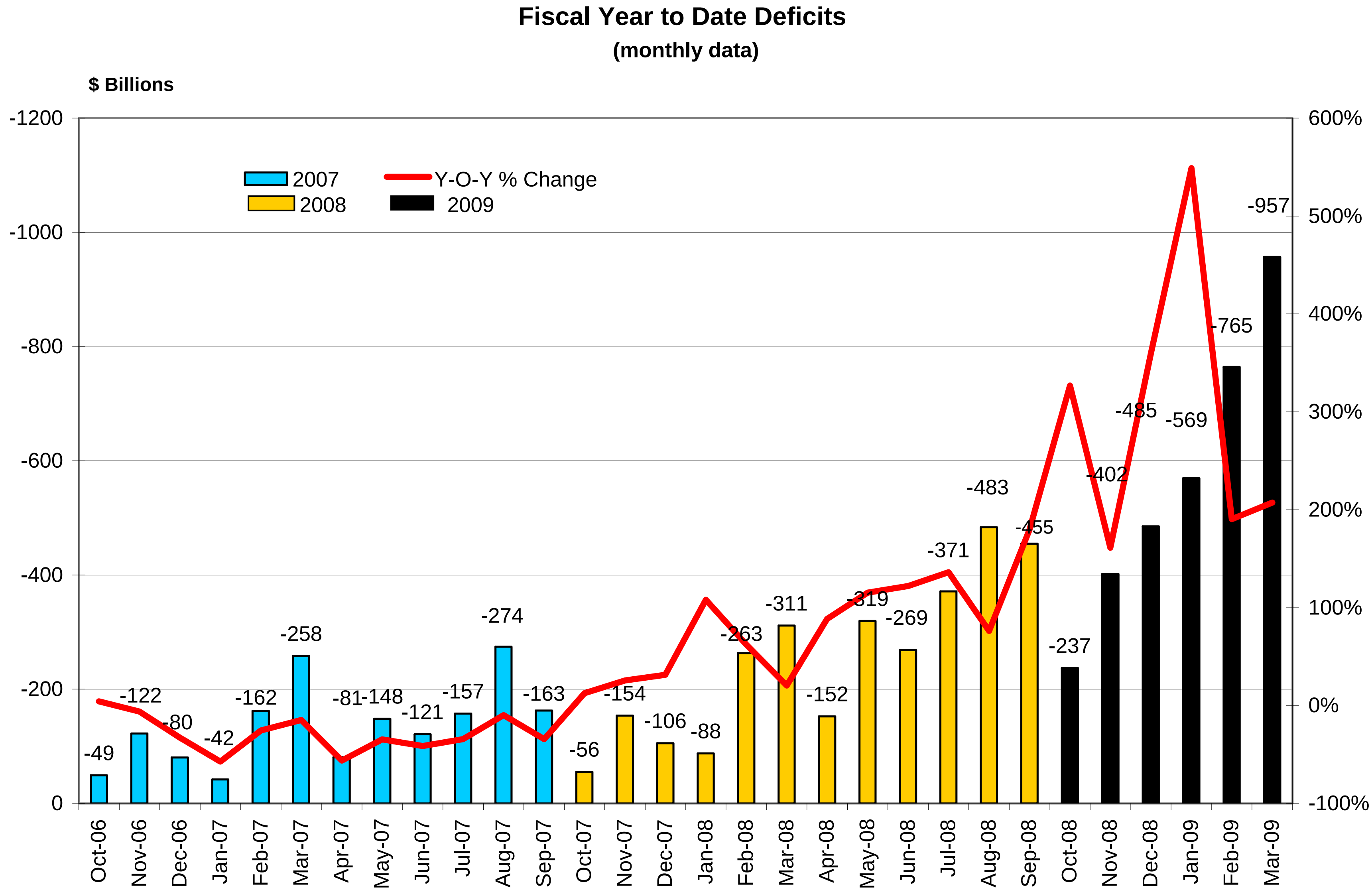
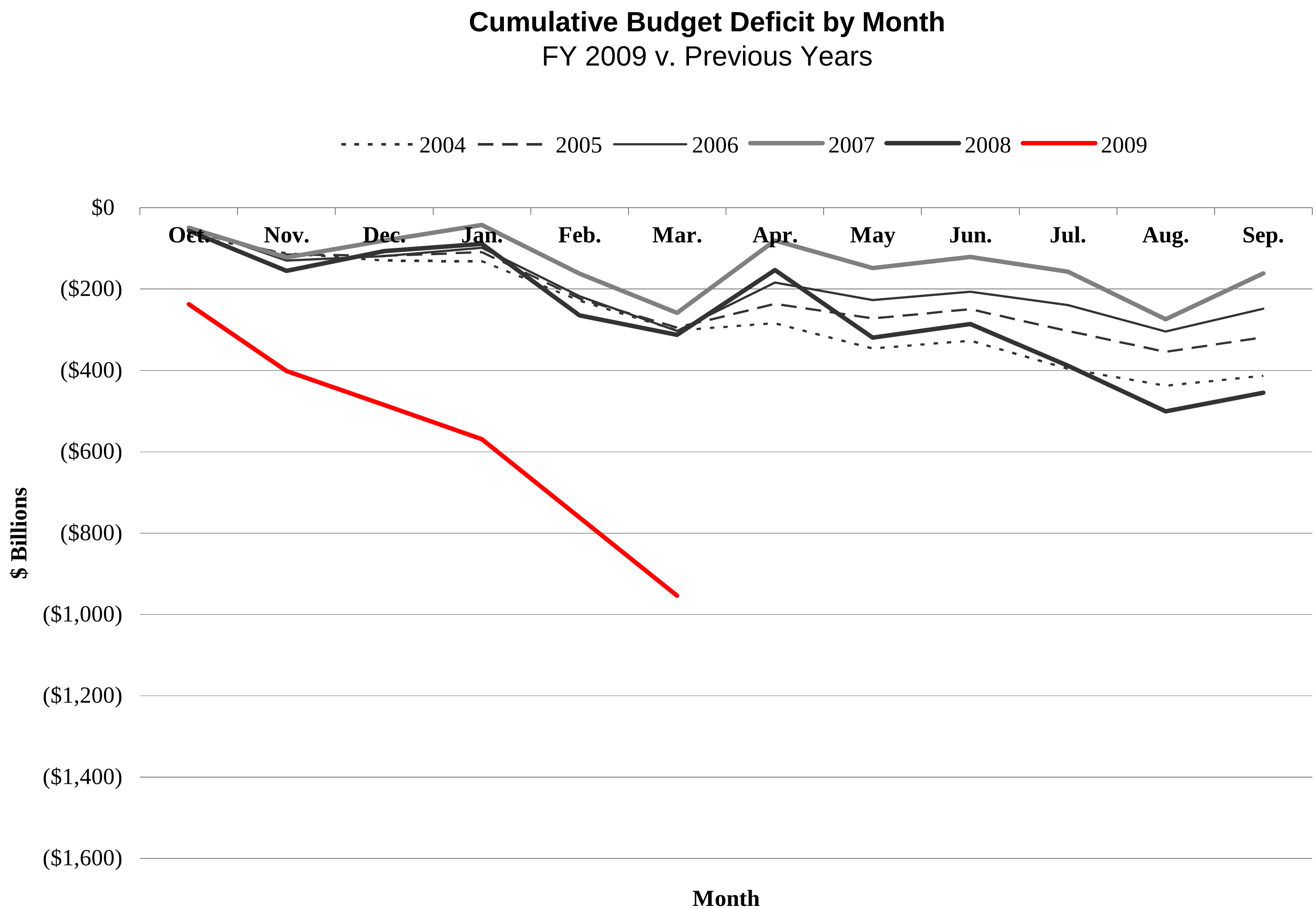
Presentation to the Treasury Borrowing Advisory Committee

U.S. Department of the Treasury
Office of Debt Management
April 28, 2009

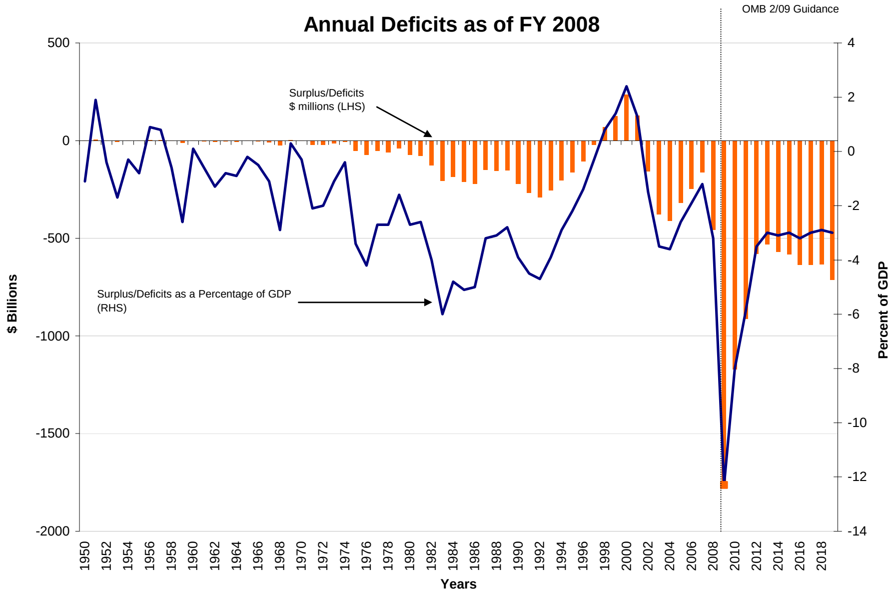
Borrowing requirements continue to grow

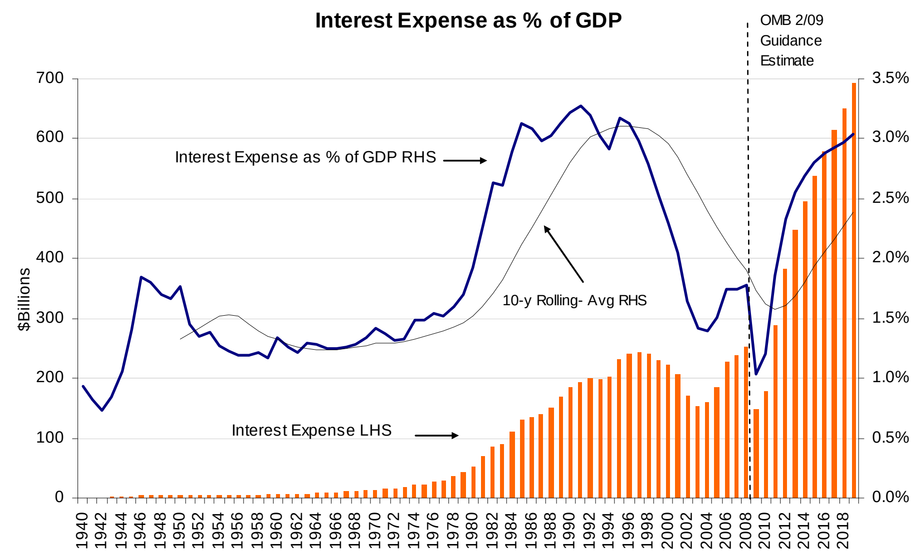


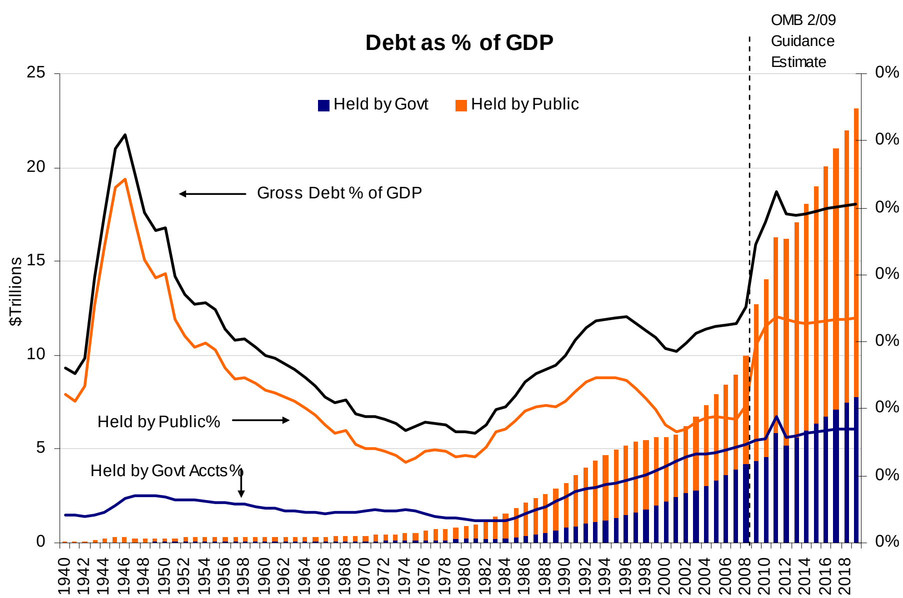
The budget deficit to date has increased unabated through the first two quarters of fiscal year 2009

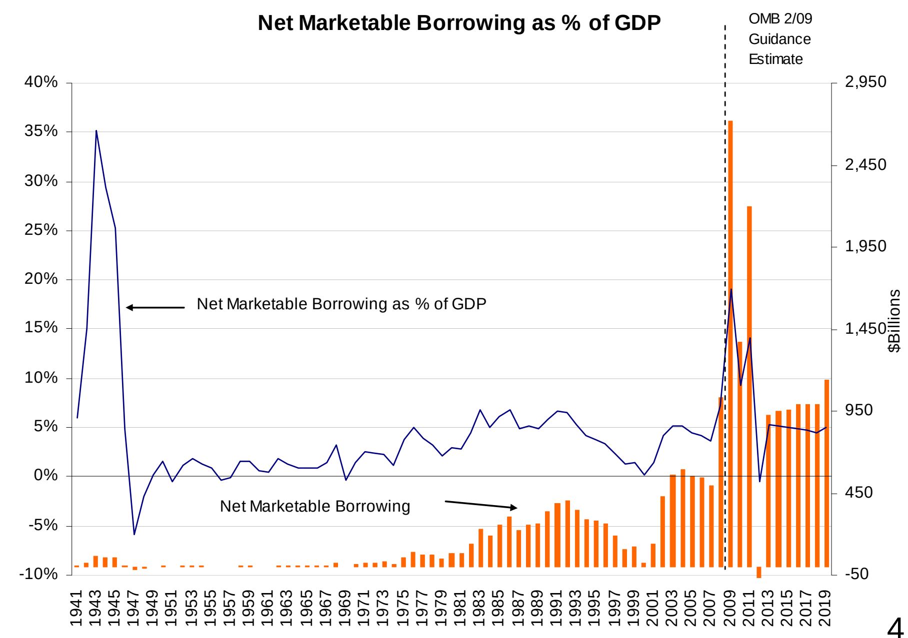


Based on initial OMB guidance in February 2009, elevated borrowing needs remain for the next few years

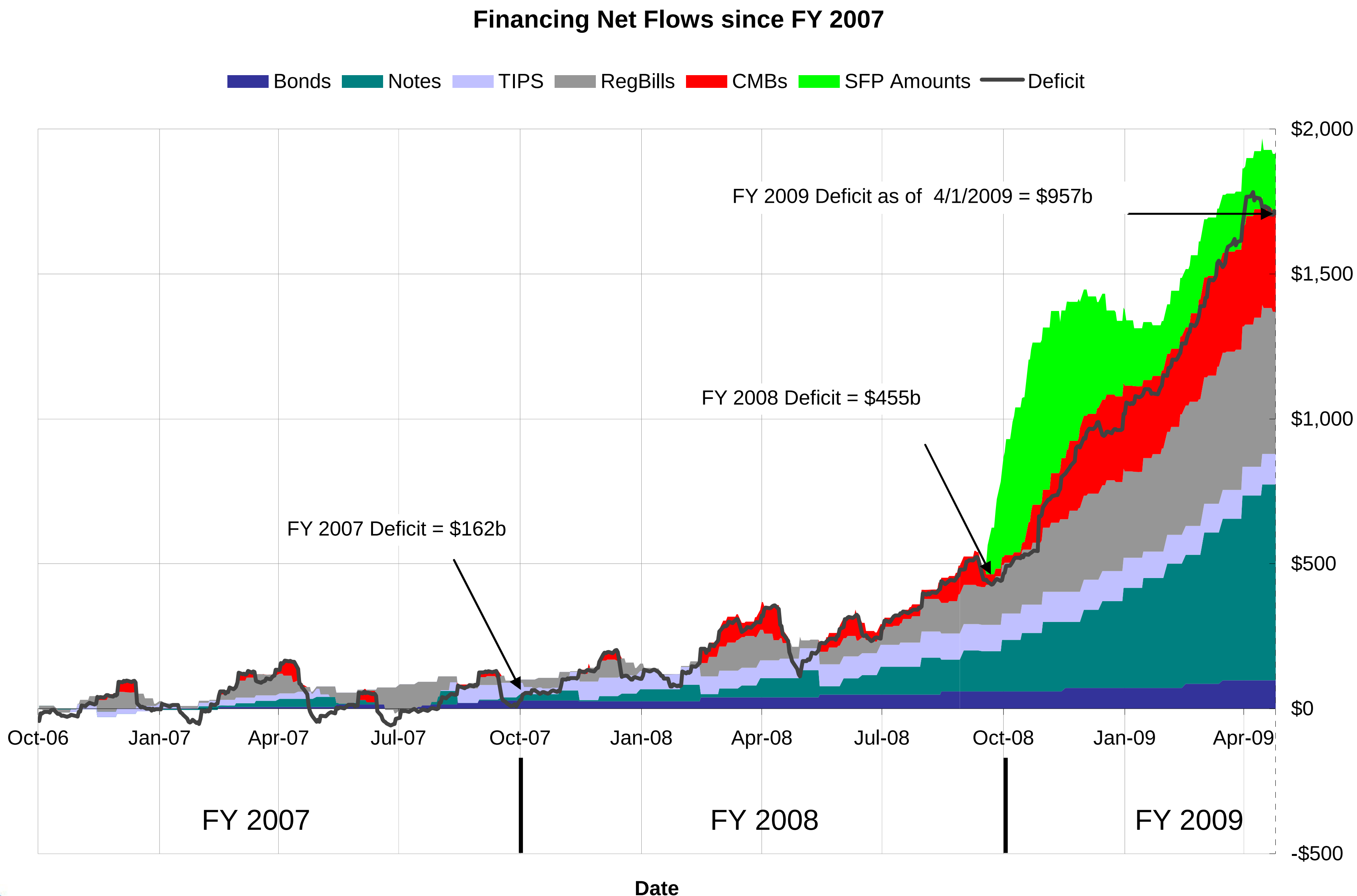






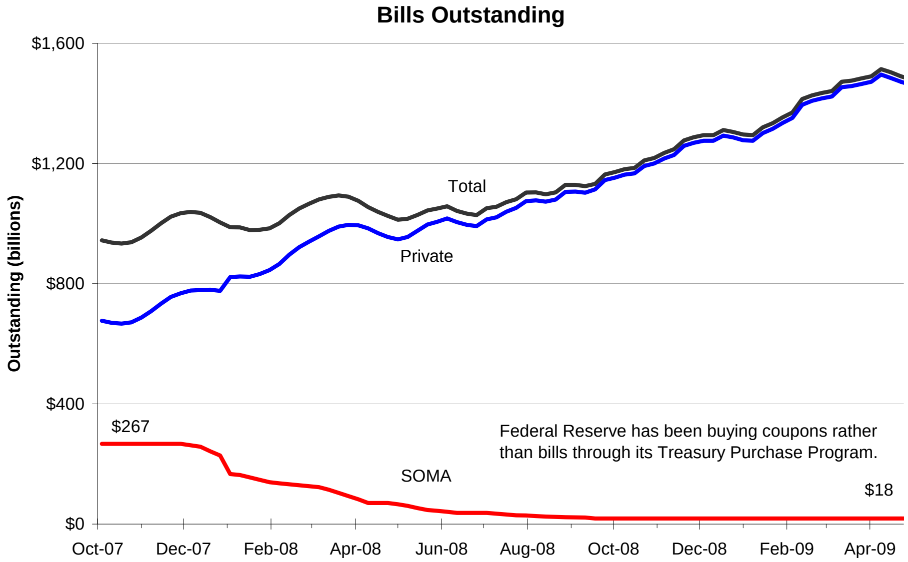


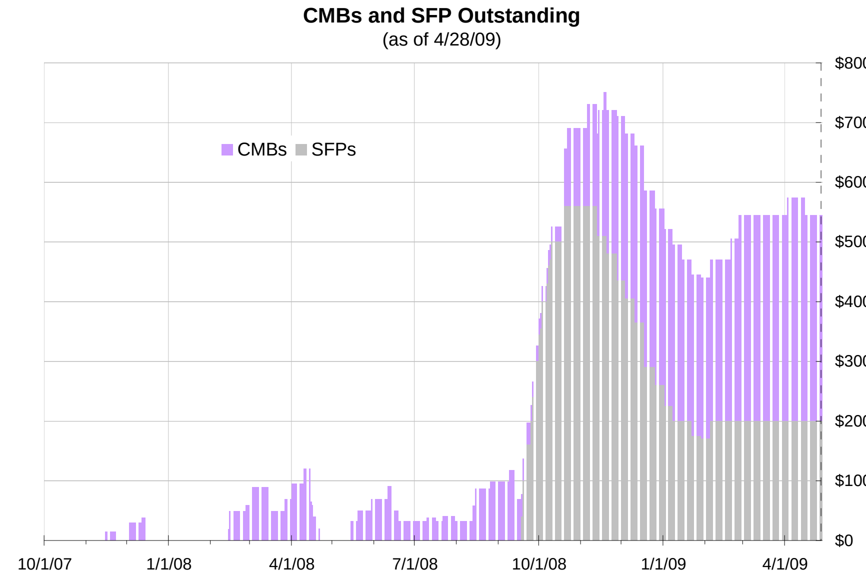
Treasury has responded to these financing needs in a regular and predictable manner

