

Treasury Borrowing Advisory Committee



Quarterly Refunding

May 4, 2004

Portfolio Composition

We are introducing both 5-year and 20-year TIPS. We will need to reduce nominal issuance to make room for additional TIPS issuance. In the absence of liquidity concerns, we would eliminate the reopenings of 10-year nominal securities to accommodate the new securities. We would like the Committee's views on eliminating the 10-year reopening, simply reducing the sizes of 10-year auctions, or spreading the reduction in issuance across both 5-year and 10-year issuance. In discussing these options, we would like the Committee's views on the timing of implementation of the Committee's preferred option. We would also like the Committee's view on initial auction sizes for these new TIPS offerings and the appropriate position for these securities in the issuance calendar.

Treasury Financing Requirements

(\$ Billions)

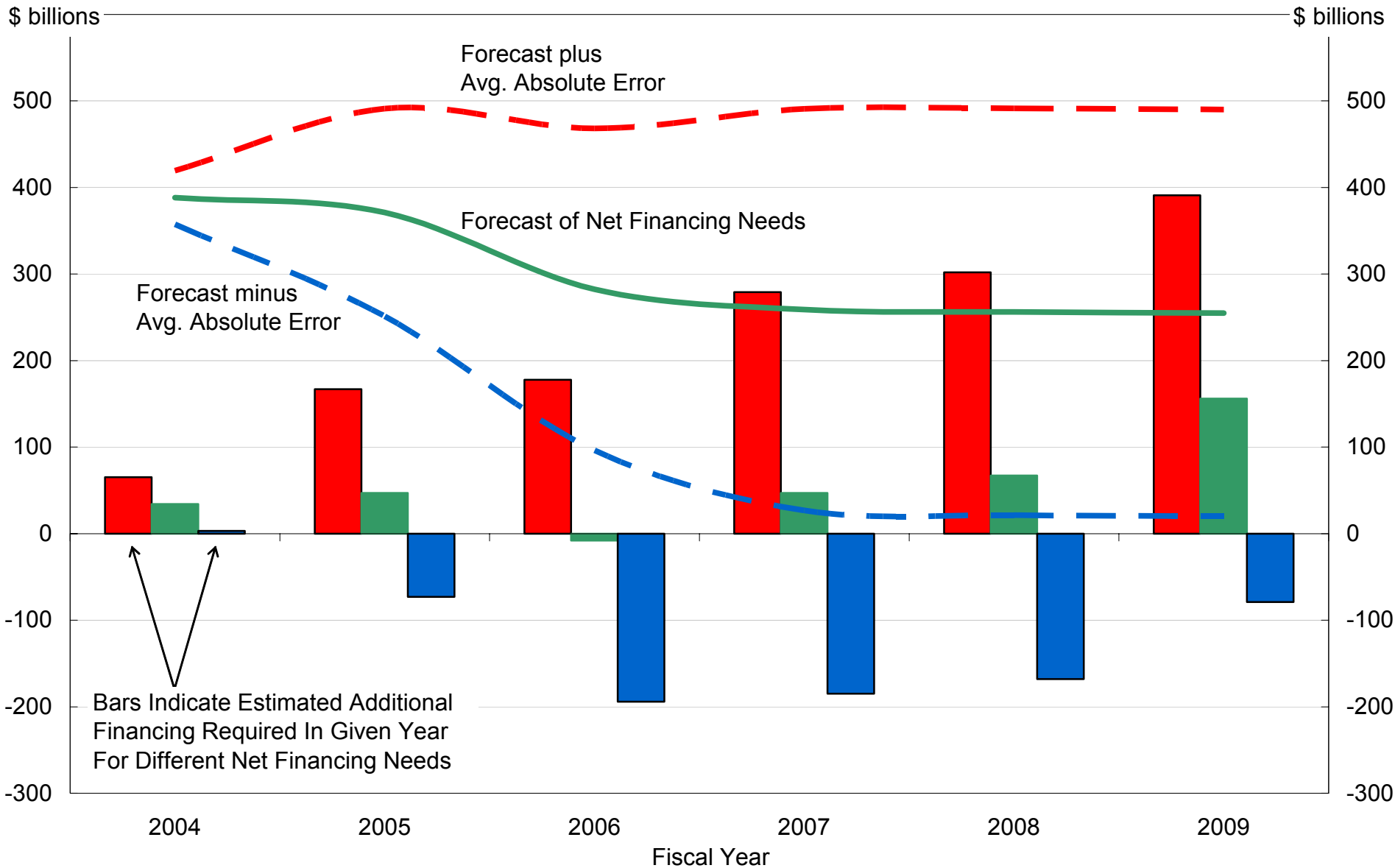
	January - March 2004		April - June 2004
	(Projected)	(Actuals)	(Projected)
<u>Deficit Funding (Def + / Surplus -)</u>	203	171	22
<u>Means of Financing</u>			
Change in Cash Balance	13	12	-24
Net Non-Marketable Financing	5	7	6
Net Marketable Financing	177	146	38
Other*	8	7	2
<u>Net Marketable Financing</u>	177	146	38
Bills		56	
Nominal Notes		78	
TIPS		12	
Bonds		0	
<u>Notes:</u>			
Starting Cash Balance	33	33	21
Ending Cash Balance	20	21	45

* Includes direct loan activity, changes in accrued interest and checks outstanding and minor miscellaneous transactions.

