-month	to 3-month	change in	bps change in
Security	month	month	nominal yield	real cost	nominal rates	nominal rates
6-month 2-year 3-year 5-year 10-year 30-year	0.19 0.75 0.90 1.10 1.36 1.42	0.20 0.56 0.72 0.91 1.21 1.39	0.997 0.977 0.963 0.940 0.904 0.858	0.71 0.70 0.71 0.65 0.69 *	0.47 1.85 2.69 4.20 7.18 12.90	$\begin{array}{c} 0.00 \\ 0.04 \\ 0.09 \\ 0.23 \\ 0.65 \\ 2.71 \end{array}$
5-year TIP 10-year TIP 20-year TIP	2.01 1.43 1.57	2.71 2.93 3.42	0.425 0.242 -0.081	-0.18 -0.26 -0.35	4.67 8.71 15.10	0.25 0.87 2.80

Notes: Historical data for TIPS are simulated assuming real yields are equivalent to the difference between the yield of a nominal security of comparable maturity and inflation expectations. Inflation expectations are derived using a simple adaptive expectations model that weights last month CPI-U NSA, current month CPI-U NSA and next month CPI-U NSA at 25%, 50% and 25%, respectively. OMB's inflation forecast of 2.4% is assumed for realized CPI-U NSA post-May 2005. Simulated TIPS' historical real yield is used to calculate TIPS' duration and convexity. * Insufficient data.

The Impact of Various Securities on Portfolio Costs and Flexibility

Different Securities' Impact on Flexibility and Cost of a Steady-State Portfolio#

			Historical		Additional Debt That Can	Contribution of \$1
		Contribution of debt	average	Steady-state	Be Raised For \$1 Billion	billion to steady-state
	Annual	stock maturity to steady	spreads to 3-	Debt Stock	Increase in Auction Size In	portfolio's average
	Auction	state portfolio's average	month bill	incl SOMA	a Fiscal Year	maturity
Security	Frequency	maturity (in months) /1	rate	(\$ billions)	(\$ billions) /1	(in months)
1-month	52	0.0	0	53	4	0.000
3-month	52	0.1	0	283	13	0.000
6-month	52	0.3	0.19	551	26	0.000
2-year	12	1.3	0.75	646	12	0.002
3-year	4	0.8	0.90	264	4	0.003
5-year	12	6.0	1.10	1236	12	0.005
10-year	8	13.3	1.36	1368	8	0.010
30-year *	2	23.6	1.42	810	2	0.029
5-year TIP	2	1	2.01	115	2	0.005
10-year TIP	4	4	1.43	420	4	0.010
20-year TIP	2	8	1.57	420	2	0.019
Totals	202	58		6166	89	0.084

Notes: /1 Average nominal historical rates are based on data from 1959 to present. A synthetic series to estimate historical nominal rates for TIPS is used -- per the prior table. * Hypothetical

A steady state portfolio illustrates the implications for Treasury's debt stock if Treasury's current issuance pattern and offering sizes

were maintained in perpetuity. Assumes no growth in SOMA.

Impact of a new 30 year on Debt Portfolio

	2005	2010	2015
Maturity (years)			
Current issuance schedule 1/	4.50	3.92	3.50
With 30-year bonds 2/	4.50	4.58	4.58
Duration (years)			
Current issuance schedule	3.93	3.58	3.33
With 30-year bonds	3.93	3.91	3.84
Nominal Interest Cost (\$B)			
Current issuance schedule	152.6	248.9	338.7
With 30-year bonds	152.6	249.4	339.8
Nominal Interest Cost Sensitivity (\$B) 3/			
Current issuance schedule		389.0	389.4
With 30-year bonds		400.9	401.7
Financing Flexibility (\$B) /4			
Current issuance schedule		5.37%	4.54%
With 30-year bonds		4.39%	4.04%

Notes: Projections are based on current CBO budget estimates through FY2015 (except internal Treasury estimate for FY2005), and on current OMB estimates for interest rates and inflation. 1/ Under current issuance schedule, auction sizes as percents of total marketable borrowing needs are held constant. 2/ Approximately \$25B to \$30B of 30-year bonds are included starting in 2006; subsequent auction sizes as percents of total marketable borrowing needs are held constant. 3/ Nominal interest cost sensitivity is the change in the debt portfolio's interest expense given a positive shock of 100bps to real and inflation rates. 4/ Average percentage change in auction size over 2006-2010 or 2006-2015.