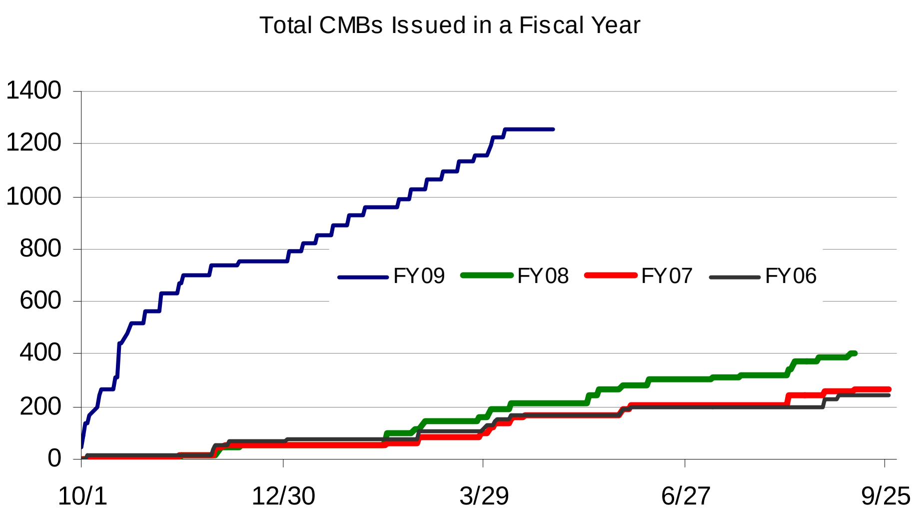


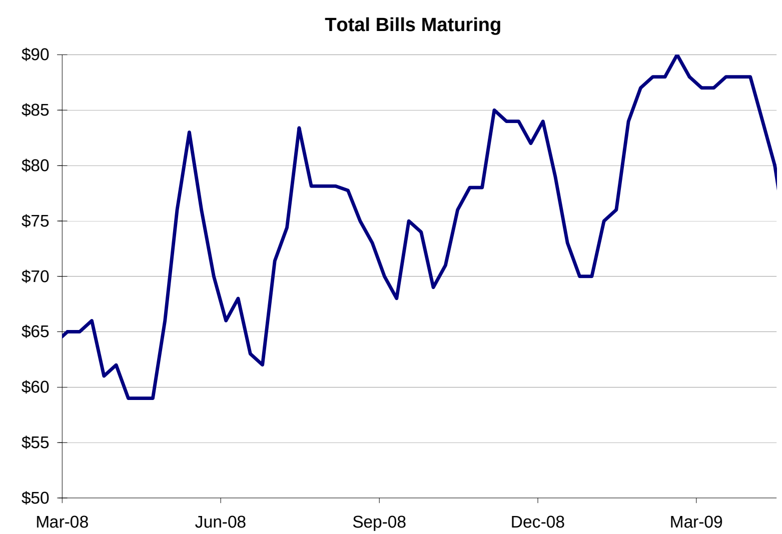
Office of Debt Management

SFP and immediate funding needs have led to higher bill issuance

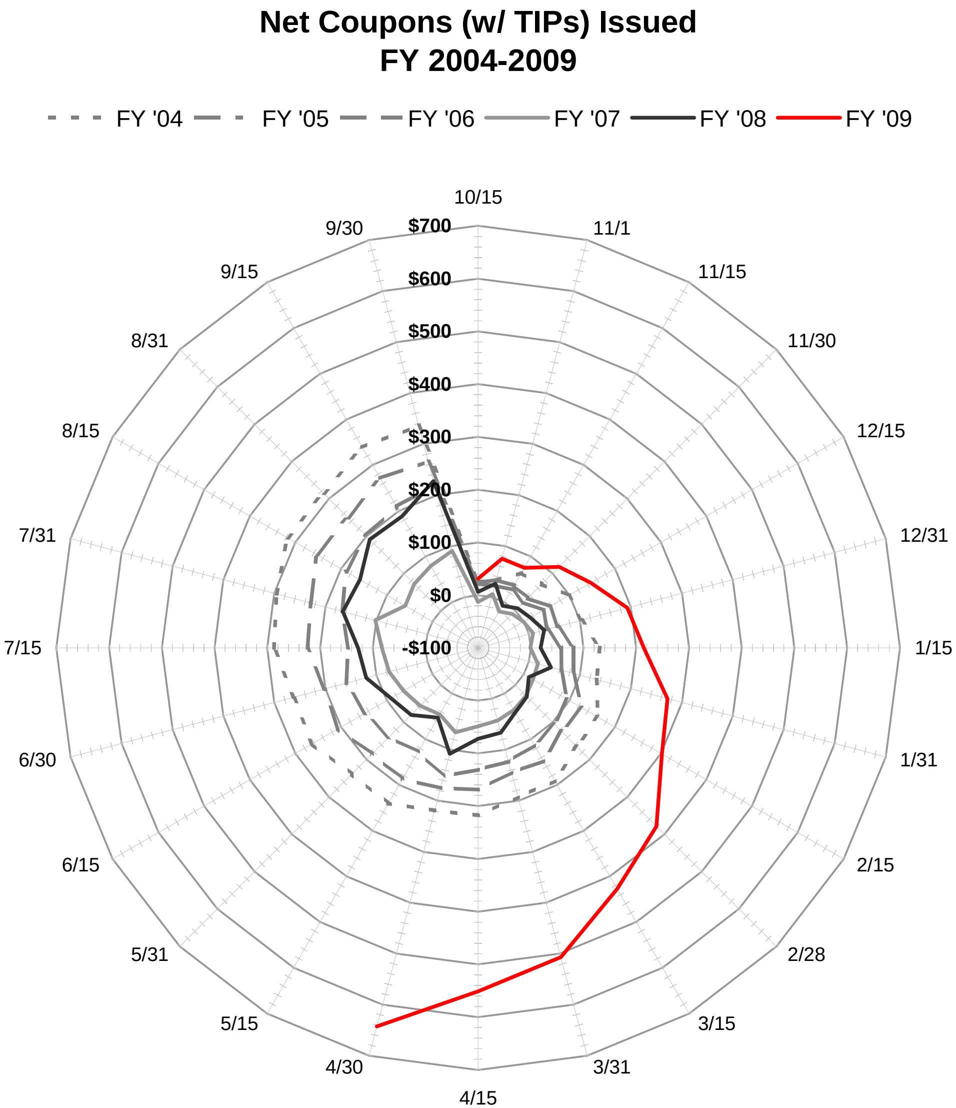


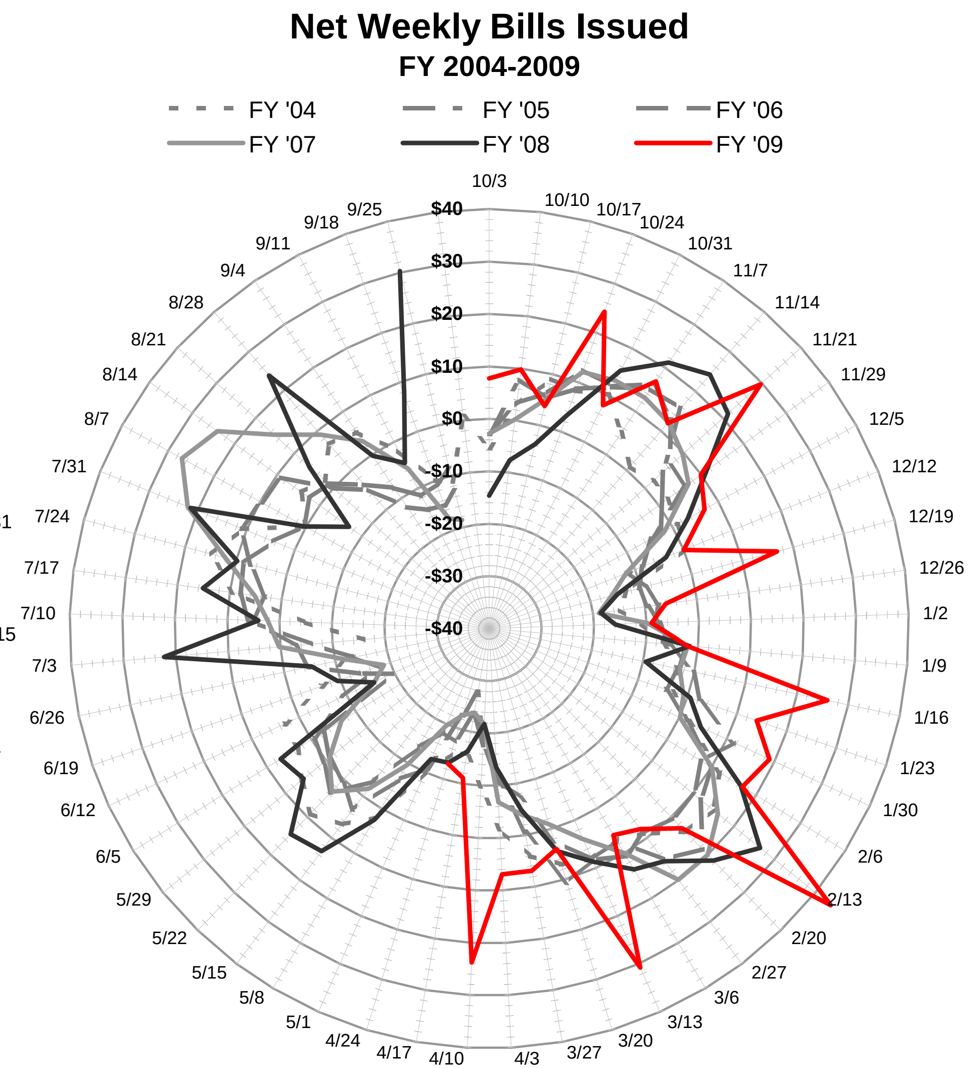




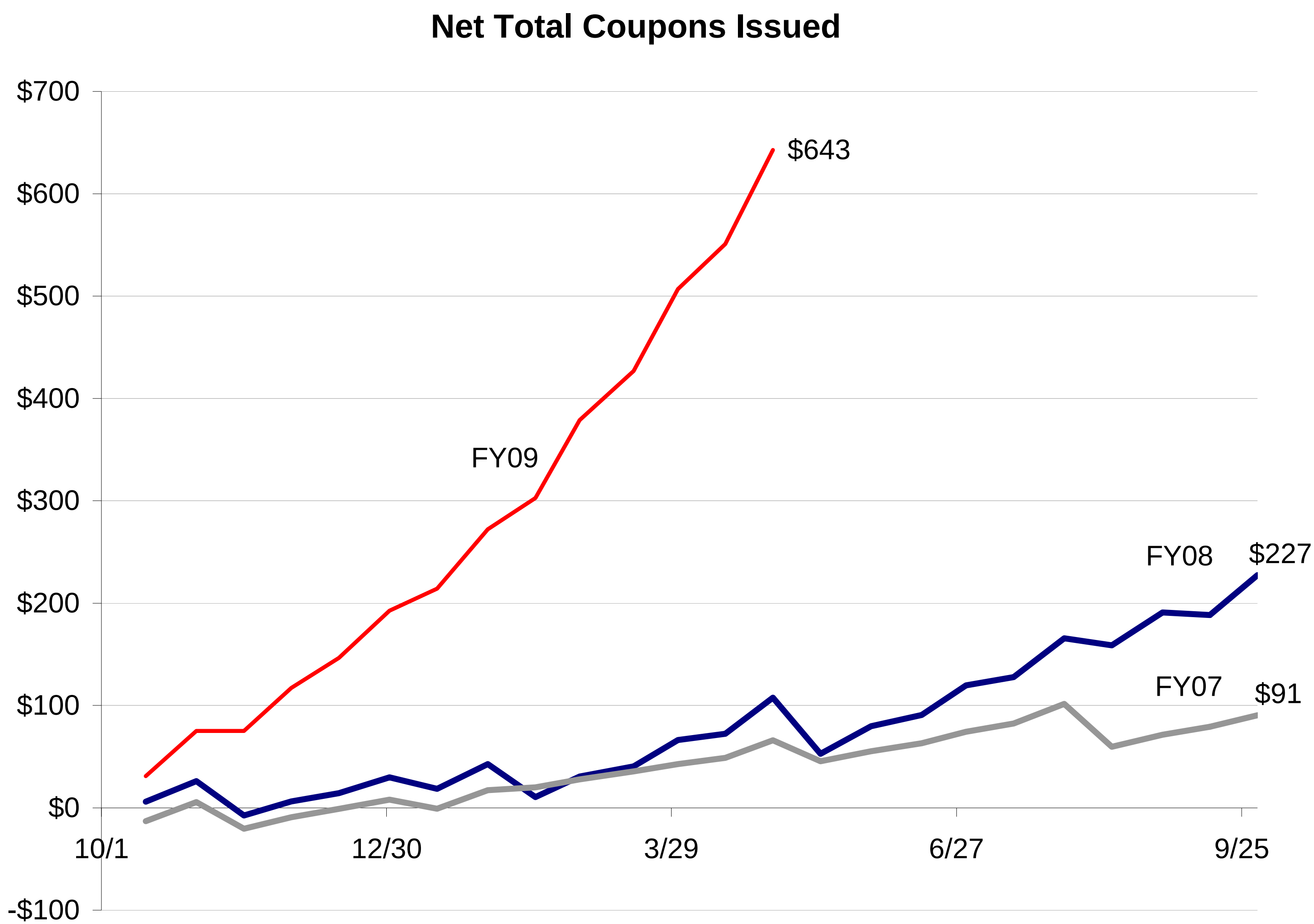


However, Treasury continues to transition to longer term financing, increasing net borrowing from coupons relative to bills



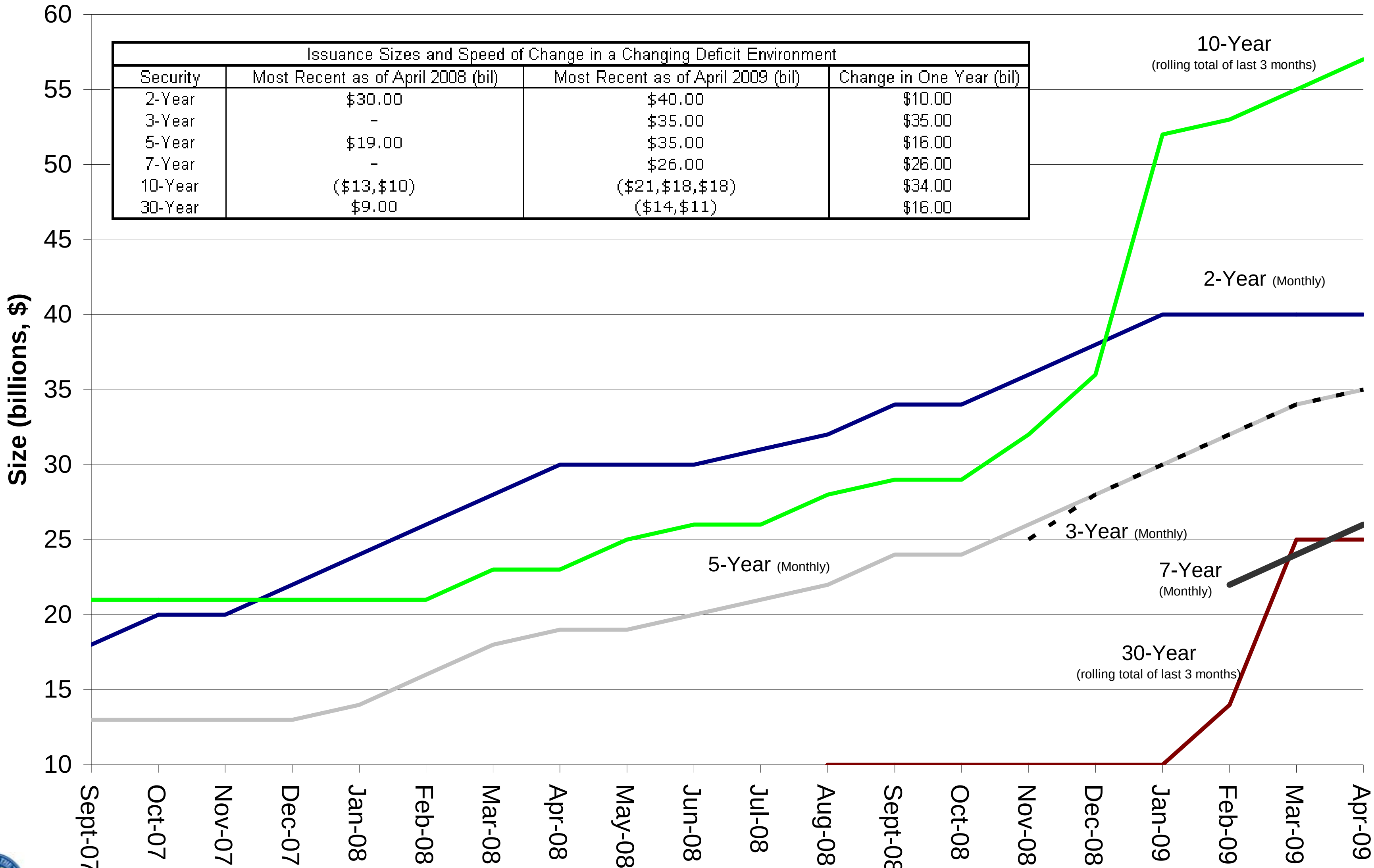


This has resulted in significantly higher nominal coupon issuance than in previous years