Note: Totals may not add due to rounding

Financing Residuals Given Current Issuance Calendar

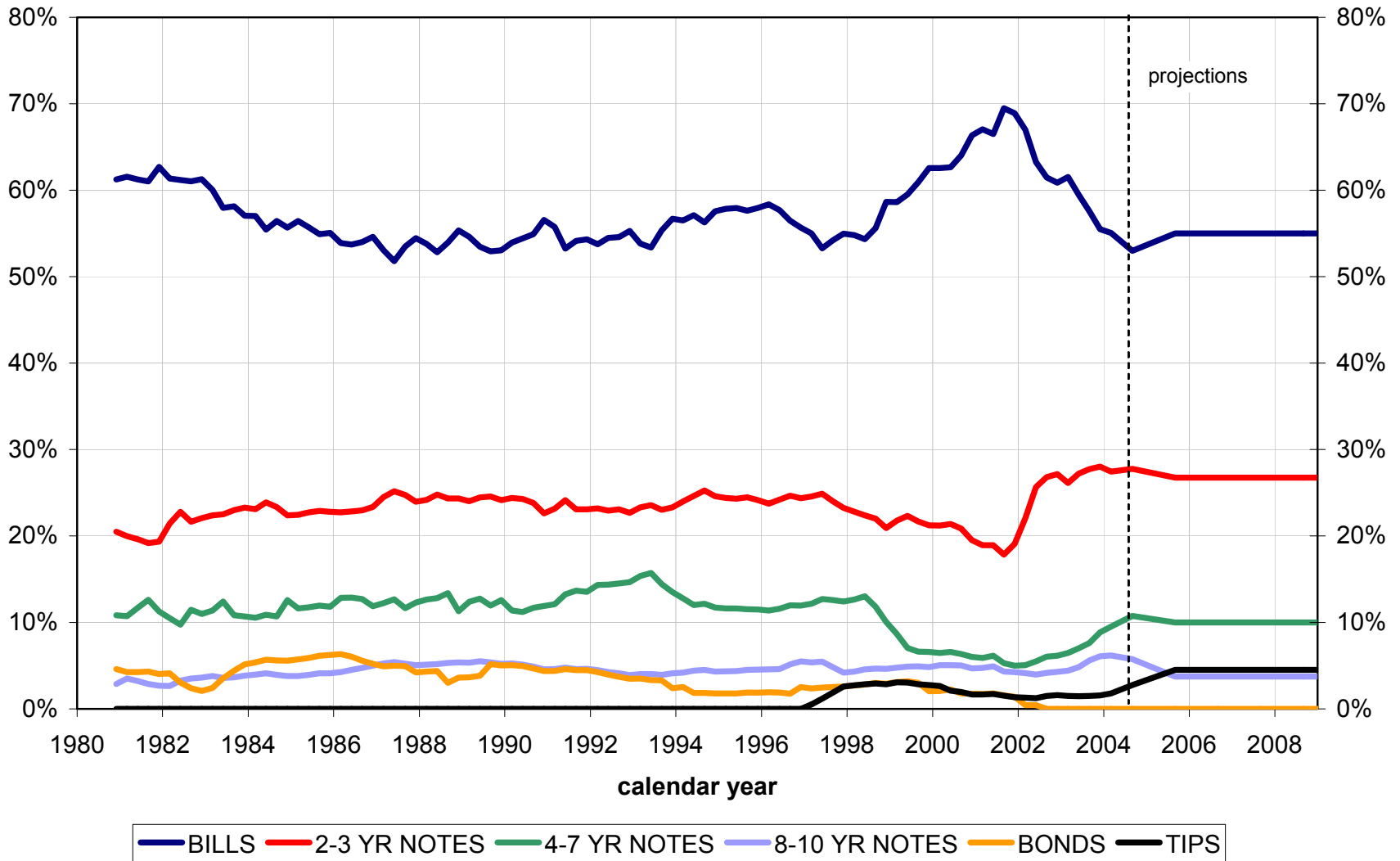
Assumes current coupon issuance pattern and issuance amount-- Bill issuance at levels required to maintain outstanding FY \$ amounts nearly equal to September 30, 2003 total outstanding



*Chart does not include new 5-yr TIPS and 20-yr TIPS.

** Forecast of net financing needs is composed of Treasury's announced estimate for FY '04 and OMB projections for out years.