Treasury Backstop Securities Lending Facility

Trading volumes are growing compared to supply

Cash MarketFutures MarketRP Market

Turnover Ratios Average Daily Trading Volume/Marketable Debt Outstanding Annual Data





Imbalances Cropping Up More Frequently

Examples:

- Fall 2001: High levels of settlement fails in the August 5-year and 10-year notes after 9/11
- Second half of 2003: Chronic settlement fails in the May 2013 10-year note
- 2005: High levels of open interest in futures contracts led to market dislocations

Outcome: Increasing Fails

Average Daily Treasury Settlement Fails*



* Fails to Receive Source: FRBNY

Risks

- •Large and Persistent Fails
- •Impaired Liquidity in Cash Market
- Loss of Price Convergence in Futures Market
- •Operational Cost of Resolving Fails
- •Ultimately Higher Borrowing Costs for Treasury

Imbalances could be mitigated or alleviated through a temporary increase in the supply of Treasuries.

Possible Sources of Additional Supply

- FRBNY securities lending facility
 - Additional supply limited to 65% of SOMA holdings
 - Holdings of some securities are small
 - No auction participation beyond rollovers
 - Primary mission of portfolio not securities lending
- Large holders
 - Most securities are already made available
 - Individually rational reductions in lending during episodes of chronic fails
- Development of a backstop Treasury securities lending facility
 - Design to provide additional supply, while not impeding normal market functioning

Specials Financing



Desirable Outcomes

- Facilitate settlement of cash market transactions
- Improve functioning of the specials market
 - Do not want to damage specials market
 - Promote market pricing through zero RP rate
 - Do not want to distort risk/reward trade-offs
- Strengthen futures market
 - Promote price convergence

Treasury Constraints

- Continue to provide certainty of supply
- Supplier of last resort
 - Encourage market-driven solutions to supply-demand imbalances
 - Stay out of market unless risk of systemic problems
 - Do not want to be perceived as rewarding shorts

Effects of a Treasury Securities Lending Facility



Desired Attributes of a Backstop Securities Lending Facility

- Clarity and confidence of availability
 - Non-discretionary, standing facility
 - Unlimited supply, renewable terms
- Discourage use unless market severely stressed
 - Price set at a penalty rate
- Not designed to address transitory needs
 - Term greater than overnight needed

Example of How a Backstop Securities Lending Facility Could Work

- Treasury Stands Ready to Lend Any Security at Implied Negative RP Rate
- Quantity Unlimited
- Borrow for Fixed Term
- If Needed, Borrower Could Renew for Same Term

Specials Market



2. Current Fails Situation

3. Prompt Delivery / Desired Outcome



4. Backstop Securities Lending Facility



Many Questions Would Need to be Answered

- Policy
 - Eligible participants
 - Pricing mechanism
 - Term of loan
- Statutory/Regulatory
 - Nature of transaction (loan, or sale and buyback)
 - Authority
 - Standing
 - During Budget Surpluses
 - Debt Ceiling
 - Interaction with buy-in rule
 - Clarification of tax regulations
 - Possible legislative changes
- Operational
 - Institutions to conduct transactions
 - Collateral arrangements
 - Accounting
 - Systems modifications
 - Treatment of interest accrual
 - Treatment of interest payments
 - Affect on amounts of debt outstanding

Presentation to the U.S. Treasury and the Treasury Borrowing Advisory Committee

August 2, 2005

Presentation Question:

Please discuss the impact of currency movements on the Treasury's cost of borrowing. Are foreign investors exerting significant downward pressures on the Treasury's financing costs or are other forces at work which have limited increases in yields?

Main Points:

- Currency movements can impact Treasury's cost of borrowing through a lower exchange rate creating more stimulative financial conditions.
- Foreign official investors exert downward pressure on Treasury's cost of borrowing through funding the current account deficit. Foreign private and official investors have exhibited a tendency recently of buying longer maturity instruments.
- These are just some of the factors limiting the increase in yields; others include:
 - A decrease in risk premiums
 - An increase in the global savings rate
 - Structural changes in the bond market
- > However, the impact of some of these factors could wane.





percent

*Source: A US Investment Bank.



Source: Department of Treasury.



Source: Department of Treasury, Bureau of Economic Analytics.



Source: Department of Treasury.



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Source: Department of Treasury.







Source: IMF World Economic Outlook (April 2005).





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*Source: Federal Reserve board for data from 1979 to date. History is derived from a fitted model.



Fixed Income Issuance by Sector in 10-Year note Equivalents (Billions)

Source: A US Investment Bank.