Existing coupon securities continue to increase to larger, more liquid benchmark sizes in a gradual, predictable manner

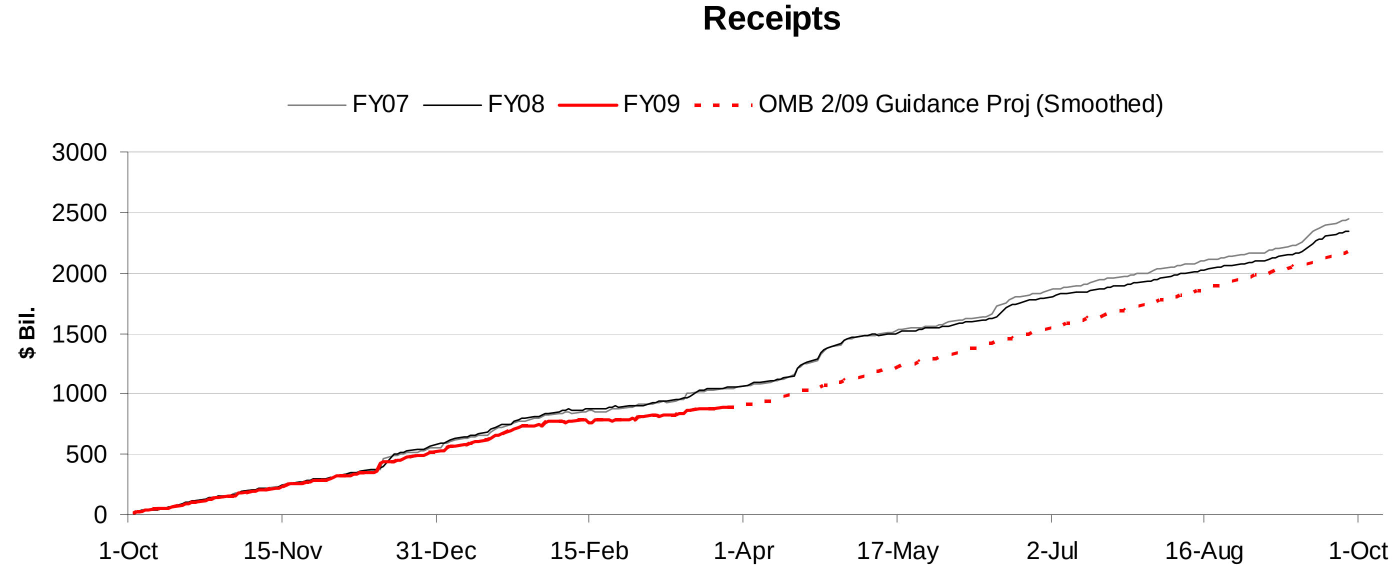
Coupon Issuance in 2007-2009

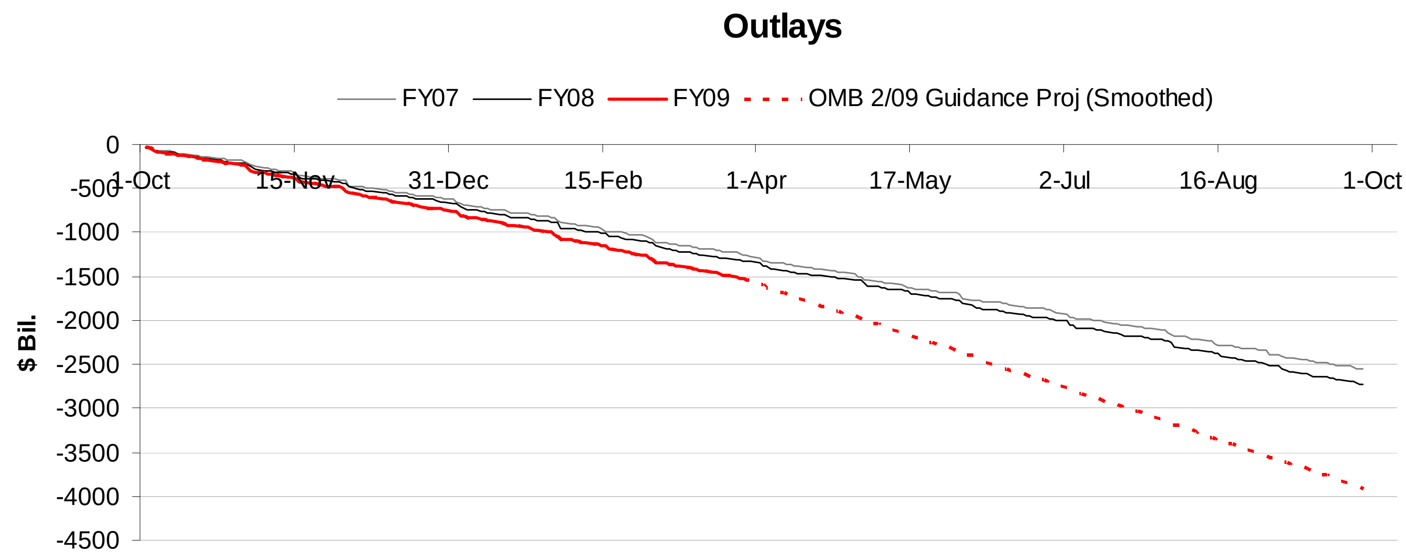


Issuance Sizes and Speed of Change in a Changing Deficit Environment

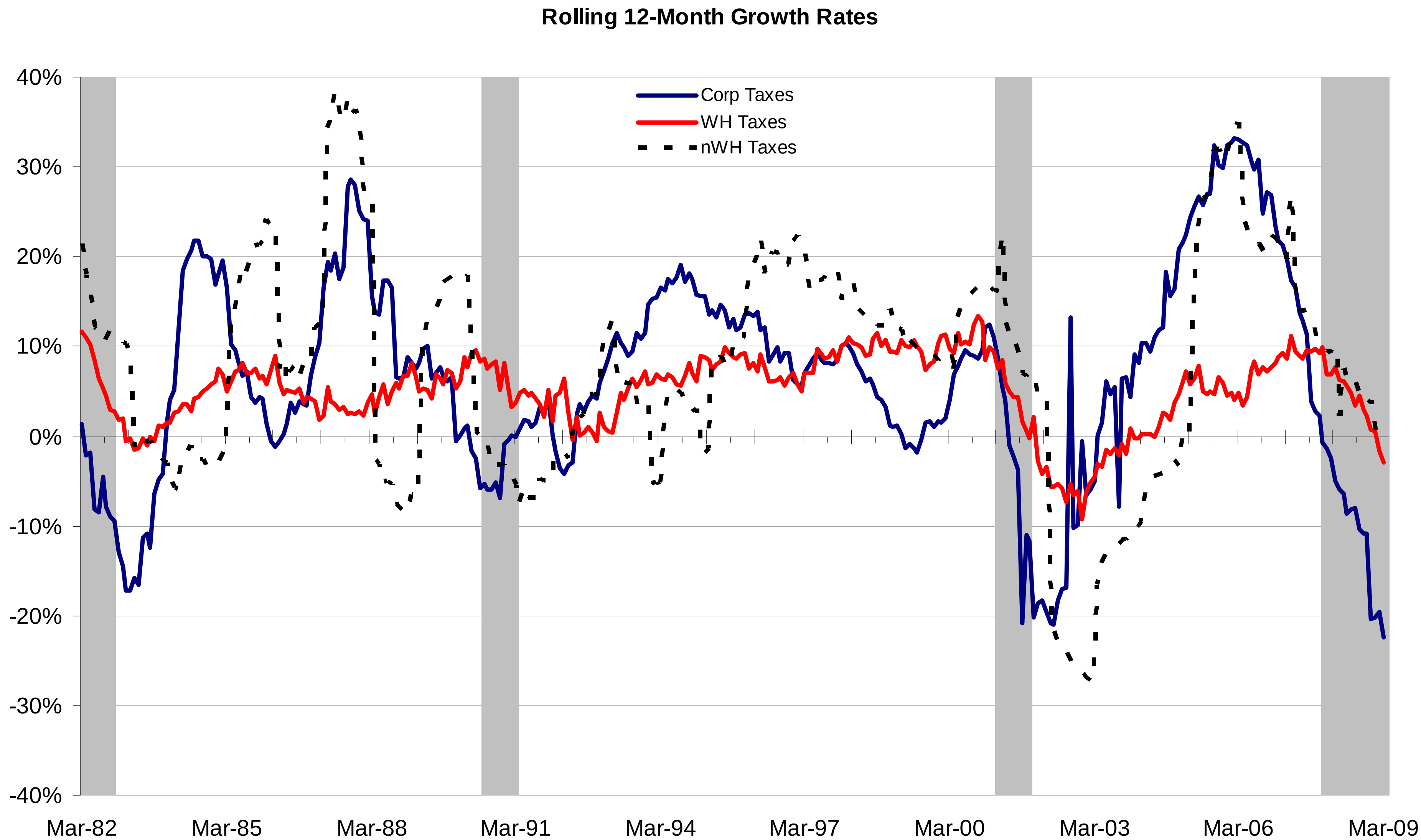
Security	Most Recent as of April 2008 (bil)	Most Recent as of April 2009 (bil)	Change in One Year (bil)
2-Year	$30.00	$40.00	$10.00
3-Year	-	$35.00	$35.00
5-Year	$19.00	$35.00	$16.00
7-Year	-	$26.00	$26.00
10-Year	($13,$10)	($21,$18,$18)	$34.00
30-Year	$9.00	($14,$11)	$16.00

In the second quarter of FY2009, year-over-year growth in receipts was negative while outlay growth accelerated

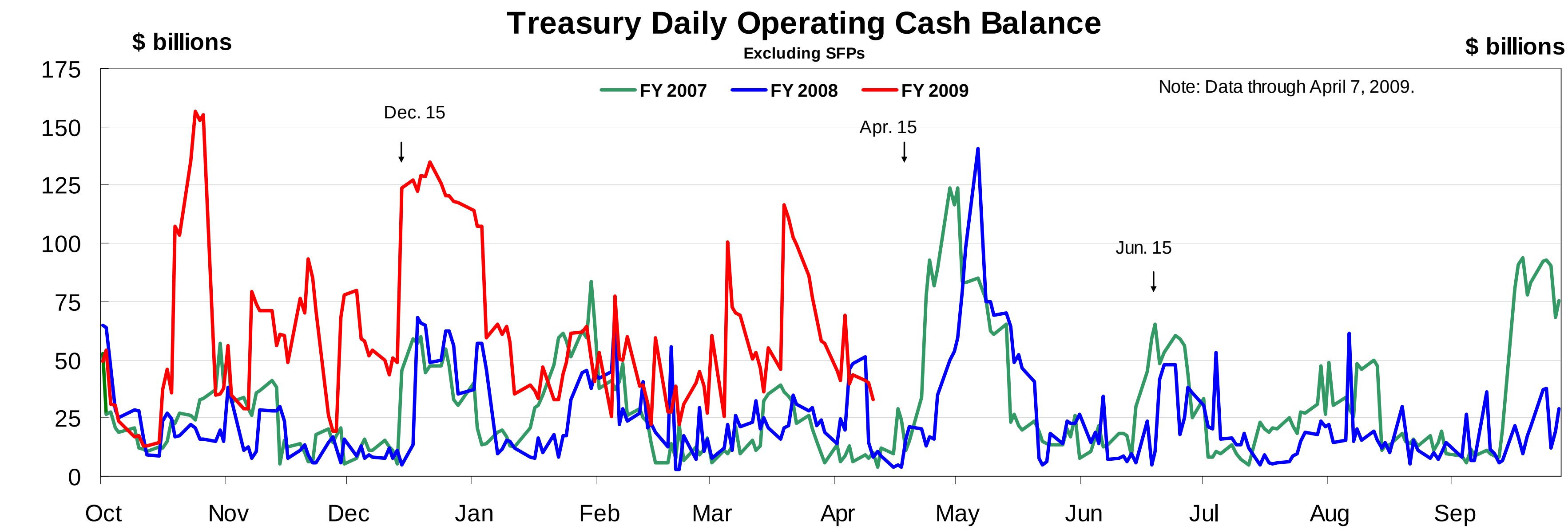


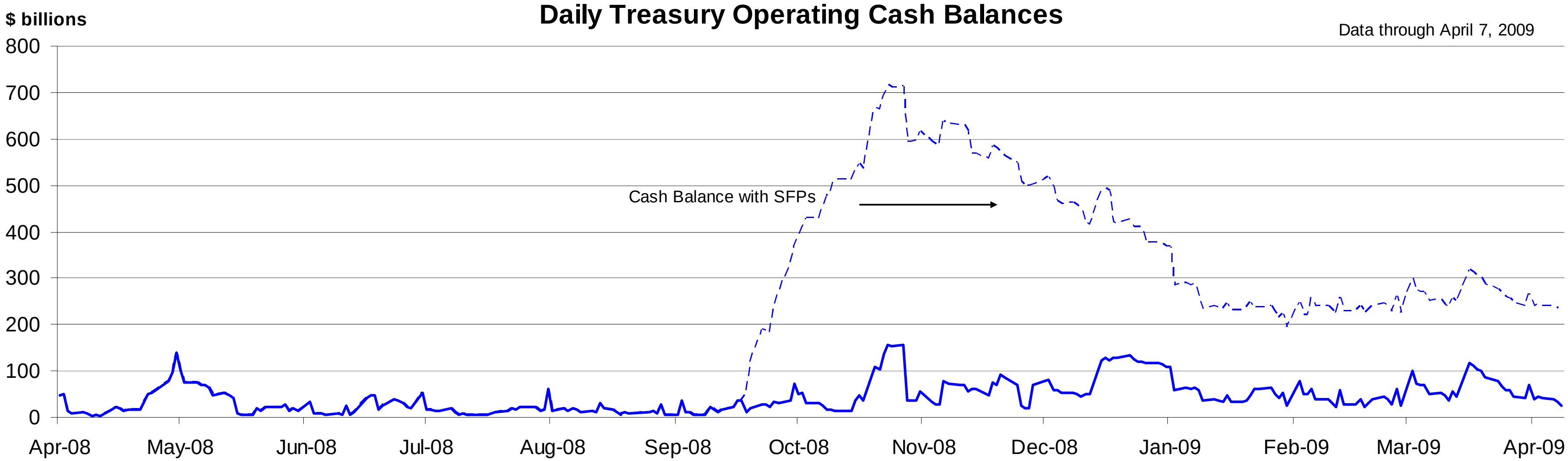


The decline in corporate tax receipts is similar to that experienced in 2002 – such declines generally precede lower growth in individual receipts