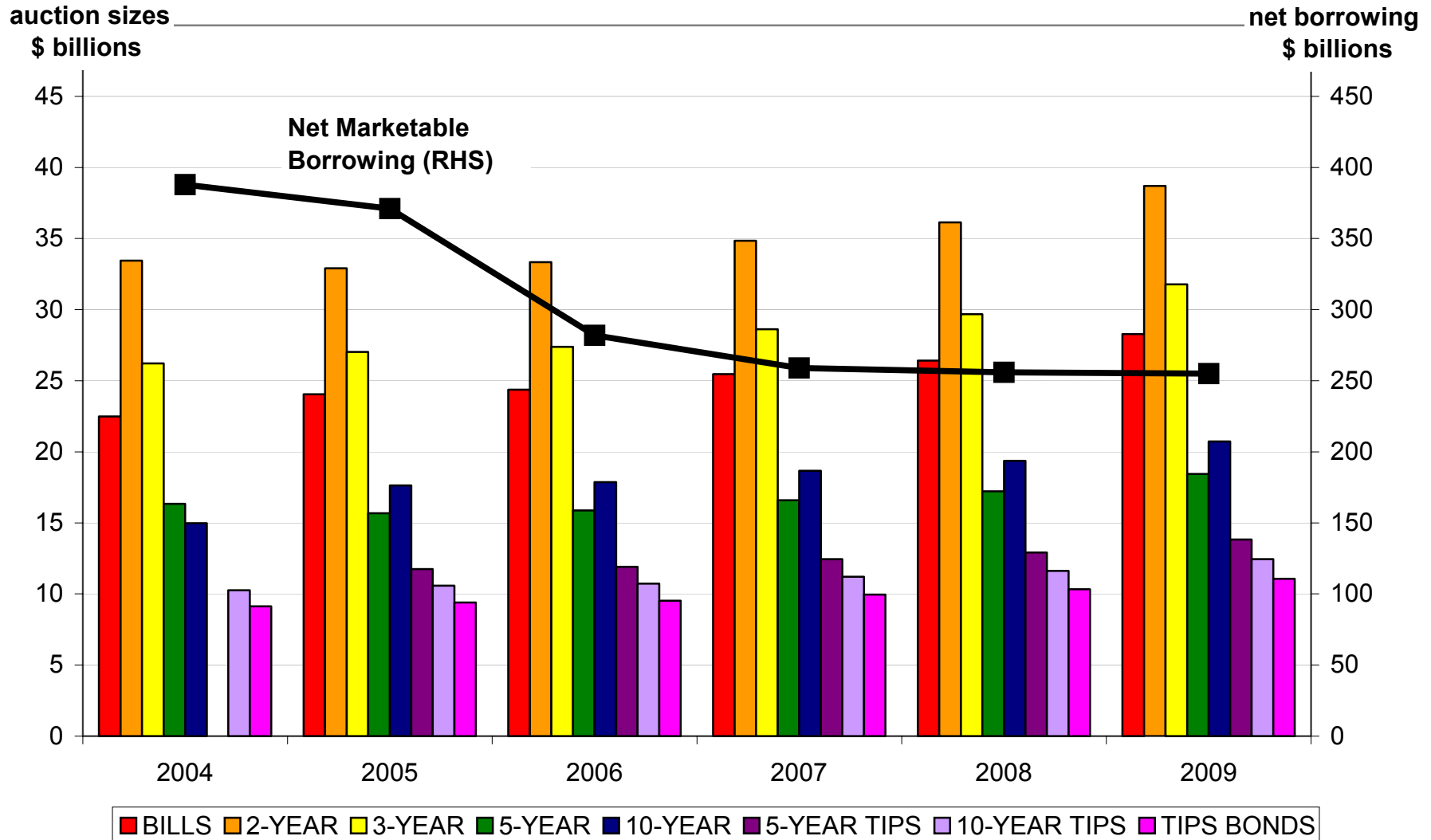
Starting Assumption: Percentage Breakdown of Issuance Constant Distribution of Treasury's Marketable Debt Issuance



* Annual issuance is defined as all coupon issuance plus bills outstanding at the end of the period.

Projected Net Marketable Borrowing and Hypothetical Auction Sizes

Hypothetical Auction Sizes Include Amounts Awarded to the Federal Reserve

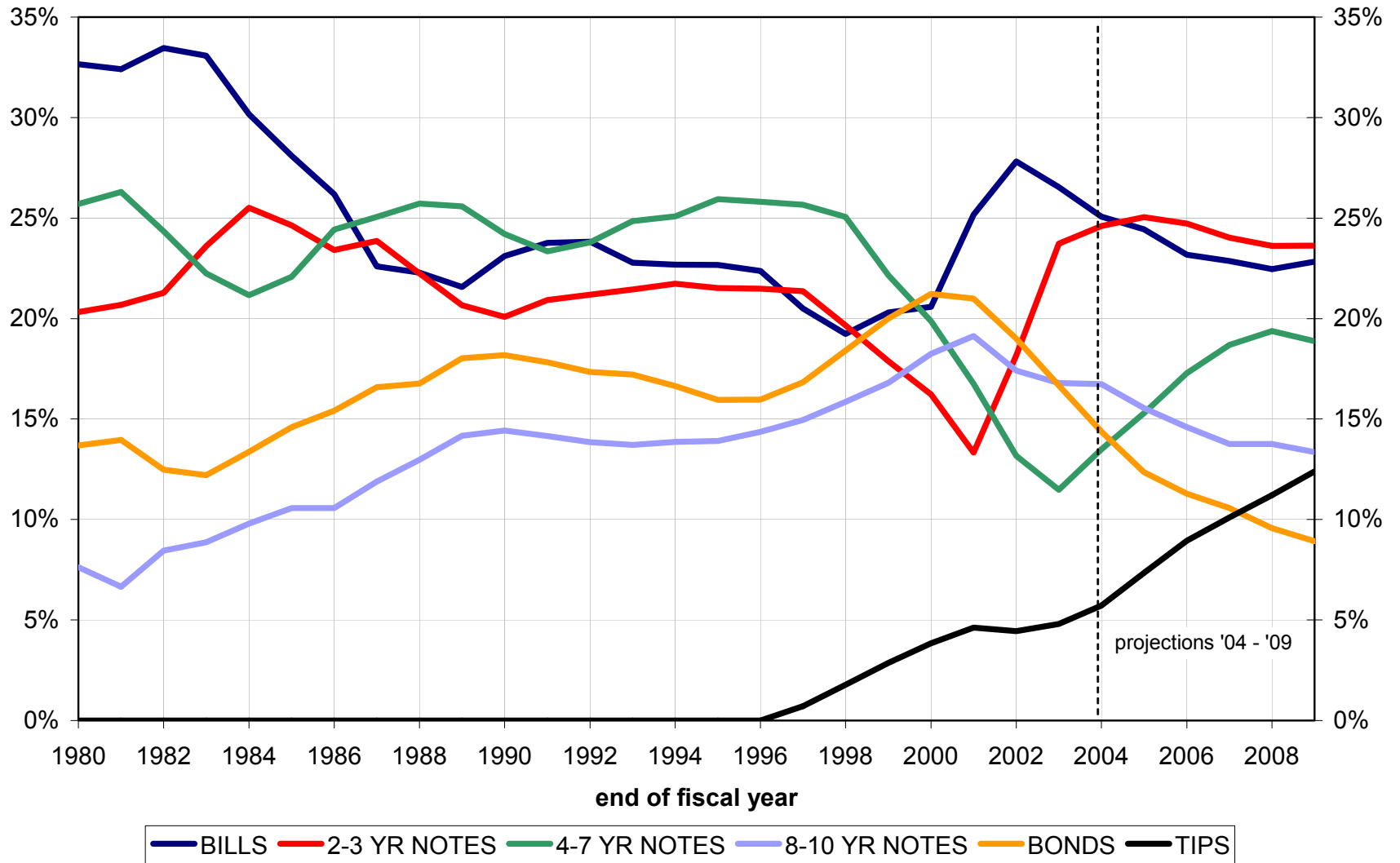


*Average auction sizes for nominal 10-yr calculated for 7 auctions in '04 and 4 per year after that; for 5-yr and 20-yr TIPS, average auction sizes are calculated assuming 2 auctions per year each (but only one 20-yr TIPS auction in FY 2004).

**For bills, the average auction size equals the amount outstanding at the end of the fiscal year divided by 43 (i.e., 4 1-month auctions, 13 3-month auctions, plus 26 6-month auctions).

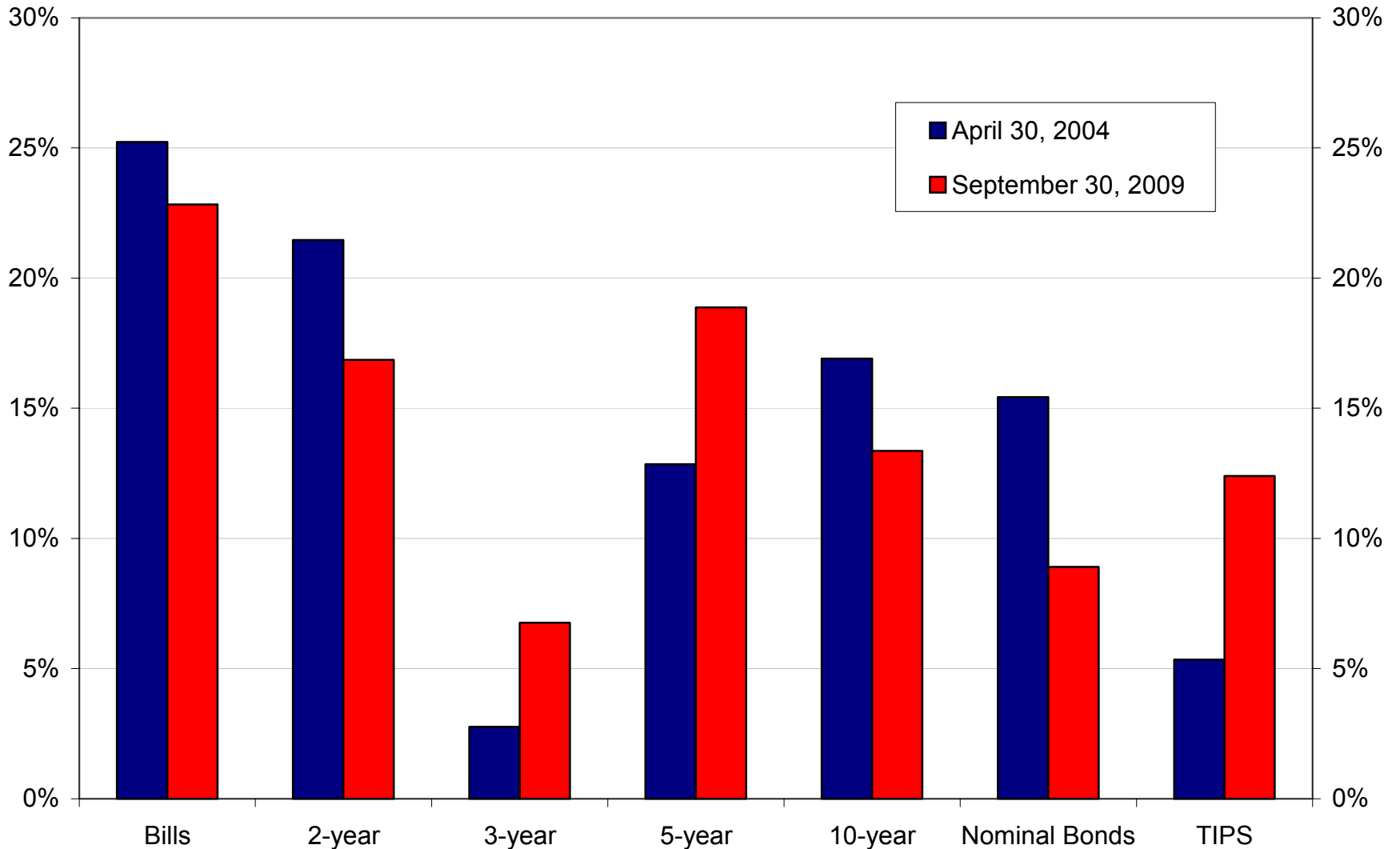
***Based on assumptions in chart 5.