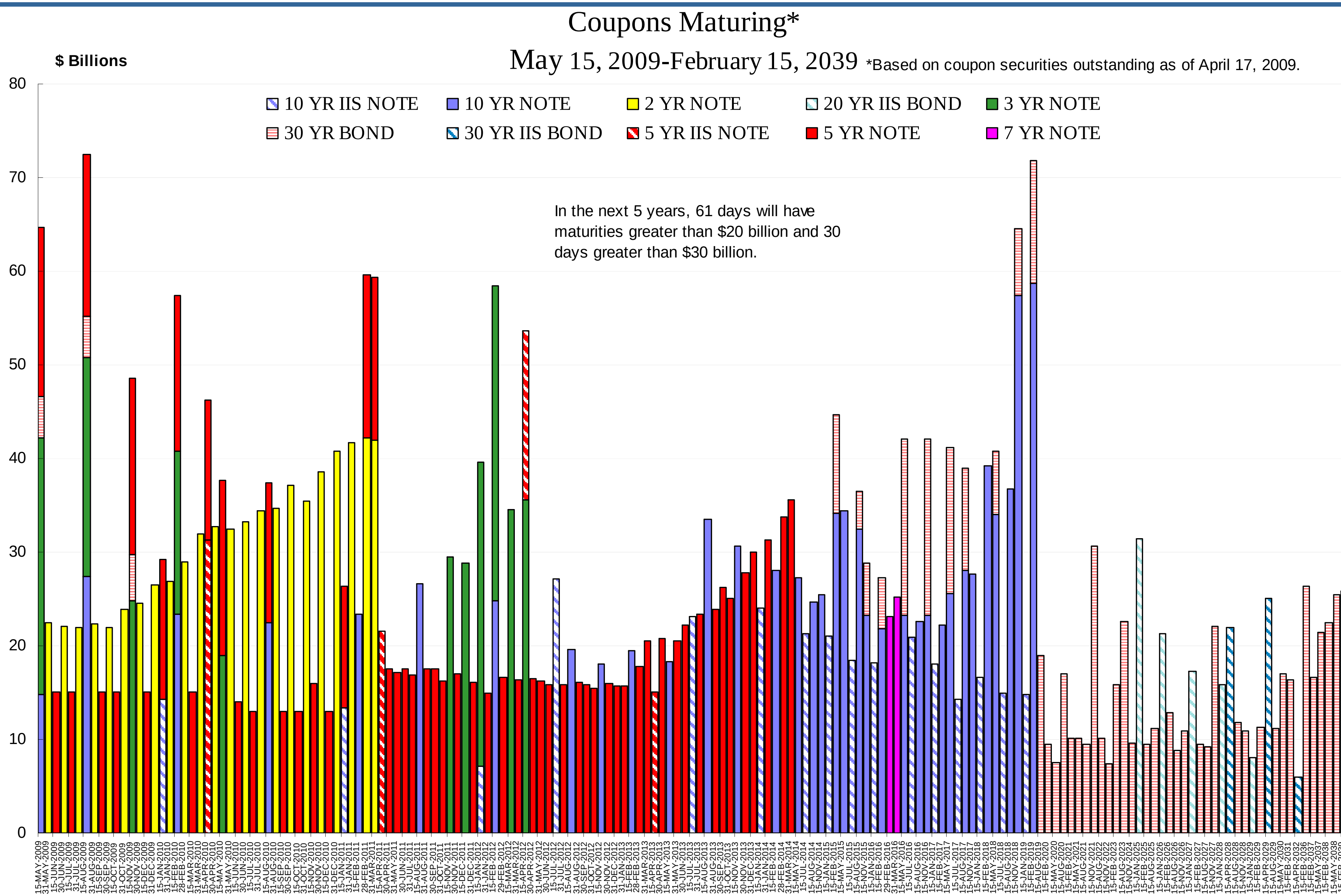


Cash balances remain elevated and volatile

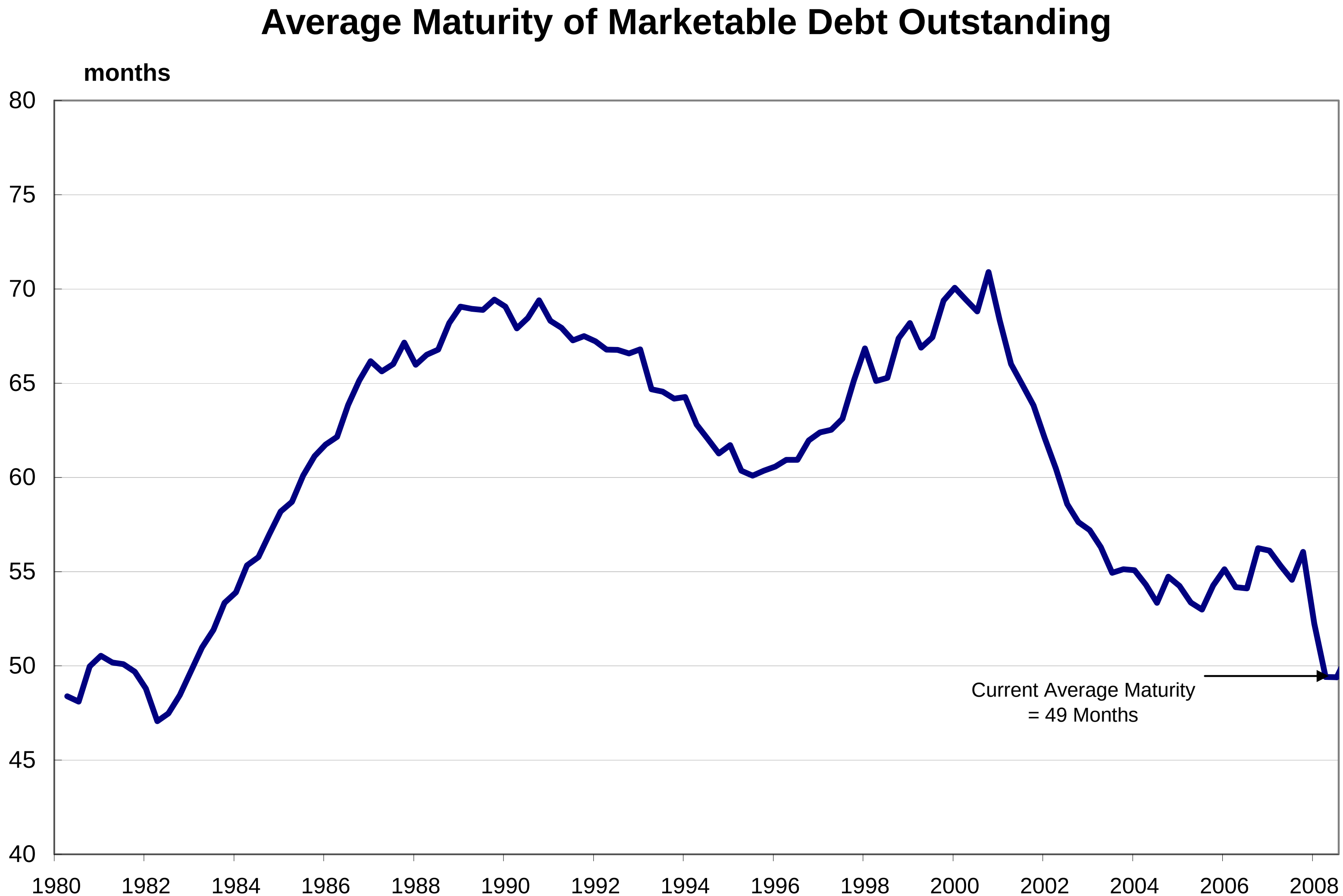




Larger concentrations of maturities occur in the 3-year sector and then again at the 10-year sector



The average maturity of the marketable debt outstanding leveled in the second quarter of FY 2009 as short-term issuance stabilized



Primary dealer estimates of the FY 2009 deficit rose by $150 billion from the estimate provided during the February 2009 refunding

Borrowing Estimates

$ billions

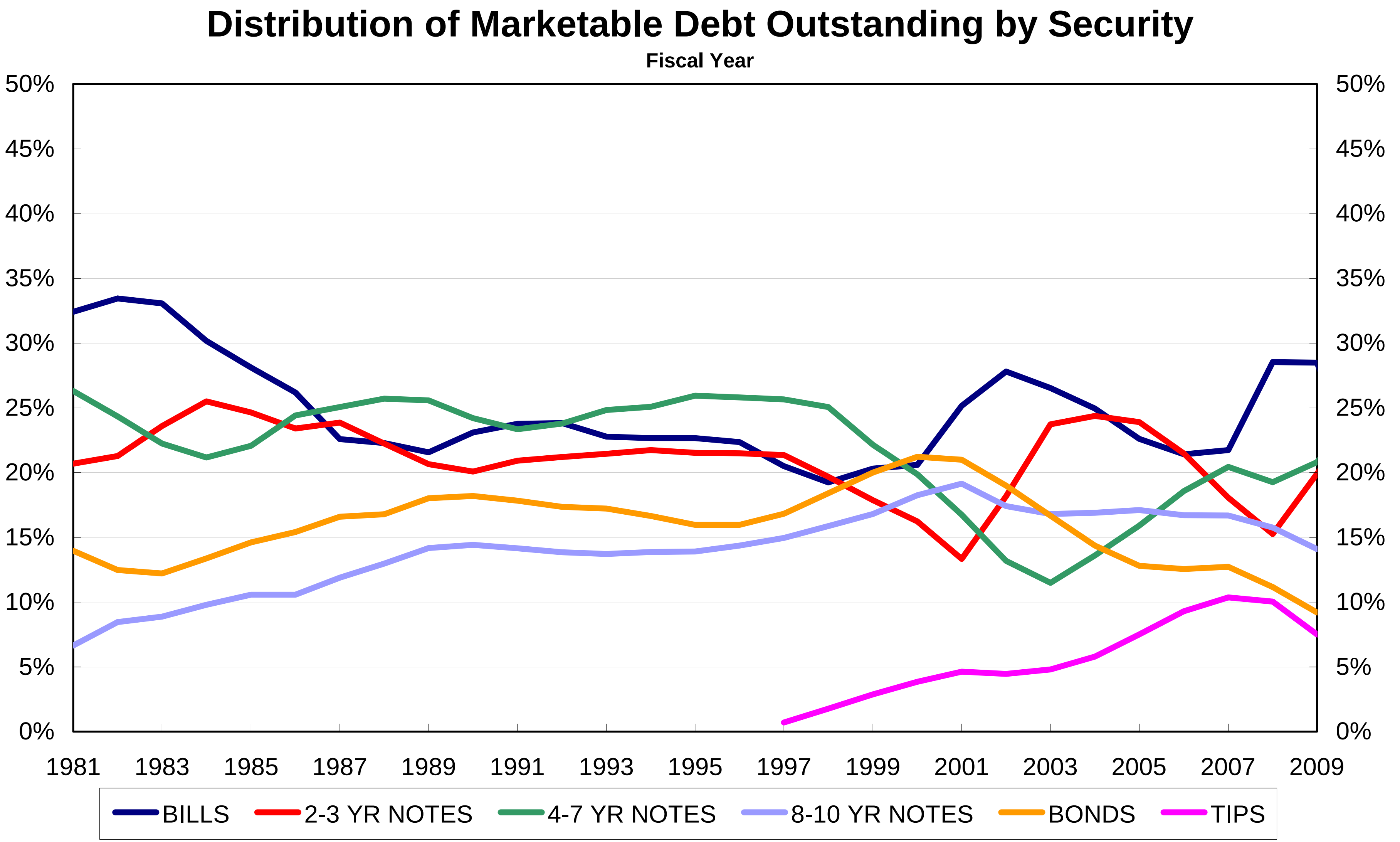
	Primary Dealers*	CBO	OMB
Current FY 09 Deficit:	1745	1667	1752
Range based on average absolute forecast error**	1687-1803	1567-1767	1648-1856
Estimates as of:	April 09	March 09	February 09
FY 2009 Marketable Borrowing Range***	1655-2700		
FY 2010 Marketable Borrowing Range***	1040-1900		

* Primary Dealers reflect average estimate. Based on Primary Dealer feedback on April 23, 2009.

** Ranges based on errors from 2004-2008.

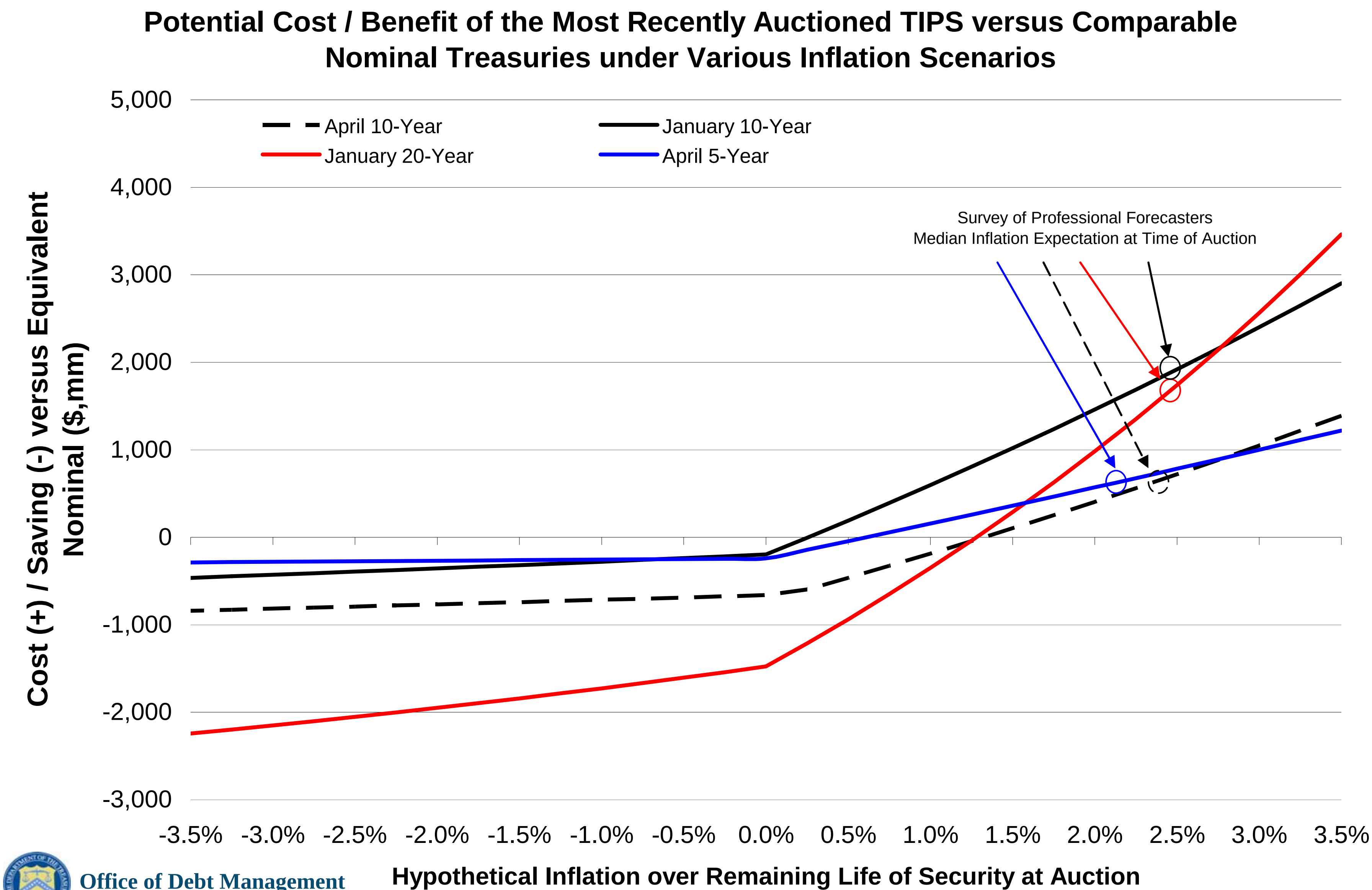
*** Based on Primary Dealer feedback on April 23, 2009.

The share of 2-7 year nominal coupon securities outstanding has increased while that of bills outstanding has flattened

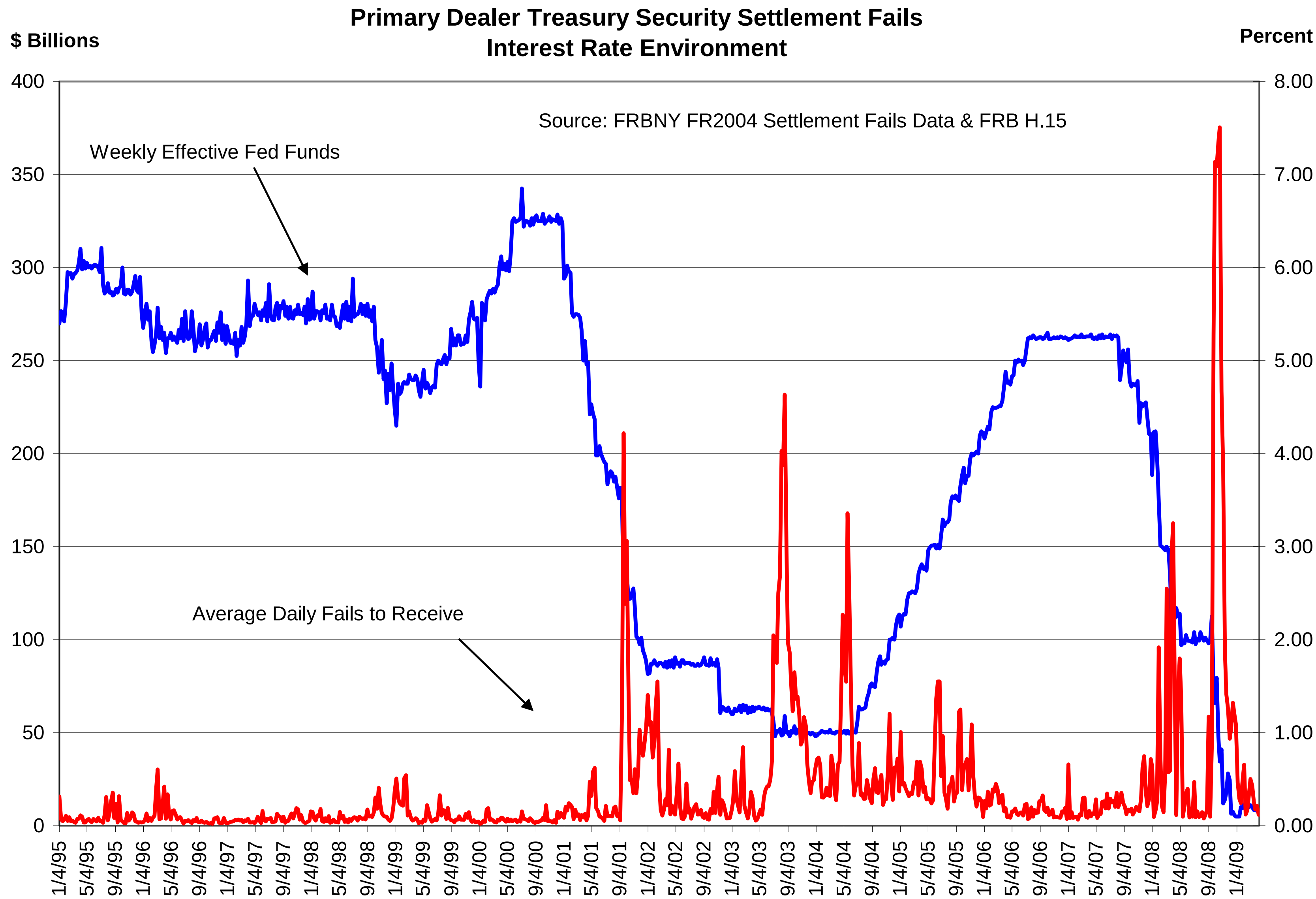


*Net financing projections for FY 2009-2019 are based on the preliminary OMB 2010 Budget estimates released February 2009. Future residual financing needs are spread proportionally across auctioned securities and are derived from hypothetical auction sizes. Initial sizes are based on announced coupon amounts as of April 17, 2009 and assume the outstanding level of bills on March 31, 2009. All projections exclude CMB issuance and maturing amounts.

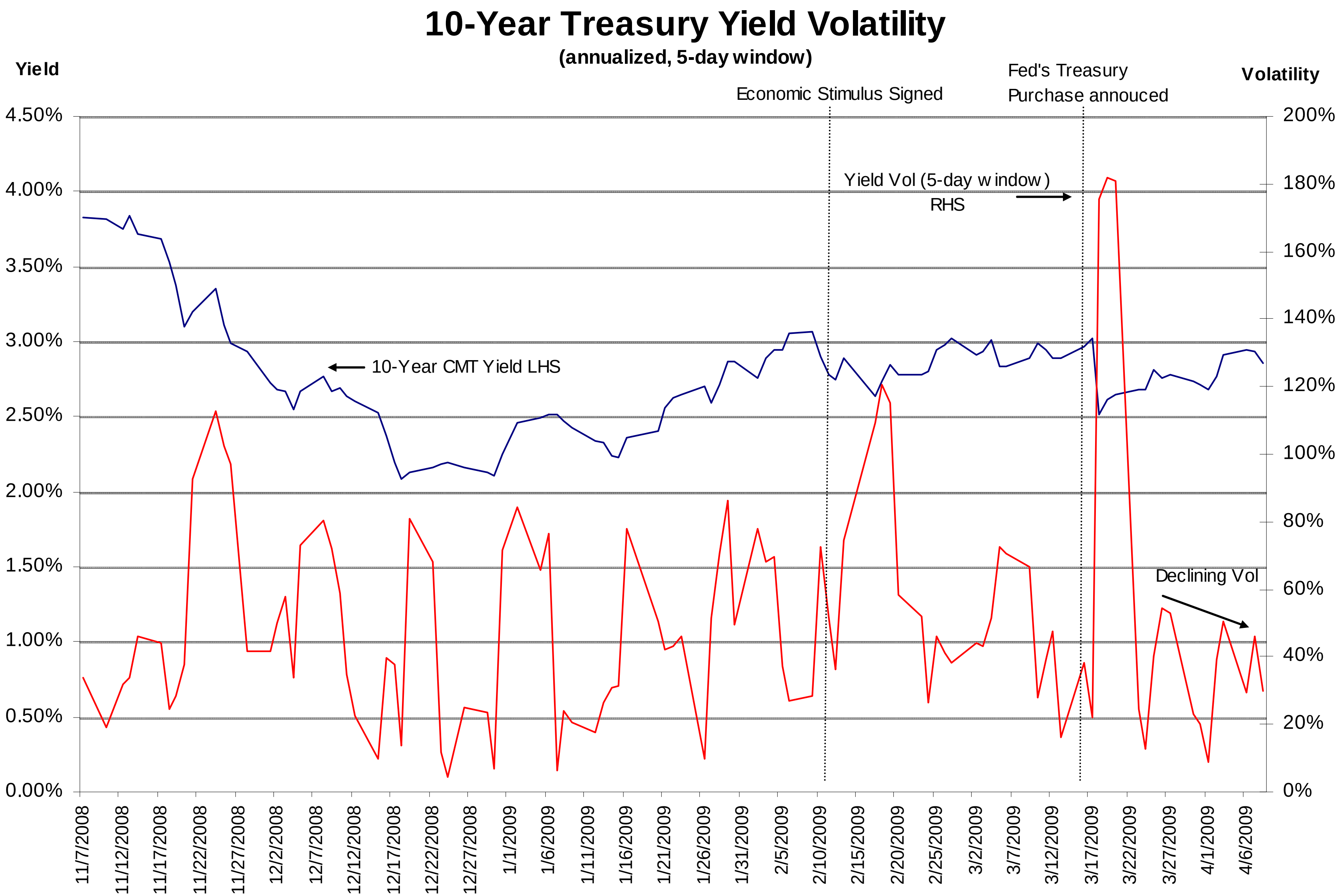
Treasury continues to monitor developments in inflation-indexed markets