Distribution of Treasury's Marketable Debt



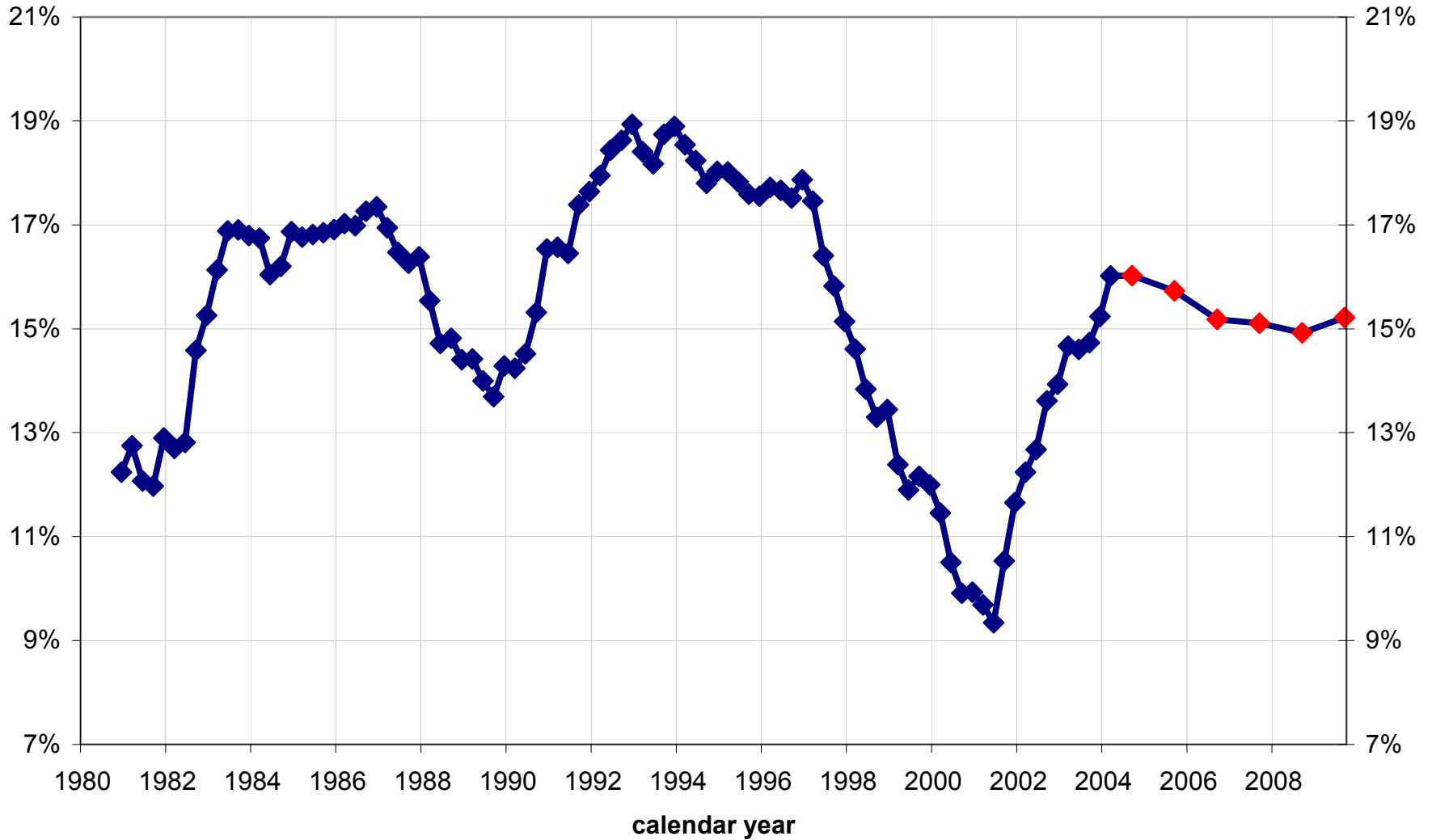
*Based on assumptions in chart 5.

Current Projected Change in Debt Portfolio Composition Over Next 5 Years



*Based on assumptions in chart 5.

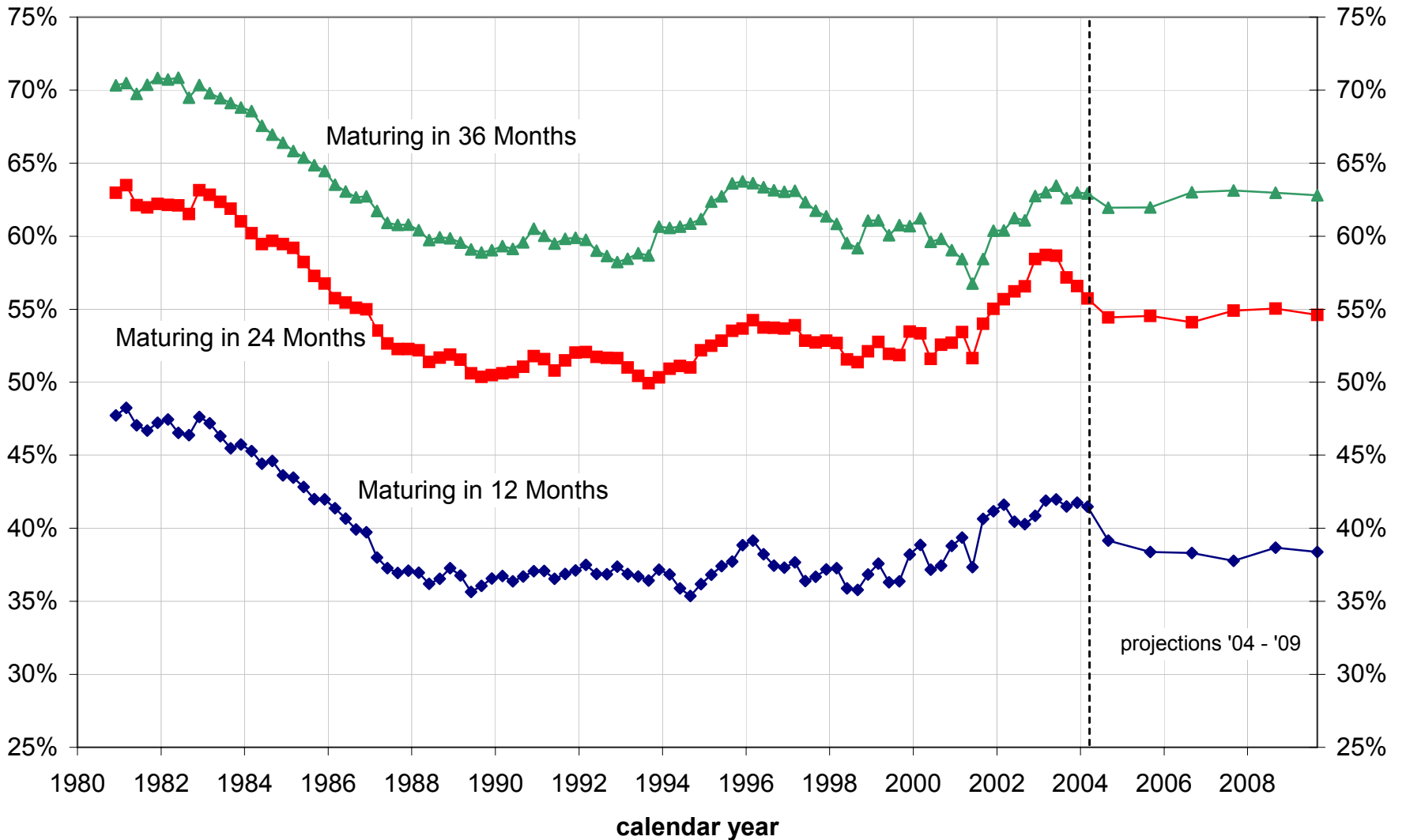
Annual Issuance as a Percentage of GDP



* Assumes nominal GDP grows at 5% annually.

**Based on assumptions in chart 5.

Percentage of Debt Maturing in Next 12 to 36 Months

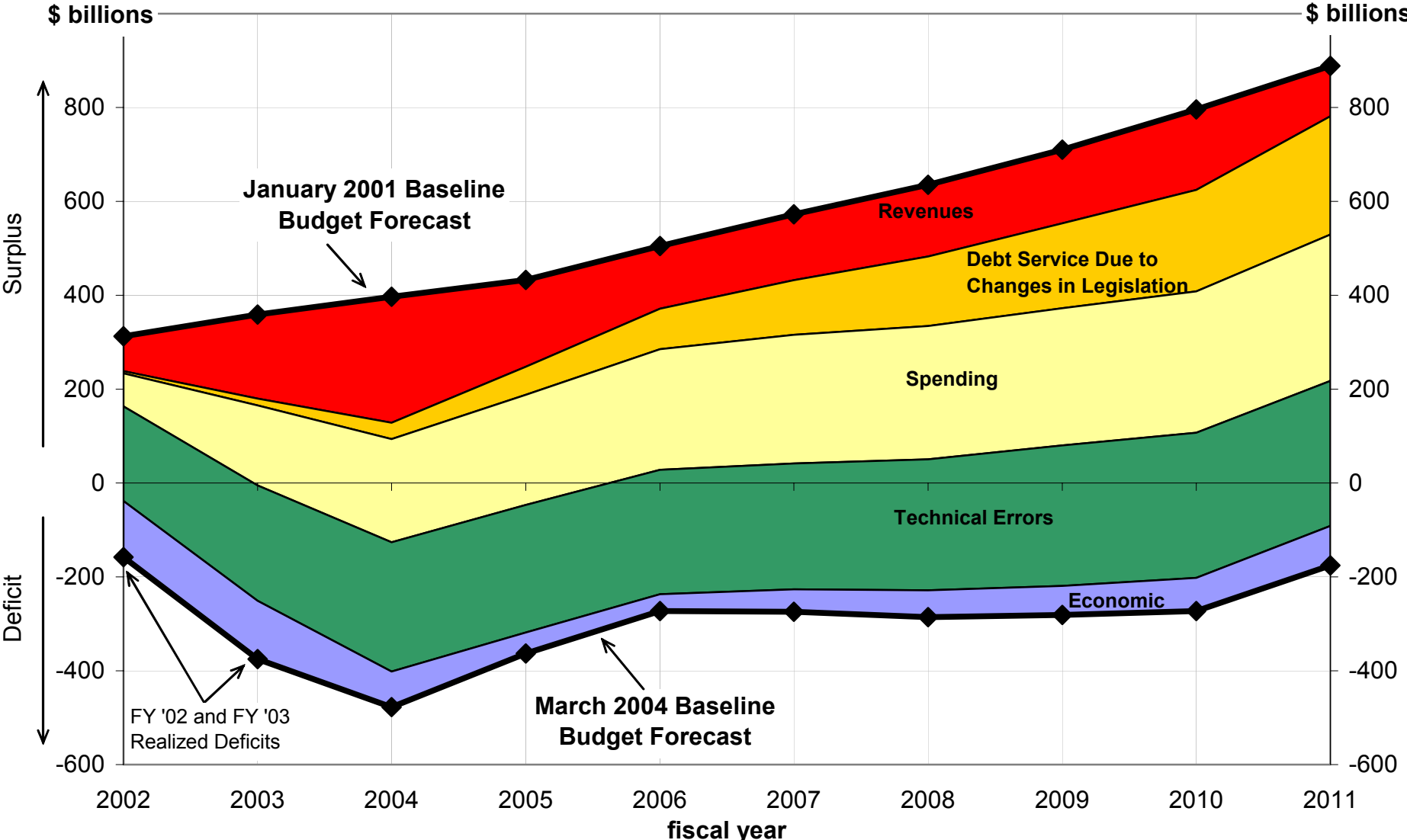


*Based on assumptions in chart 5.