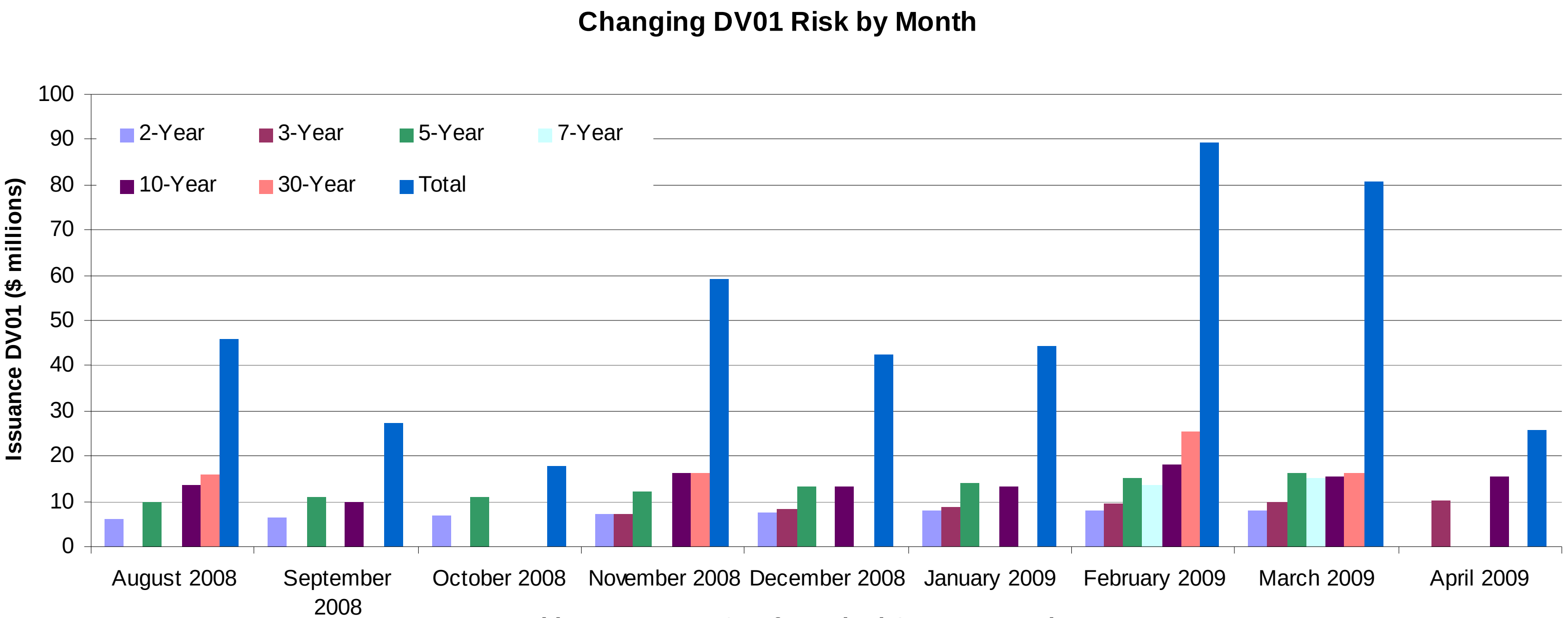
The Treasury repo market, after experiencing dislocations, has readjusted

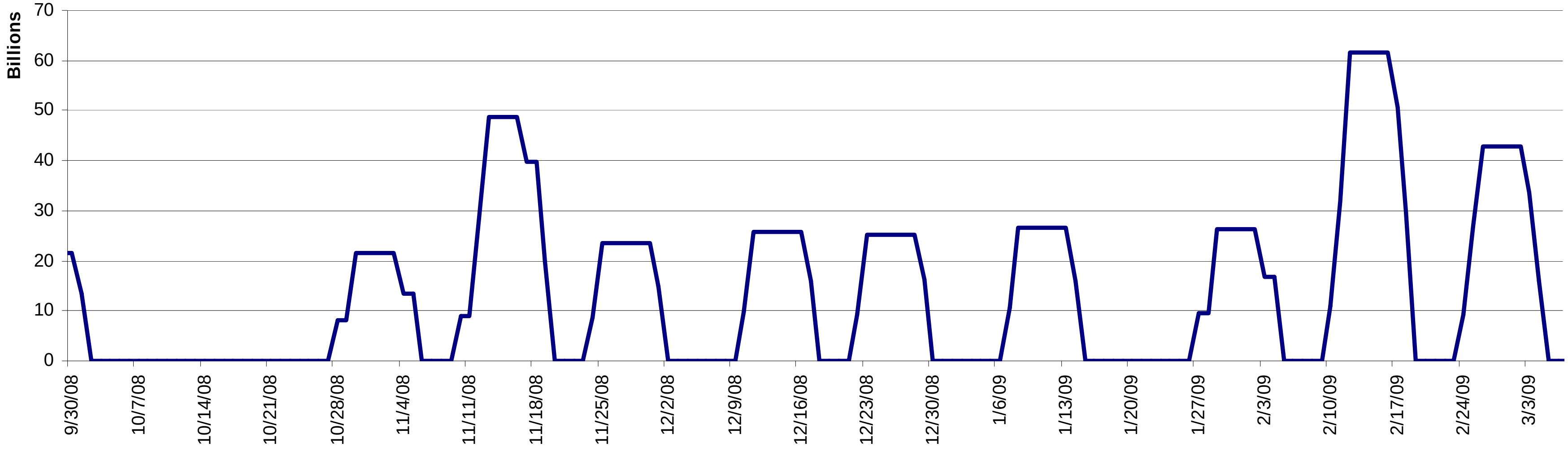


Volatility has remained range bound since the announcement of Fed purchases of Treasuries



DV01 has been increasing steadily with declining yields and increasing auction sizes





The current auction calendar has addressed recent changes in borrowing needs

Announced through 4/23/09

Security	Recent Size, $ Billions
4-week, 13-week, and 26-week bills	20, 29, 28
52-week bills	25
2-year note	40 per month
3-year note	35 per month
5-year note	35 per month
7-year note	26 per month
10-year note	57 (21 initial + 18 + 1st reopening + 18 2nd reopening)
30-year bond	25 (14 initial + 11 reopening)
5-year TIPS	14 (8 initial + 6 reopening)
10-year TIPS	14 (8 initial + 6 reopening)
20-year TIPS	14 (8 initial + 6 reopening)
Cash Management Bills (including SFP)	34 (average size in FY 2009)

The calendar for the recent quarter reflects the frequency of auctions as Treasury accesses the capital markets

Supplementary Financing Bills Applied for Q2 FY09

February

Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27

1 auction
2 auctions
3 auctions
4 auctions
Holiday/Fri
Early Close

March

Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27
30	31			

Available Days without an Auction

8

April

Monday	Tuesday	Wednesday	Thursday	Friday
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

Special Friday SFP Auctions

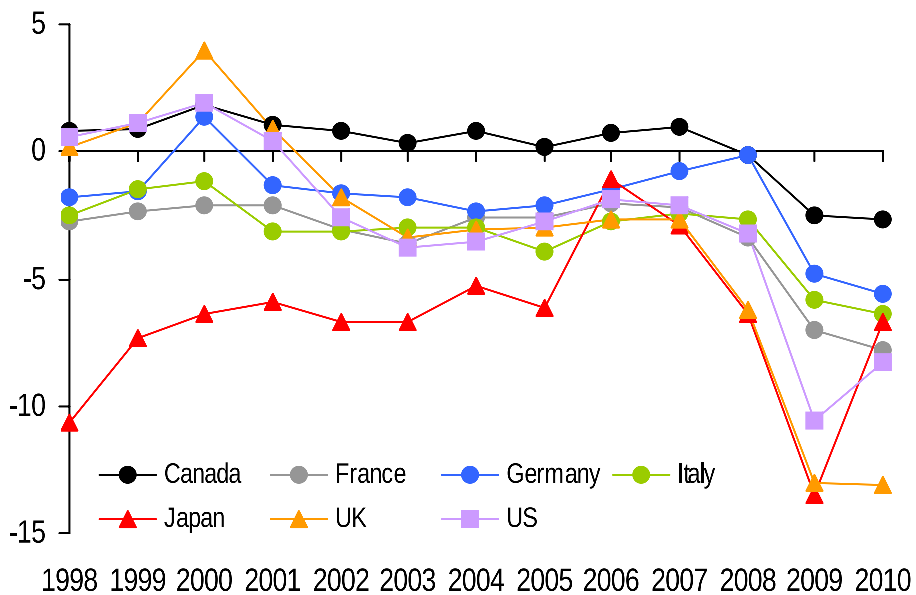
In recognition of both short, intermediate, and long term financing needs, as well as recent guidance provided by the Office of Management and Budget and other agencies, what adjustments to debt issuance, if any, should Treasury make in consideration of each of these horizons at this time in terms of adjustments to size, frequency, or instruments?

Treasury Borrowing Advisory Committee Presentation to Treasury

April 28, 2009

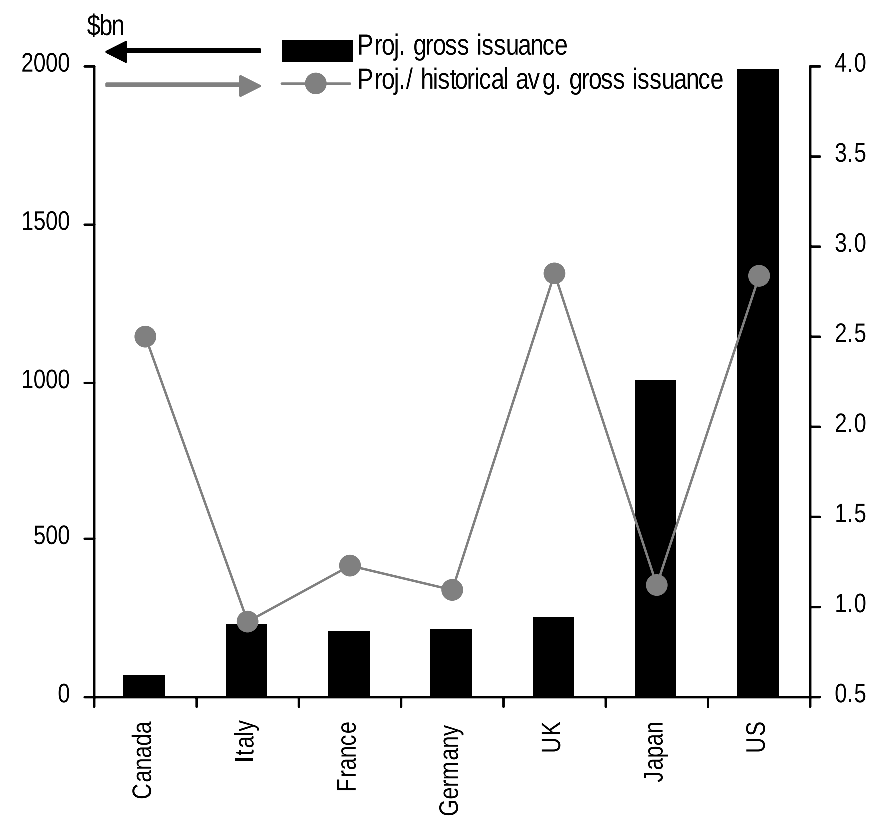
Deficits and sovereign debt supply are rising in several G7 countries

Central government budget balance as a percentage of GDP; negative numbers indicate deficit; %



Source: OECD December 2008 Economic Outlook

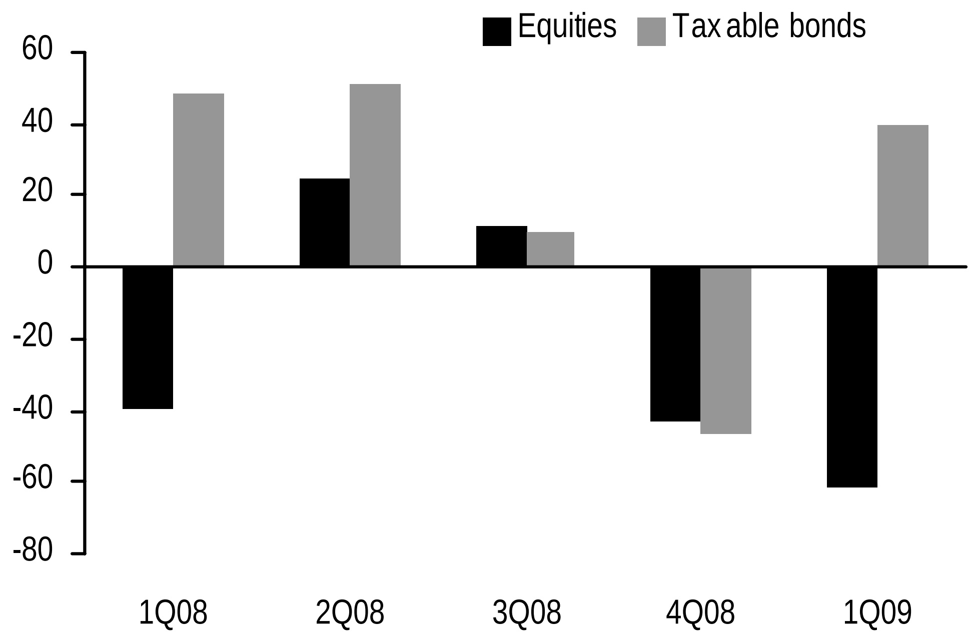
Projected gross issuance over calendar year 2009* versus projected gross issuance/ 5-year annual gross issuance average



*** Gross issuance includes only long-term debt (i.e. debt issued with original maturity greater than 1-year); historical avg. issuance is average over 2003-2008.**

Aggregate flows into equity and bond mutual funds

Quarterly flows into equity mutual funds versus taxable bond mutual funds; $bn

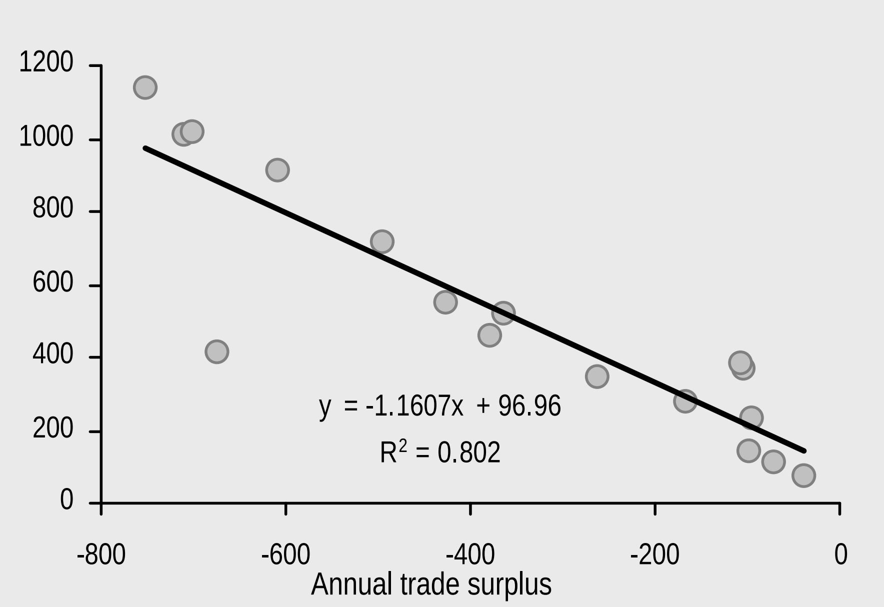


Source: AMG Data Services

- **Except for 4Q08, inflows into taxable bond funds have stayed positive, while equity funds have seen outflows**

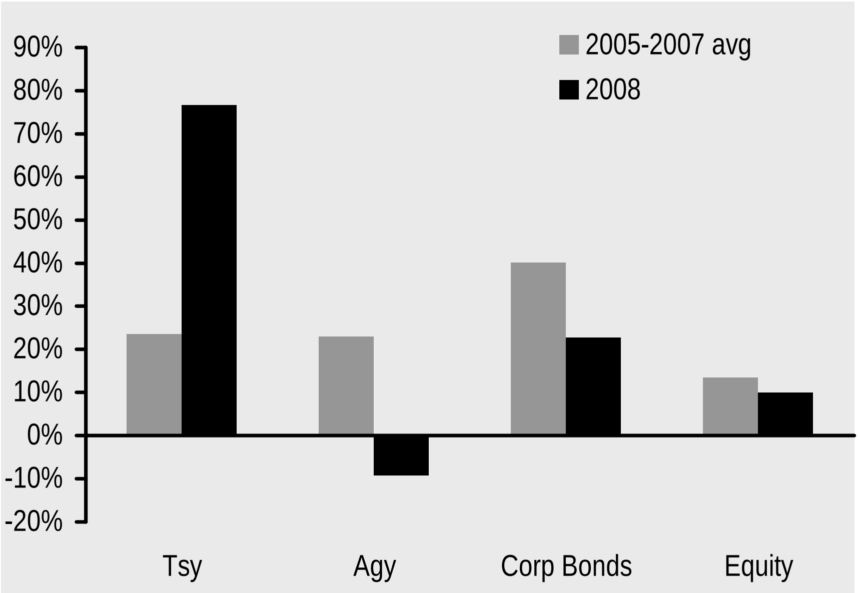
Aggregate foreign inflows into US assets will likely fall (but stay positive) with a shrinking trade deficit, but asset substitution has been offsetting the impact on Treasuries

Annual total net purchases of US securities by foreigners versus annual trade surplus (1992-2008); $bn



Source: Treasury International Capital System

Percentage share by asset class in total purchases of USD assets by foreigners (%-pts) - 2005-2007 average versus 2008



Source: Treasury International Capital System

- A shrinking trade deficit is likely to lead to smaller (but still positive) aggregate inflows - we estimate a trade deficit of $475bn in calendar year 2009, versus $721bn on average over the 2005-2007 period, and $674bn in 2008
- However, a substitution effect into Treasuries is evident so far
  - TIC data on transactions in coupon Treasuries suggest that foreigners bought $316bn Treasuries in 2008, versus $245bn on average in 2005-2007
  - Year-to-date Fed custody holdings data of Treasuries have increased by $133bn, while that of Agencies has decreased by $8bn
  - TIC data show over January-February 2009, foreigners bought $32bn Treasuries and sold $14bn Agencies, $5bn US corporate bonds, and $4bn US stocks

Within US fixed income markets, rising Treasury issuance relative to other markets will cause shifts in the composition of common benchmark indices …

US index components outstanding for a major benchmark aggregate index as of 3/31/09; projected net issuance in Apr-Dec 2009; projected Dec 2009 outstanding levels, and projected Dec 2009 weightings

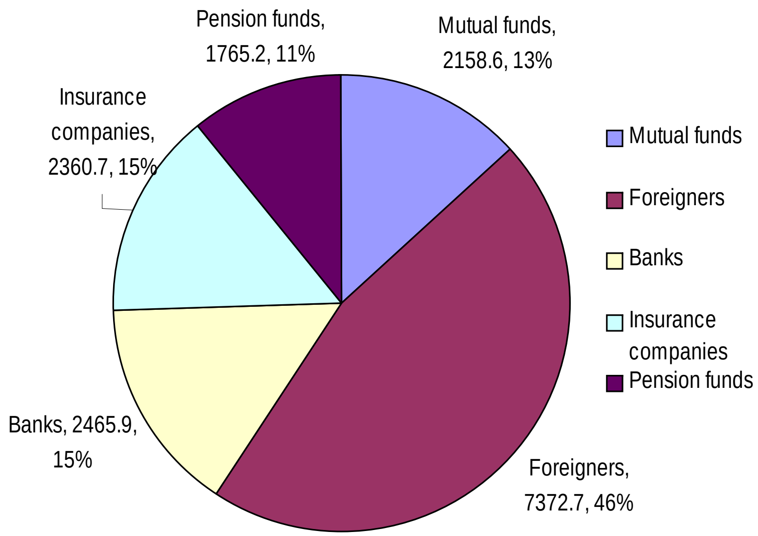
	3/31/09 weighting*	3/31/09 outstanding ($bn)	Proj. Apr-Dec 2009 issuance	Proj. 2009 outstanding ($bn)	Proj. 2009 weightings
TOTAL	100%	9,320		10,965	100%
US MBS	42%	3,946	400	4,346	39%
US Treasuries	31%	2,614	1,135	3,749	34%
US Credit	19%	1,944	131	2,074	19%
US Agencies	6%	520	-20	500	5%
EM External Debt (USD)	2%	150	0	150	1%
EM Credit (USD)	1%	146	0	146	1%

* 3/31/09 weighting uses market values.