Financing Uncertainty and Interest Rate Volatility

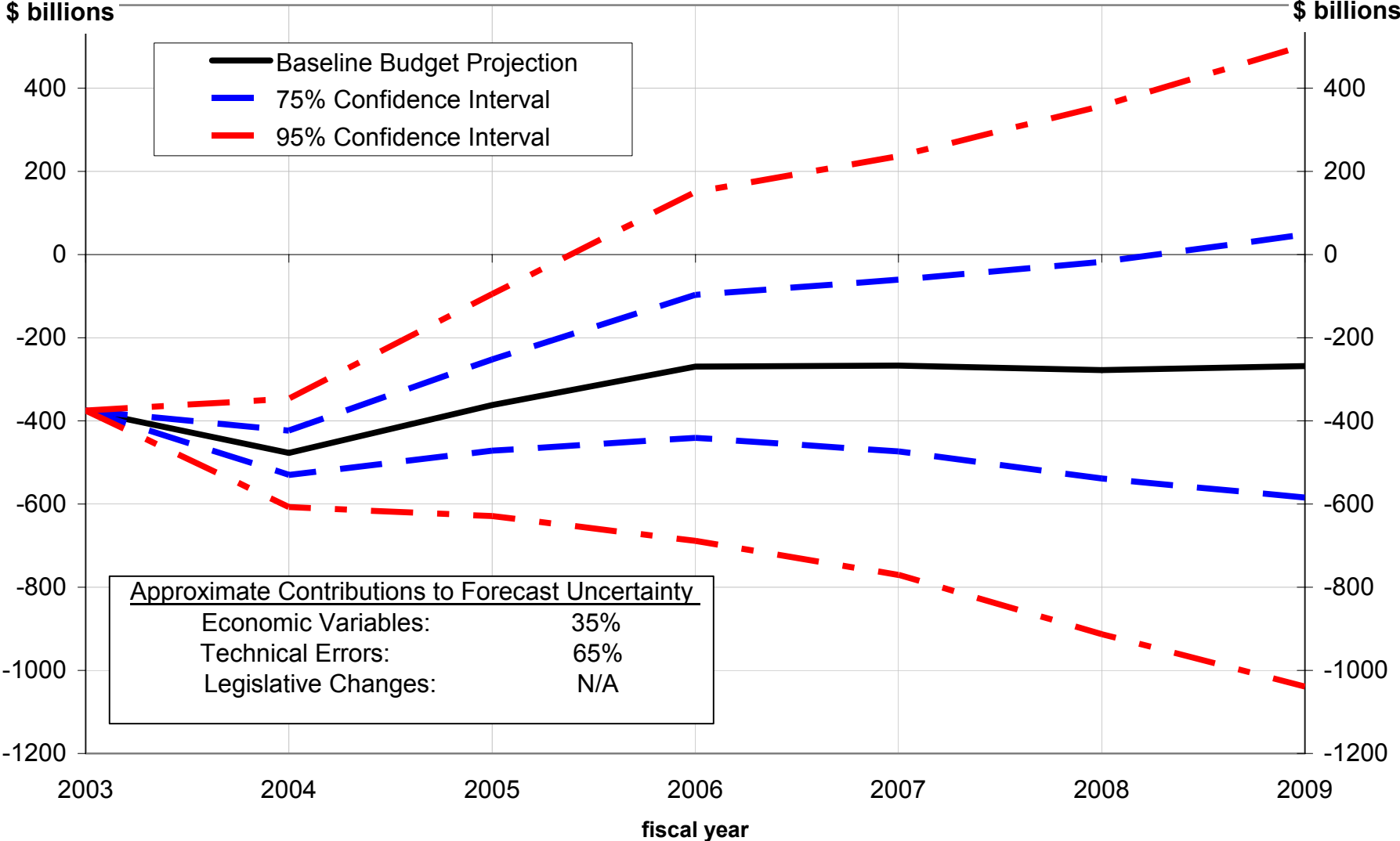
As a follow up to discussions regarding the uncertainty of the budget-modeling process, we will show the Committee some charts illustrating the financing risk due to technical errors in budget forecasting. We will also show the Committee charts illustrating the trade-offs between interest costs and expected volatility. We would like the Committee's views on Treasury's tolerance for interest rate volatility.

Components of the Change in CBO's Budget Projection Since 2001



Confidence Intervals Around CBO's Baseline Projection

(Probability distribution is derived from past projection errors during 1982 - 2002)