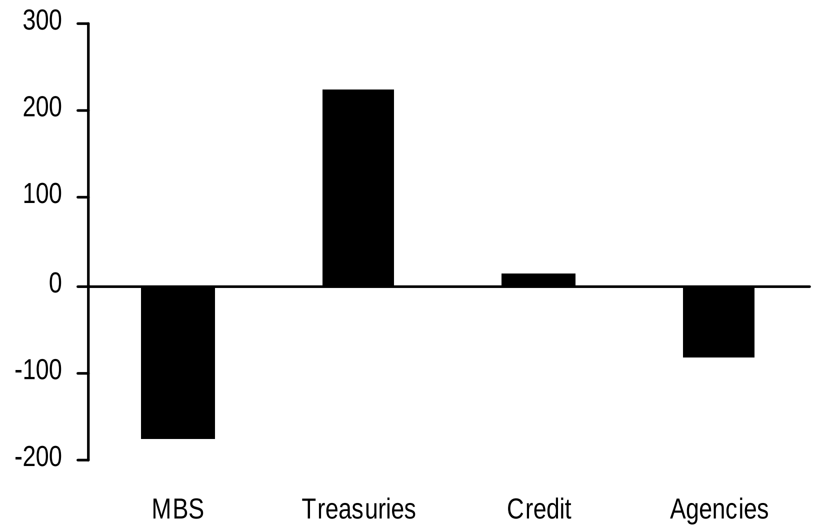
- **The relatively high Treasury issuance over April-December 2009 should cause USTs to grow to about 34% of the index, from about 31% currently**
- **USTs could grow to an even higher fraction of the index if commonly used benchmarks change their methodology to adjust for the Fed's purchases (especially of MBS)**
    - **In this case, USTs could grow to approximately 36% of the index**

… and passive investor reallocations should cause inflows into Treasuries

US fixed income assets held* by various investors as of December 2008; $bn



Estimated net demand for various fixed income asset classes from indexed investors stemming from the shifting composition of the US fixed income market (not accounting for Fed purchases); $bn



* Includes Treasury securities, U.S. government agency securities/MBS, corporate and foreign bonds, and municipal securities and loans
Source: Federal Reserve Flow of Funds Accounts

- **Approximately 40% of the investor universe (mutual funds, pension funds and insurance companies, with an estimated $6.5Tn in fixed income assets) may be assumed to manage to a benchmark**
  - **Other countries' sovereign issuance is likely not a competing factor for these investors**
- **We estimate $225bn in Treasury market inflows from these investors due to index composition changes**
  - **Such demand could be higher (about $380bn) if common benchmark indices are redefined to exclude Fed purchases, especially of MBS**

Expected net Treasury supply versus a breakdown of expected sources of demand

Projected net issuance in coupon Treasuries over April-December 2009 versus expected incremental demand from various sources; $bn

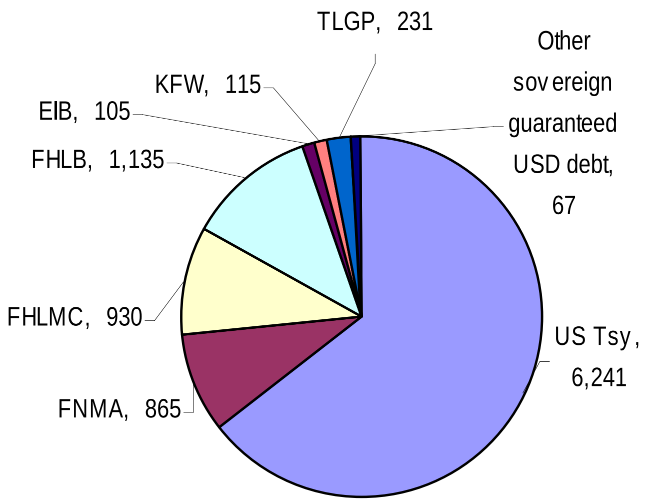
Expected net issuance in coupon Treasuries over Apr-Dec 2009	1135
Fed purchases over Apr-Dec 2009	258
Index-related demand	224
Foreign demand*	145
Reinvestment demand from MBS/Agy debt sales**	352
Remainder	157

* Assumes run rate of purchases over January-February 2009 by foreigners remains the same over April-December 2009. Based on TIC flows data.

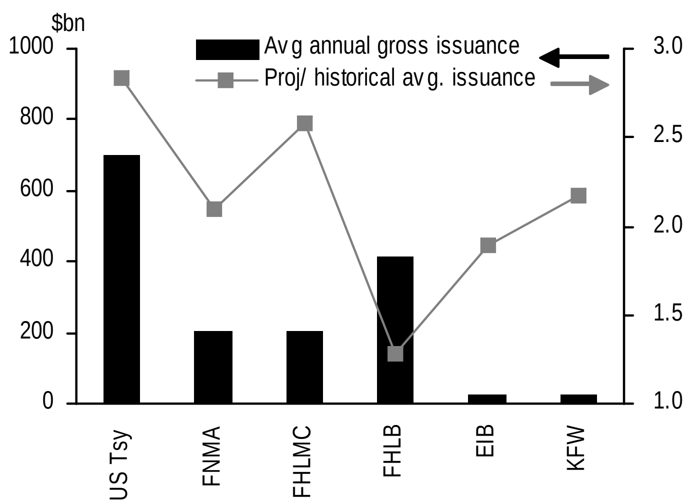
** We assume that benchmark indices will not adjust for Fed purchases. We then use the estimated net reduction in MBS and Agency debt exposure from index investors to calculate the MBS/Agency debt displaced from non-indexed portfolios. Finally, we assume that this displaced cash from non-indexed portfolios will remain allocated to US Fixed Income, and re-invested in Treasuries and Corporates (including FDIC guaranteed debt) in proportion to the expected gross issuance in those markets

Issuance trends for quasi-government debt markets

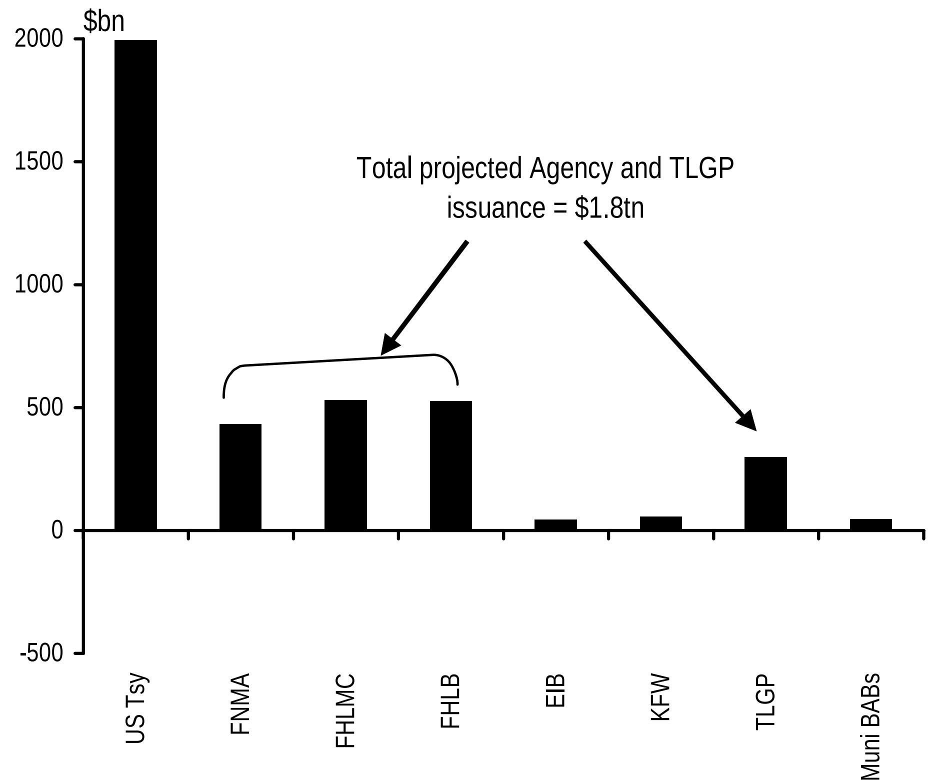
Amt outstanding by issuer as of Mar'08, USD bn



Historical 5-year annual average gross* issuance versus projected 2009 gross issuance/ 5-year annual gross issuance average



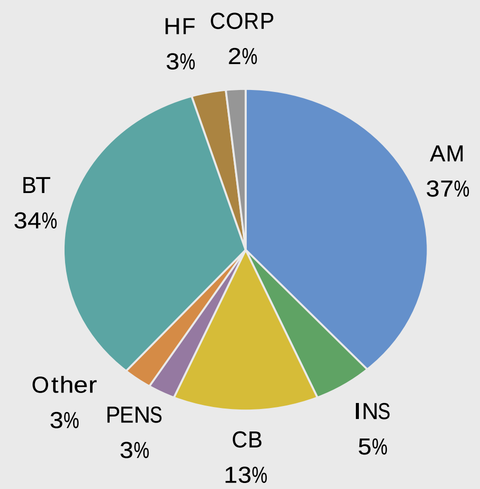
Projected gross issuance, Jan-Dec'09



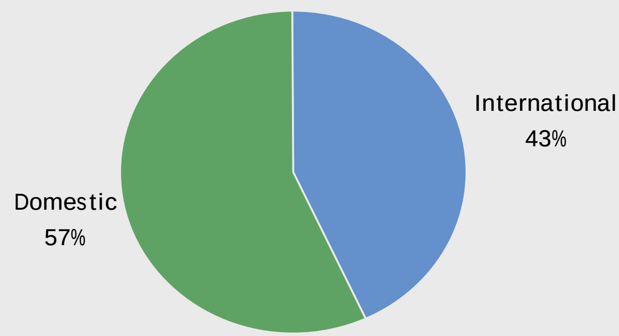
*** Gross issuance includes only long-term debt (i.e. debt with original maturity greater than 1-year)**

Estimated composition of demand for quasi-government debt

Estimated composition of the investor universe participating in recent issues in the FDIC market, by investor type



Estimated domestic/international split among investors participating in recent issues in the FDIC market

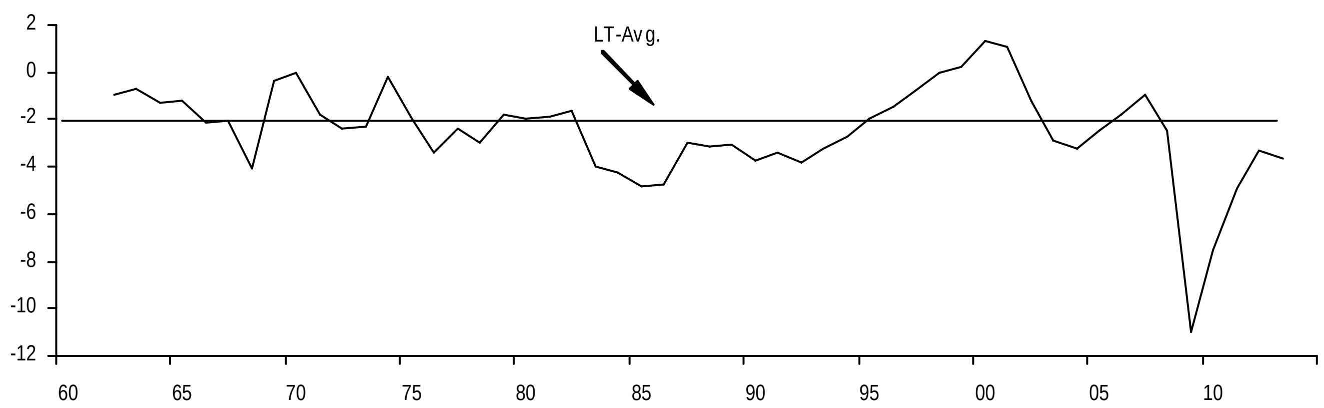


- FDIC-guaranteed debt is treated as a sub-sector of government debt in benchmark indices – most investor classes would thus have an incentive to participate
- Anecdotal evidence regarding investor participation in the FDIC-guaranteed market suggests that most classes of Treasury investors are active buyers of this paper

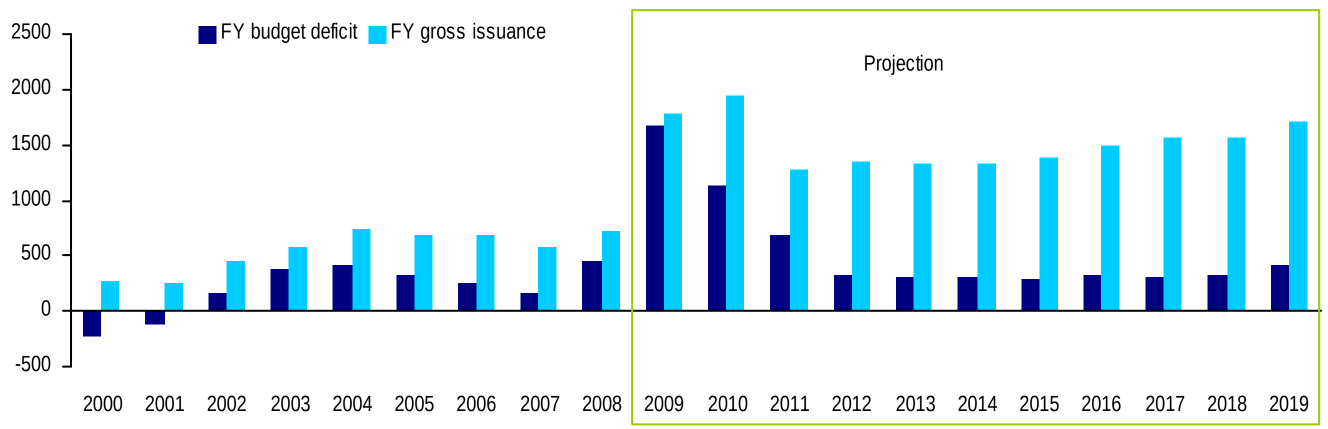
Asset Manager (AM)
Bank Treasury (BT)
Central Bank (CB)
Corporate (CORP)
Hedge Fund (HF)
Insurance Company (INS)
Pension Fund (PENS)

Long term deficit and issuance projections

US cyclically adjusted budget deficit; % of potential GDP



Fiscal year budget deficit versus fiscal year gross issuance and projections for 2009-2019*; $bn



* CBO budget forecasts are used. To project gross issuance, we assume that the coupon auction schedule remains unchanged except for an additional bond reopening, that bills outstanding reverts to and stays at a constant 25% of total debt outstanding, and that gross issuance sizes are scaled to meet the remaining funding needs net of bill issuance. Issuance projections do not account for returns from financial assets acquired via TARP.