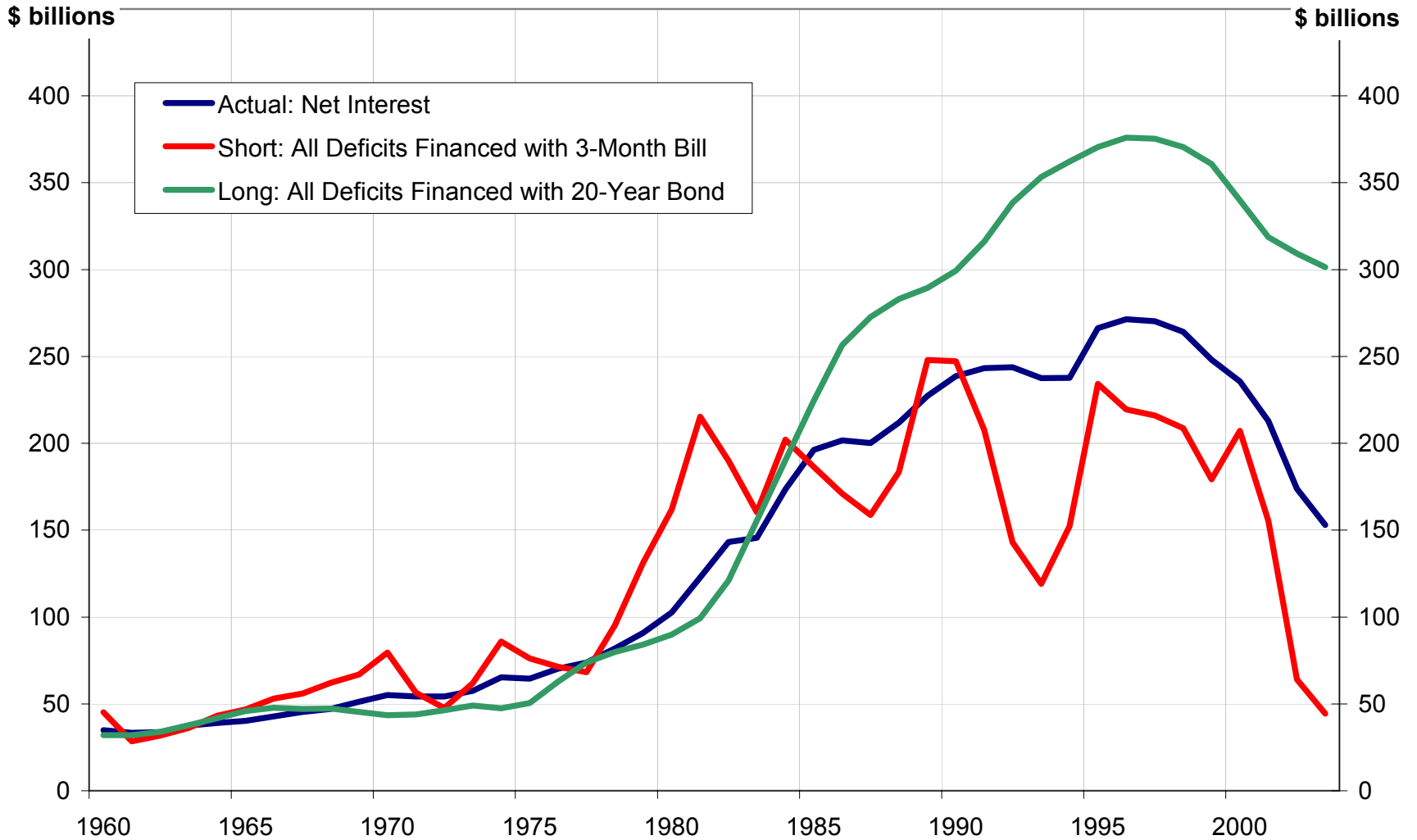


Analyzing Cost/Volatility Trade-off

- Annual change in interest costs is a function of...
 - Factors not controlled by debt managers
 - Deficit
 - Current Interest Rates and Inflation
 - Interest Rates on Maturing Debt
 - Factors controlled by debt managers
 - Amount of Debt Maturing
 - Distribution of Issuance
- Would a mean-variance framework help us make better debt management decisions?

Interest Expenditures under Various Financing Strategies

Inflation Adjusted to 2003 \$Dollars Using GDP Deflator



Self-Imposed Constraints

- Not market timers -- auction schedule fixed
- Constraints on adjusting issuance sizes
- Most securities can not be called early
- Limits on the amount of cash we can hold

What Measures to Use in a Mean-Variance Analysis?

- Portfolio
 - Debt Outstanding or Issuance
- Cost Measure
 - Current or Historical Interest Rates
 - Current or Historical Spreads
- Volatility Measure
 - Change in the Cost of Debt Outstanding or Interest Rates
 - Need to incorporate the different rollover characteristics and payment streams of various securities to measure the volatility of interest expenses on the debt outstanding

November Calendar

The November refunding calendar is complicated by several potential market-moving events and Veterans Day. We would like the Committee's advice on the scheduling of auctions in the final quarter of this year.

Calendar Options for November 2004

Option 1: Keep announcement the same but auction 3y on Monday, 5y on Tuesday, and the 10y on Friday

Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5
	<i>Election day/TBAC</i>	ANNOUNCEMENT		<i>Employment Report</i>
8	9	10	11	12
AUCTION 3-YEAR NOTE ^{3/}	AUCTION 5-YEAR NOTE ^{3/}	<i>FOMC</i>	Holiday	AUCTION 10-YEAR NOTE ^{3/}

Option 2: Keep announcement the same but auction 3y on Friday, 5y on Monday, and 10y on Tuesday

Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5
	<i>Election day/TBAC</i>	ANNOUNCEMENT		<i>Employment Report</i>
8	9	10	11	12
AUCTION 5-YEAR NOTE ^{3/}	AUCTION 10-YEAR NOTE ^{3/}	<i>FOMC</i>	Holiday	AUCTION 3-YEAR NOTE ^{3/}

Option 3: Keep announcement the same but auction 3y on Monday, 5y on Tuesday, and 10y on Wednesday after the FOMC meeting

Monday	Tuesday	Wednesday	Thursday	Friday
1	2	3	4	5
	<i>Election day/TBAC</i>	ANNOUNCEMENT		<i>Employment Report</i>
8	9	10	11	12
AUCTION 3-YEAR NOTE ^{3/}	AUCTION 5-YEAR NOTE ^{3/}	AUCTION 10-YEAR NOTE ^{3/}	Holiday	

^{3/} Settles Nov 15.