The impact of improving economic conditions and rising risk appetite needs to be considered in the future

Stylized listing of factors currently supportive of USTs, and estimated impact going forward when the economy begins to improve

Factors currently supporting USTs	Outlook	Impact on yields
Net inflows into fixed income markets	↓	↑
Fed purchases of Treasuries	↓	↑
Index-related demand	↔	↔
Foreign demand for Treasuries	↓	↑
Other Fed asset purchases	↓	↑

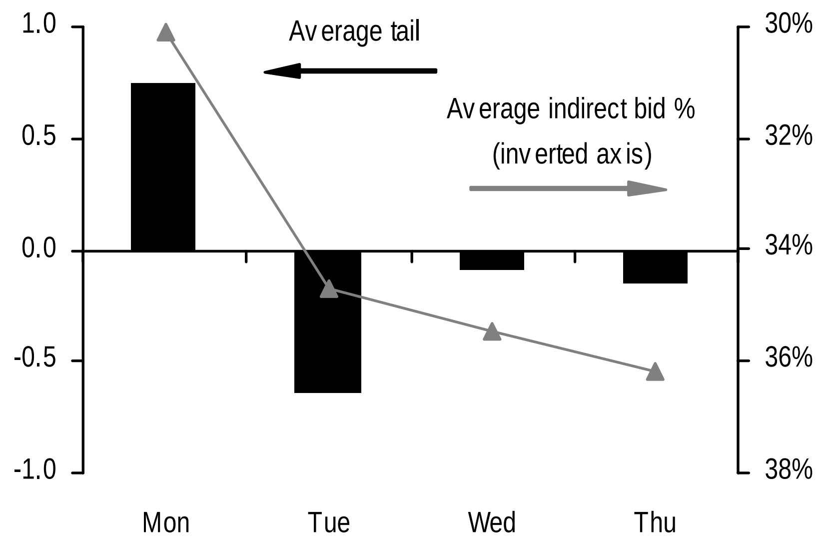
Auction timing - avoid Mondays and Fridays

Distribution of Treasury auctions* by day-of-week;

	2Y	5Y	10Y	30Y
Mon	4	0	0	0
Tue	13	5	4	0
Wed	50	38	13	0
Thu	4	27	32	13
Fri	0	0	0	0
Total	71	70	49	13

Average auction tail** and % indirect bids for the 2-year note separated by day of week;

bp %

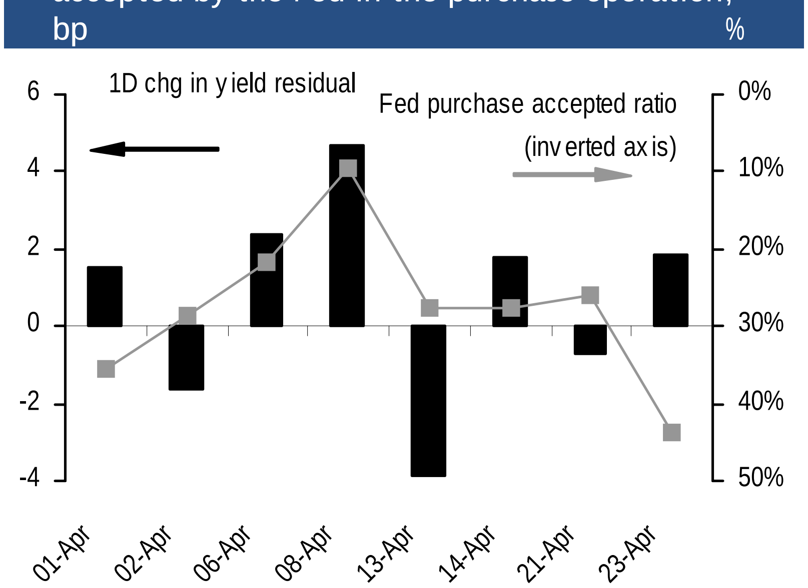


- **There is some evidence that auctions held on Mondays perform poorly relative to auctions held on other days of the week**
  - **Typical tails have been larger, and indirect bids have been lower**
- **The experience with Monday auctions suggests that auctions held on Fridays could prove similar or worse**
  - **Asian investors are likely to be less active in Friday auctions given the time difference**
- **We recommend Treasury avoid Mondays and Fridays to the extent possible given calendar constraints**

* Uses Treasury auction data from May 2003 to March 2009. 3-year and 7-year sectors were excluded due to sparse history.
** Auction tails calculated as difference between the pricing yield and the 1PM WI yield
Source: Bloomberg

The impact of Fed purchases – demand begets supply

Change in yield residual* on the day of a purchase operation versus the percentage of total offers accepted by the Fed in the purchase operation;

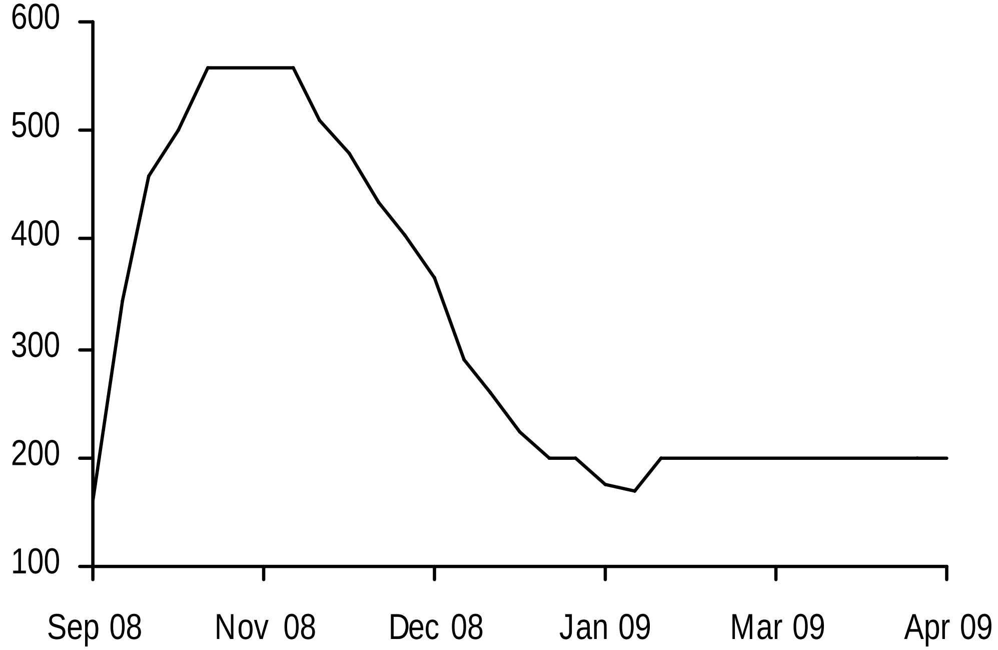


- **Given the numerous high-frequency events impacting markets, it is difficult to isolate the impact of Fed purchases**
- **That said, we find that the closest benchmark to the purchase sector has cheapened versus the wings on the day of the operation in 5 out of 8 operations in April**
- **This impact has been greater in purchase operations with lower acceptance rates**
    - **In effect, purchase operations may be acting as effective sources of supply to dealer desks**

* Yield residual defined as the 6-month residual of the yield of the closest benchmark to the Fed purchase sector, regressed against yields on the wings. Wings refer to the nearest surrounding benchmark points on the curve except for the 10-year, where wings refer to 2s and 30s.

The Supplemental Financing Program

Supplemental Financing Program amount outstanding; $bn



Advantages and disadvantages of Fed bills versus SFP

Fed bills	SFP
Advantages	
Preserves the separation between fiscal and monetary policy	Uses existing operational and market resources
Provides the Fed with the flexibility of using an additional reserve management tool, when and if needed	Concentrates liquidity in one market
Greater transparency regarding the US Government's fiscal liabilities and term structure versus monetary policy actions	
Provides a mechanism to make the Fed's reserve creation portable beyond the banking system	Provides a mechanism to make the Fed's reserve creation portable beyond the banking system
Disadvantages	
Requires legislation authorizing the Fed to issue debt	Requires legislation to exempt SFP amounts from the debt ceiling
Splits liquidity across two markets	May be seen as compromising the separation between fiscal and monetary policy

Treasury Borrowing Advisory Committee Quarterly Meeting
Committee Charge – April 28, 2009

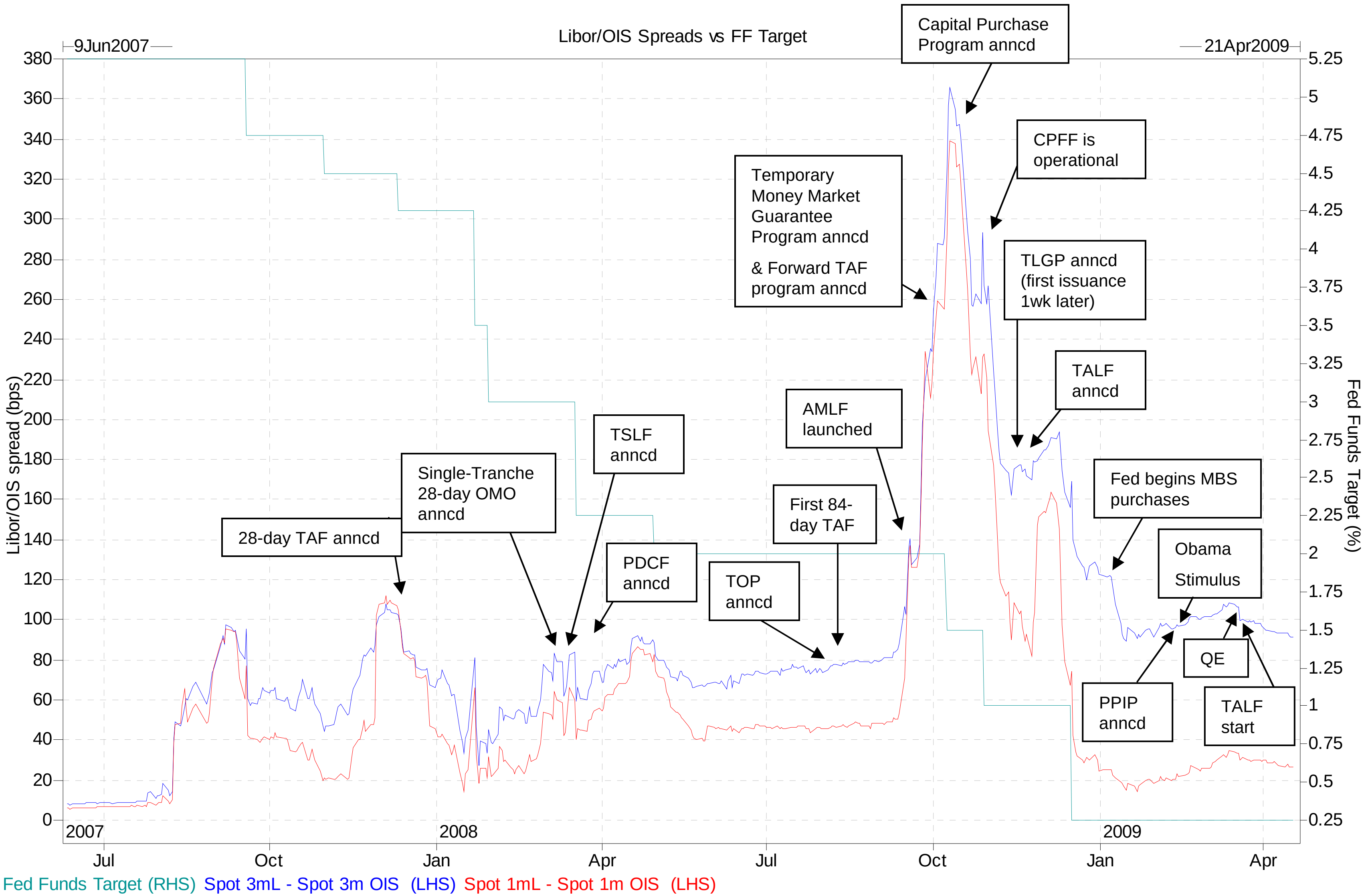
Credit Market Conditions

The Treasury, Federal Reserve, and FDIC have undertaken a series of actions to foster the robust functioning of credit markets. Please discuss how these actions have impacted credit markets, what additional steps may be considered, and the implications of any current or additional steps on the Treasury market.

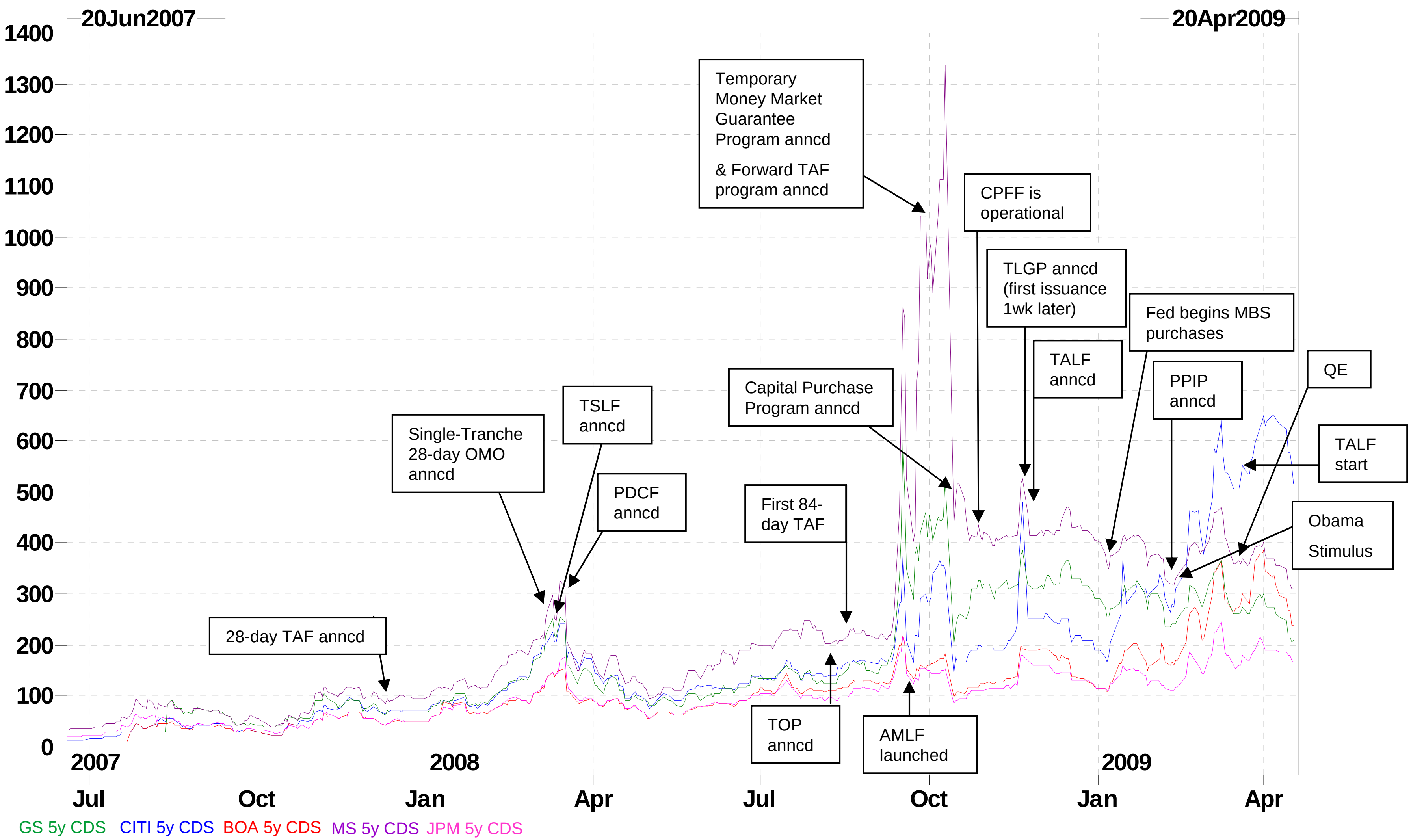
Timeline of Policy Initiatives from the Fed and Treasury

Date	Event
12-Dec-07	28-day TAF announced
7-Mar-08	Single-Tranche 28-day OMO announced
11-Mar-08	TSLF announced
16-Mar-08	PDCF announced
8-Aug-08	TOP announced
11-Aug-08	First 84-day TAF
19-Sep-08	AMLF launched
29-Sep-08	Temporary Money Market Guarantee Program announced & Forward TAF program announced
14-Oct-08	Capital Purchase Program announced
27-Oct-08	CPFF is operational
21-Nov-08	TLGP announced (first issuance 1wk later)
25-Nov-08	TALF announced
5-Jan-09	Fed begins MBS purchases
10-Feb-09	PPIP announced
13-Feb-09	Obama Stimulus
18-Mar-09	QE
19-Mar-09	TALF start

LIBOR/OIS Spreads Sustain Recent Tightening

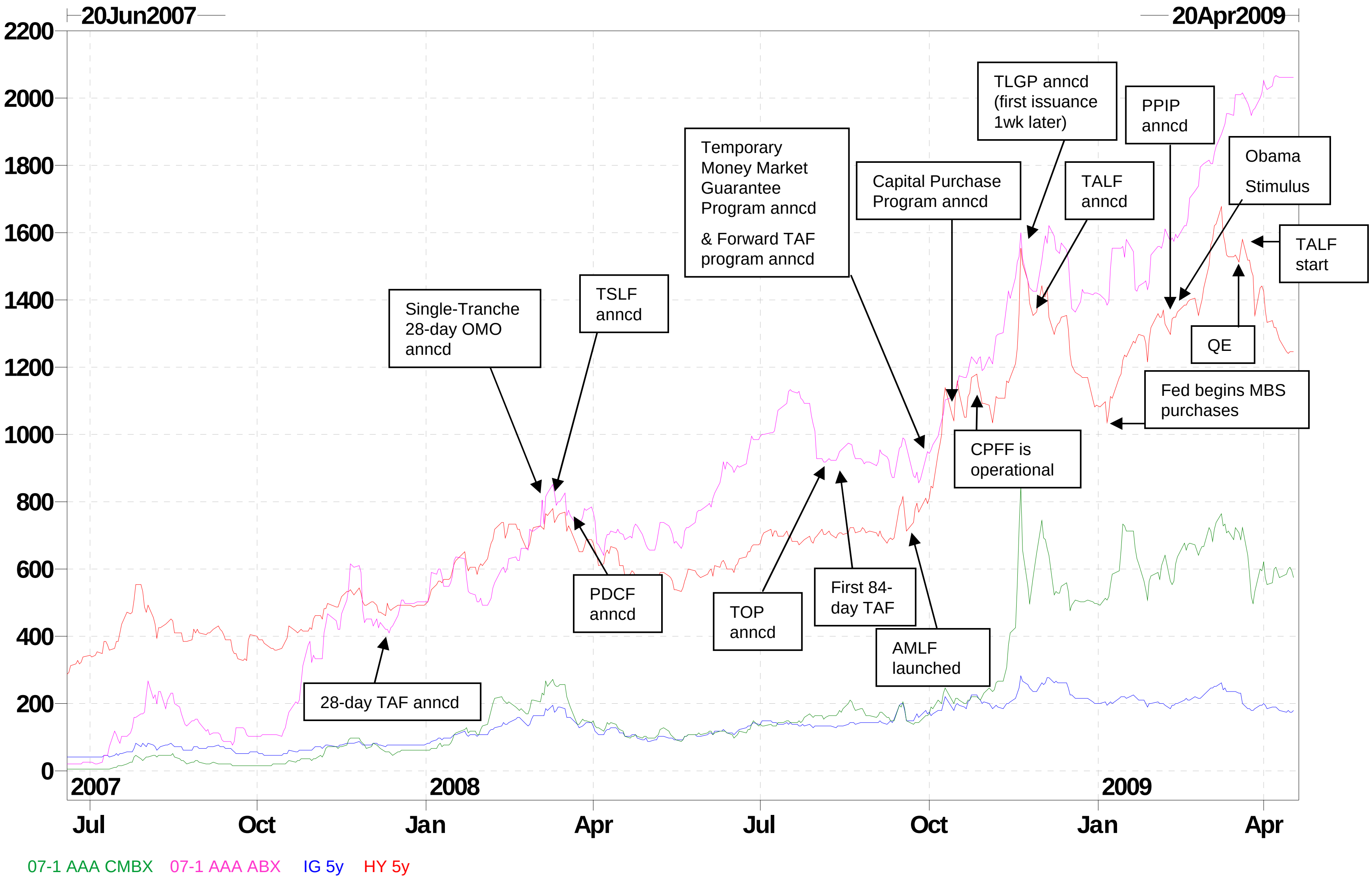


Bank CDS

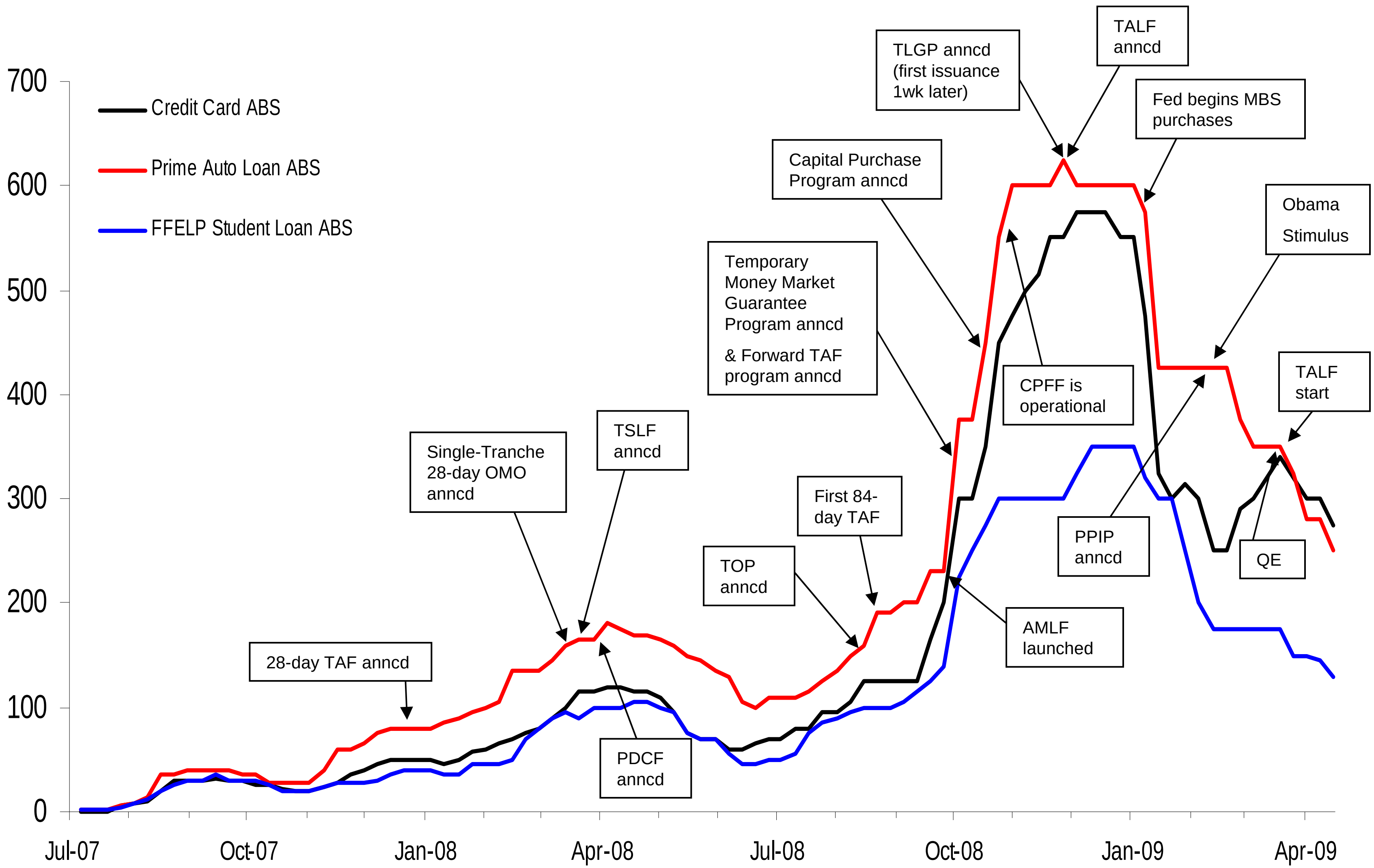


20Jun2007
20Apr2009
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
Temporary Money Market Guarantee Program anncd
& Forward TAF program anncd
CPFF is operational
TLGP anncd (first issuance 1wk later)
Fed begins MBS purchases
TALF anncd
QE
PPIP anncd
Capital Purchase Program anncd
TSLF anncd
Single-Tranche 28-day OMO anncd
PDCF anncd
First 84-day TAF
TALF start
Obama Stimulus
28-day TAF anncd
TOP anncd
AMLF launched
2007
2008
2009
Jul
Oct
Jan
Apr
Jul
Oct
Jan
Apr
GS 5y CDS
CITI 5y CDS
BOA 5y CDS
MS 5y CDS
JPM 5y CDS

Credit Index Spreads

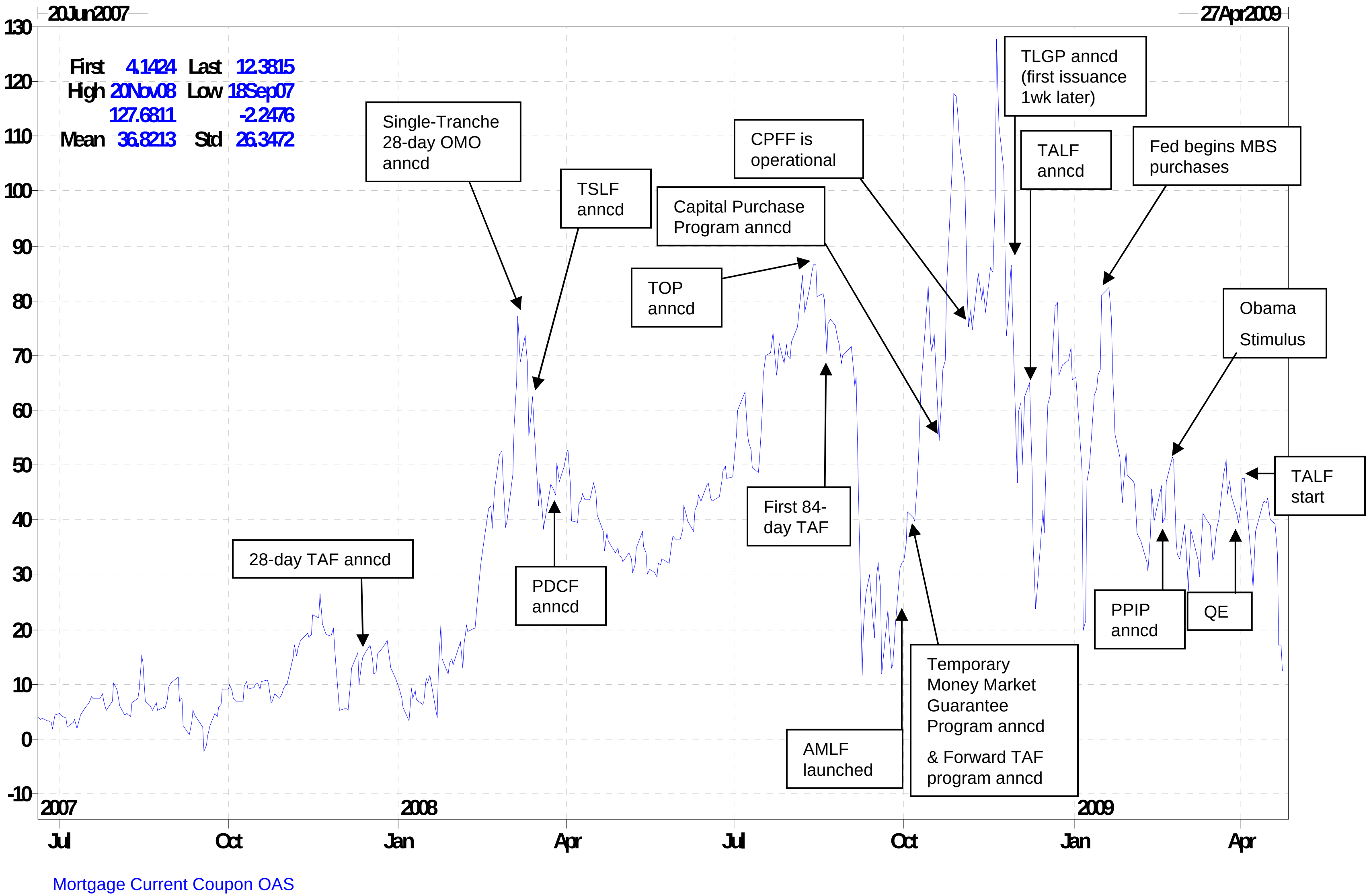


ABS Spreads

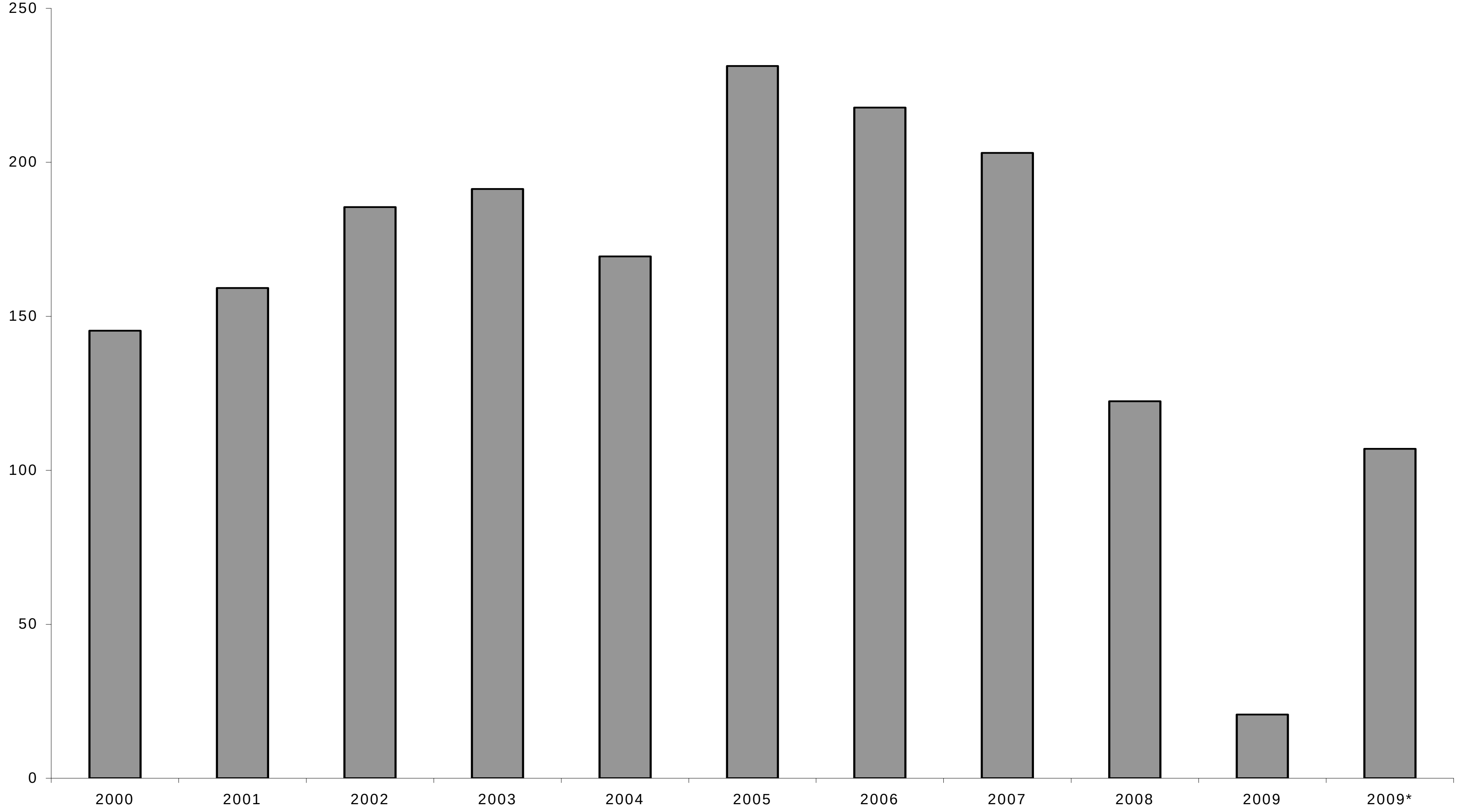


700
600
500
400
300
200
100
0
Credit Card ABS
Prime Auto Loan ABS
FFELP Student Loan ABS
Jul-07
Oct-07
Jan-08
Apr-08
Jul-08
Oct-08
Jan-09
Apr-09
28-day TAF anncd
Single-Tranche 28-day OMO anncd
TSLF anncd
PDCF anncd
TOP anncd
First 84-day TAF
Temporary Money Market Guarantee Program anncd
& Forward TAF program anncd
Capital Purchase Program anncd
TLGP anncd (first issuance 1wk later)
TALF anncd
Fed begins MBS purchases
CPFF is operational
AMLF launched
PPIP anncd
Obama Stimulus
TALF start
QE

Mortgage OAS

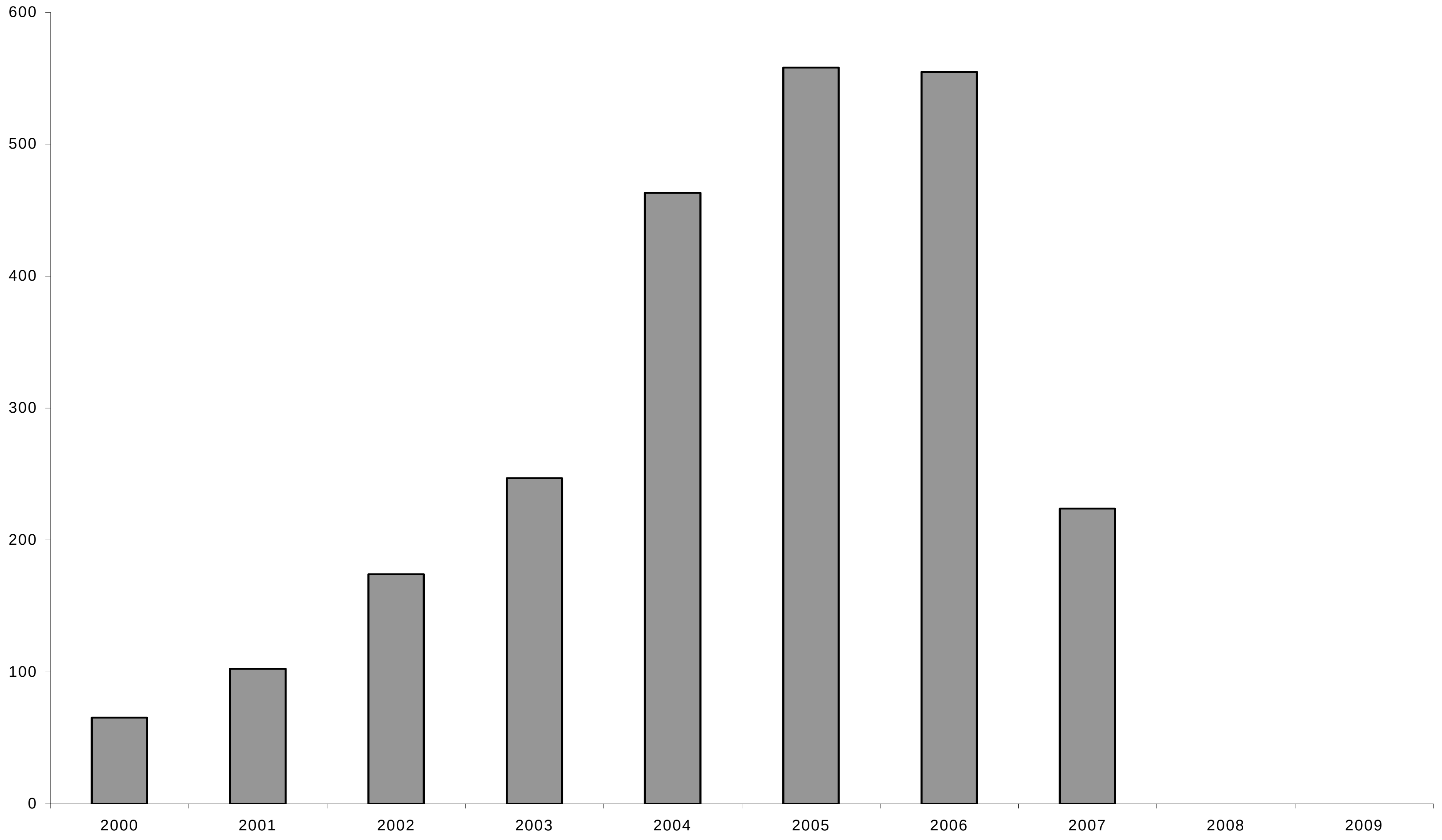


Gross Issuance of Auto, Credit Card + Student Loan ABS ($ bn)

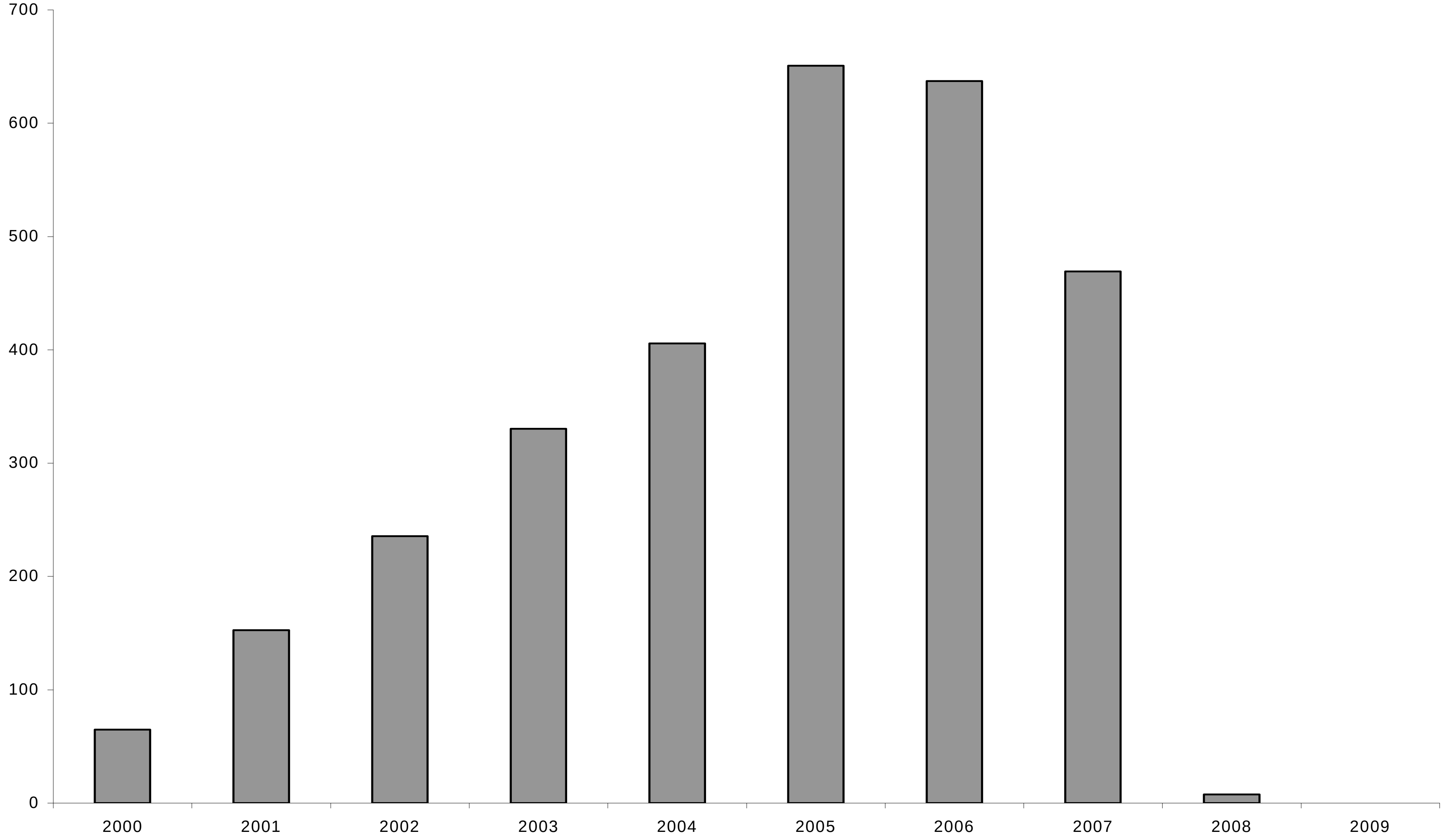


* Annualized issuance since TALF program started

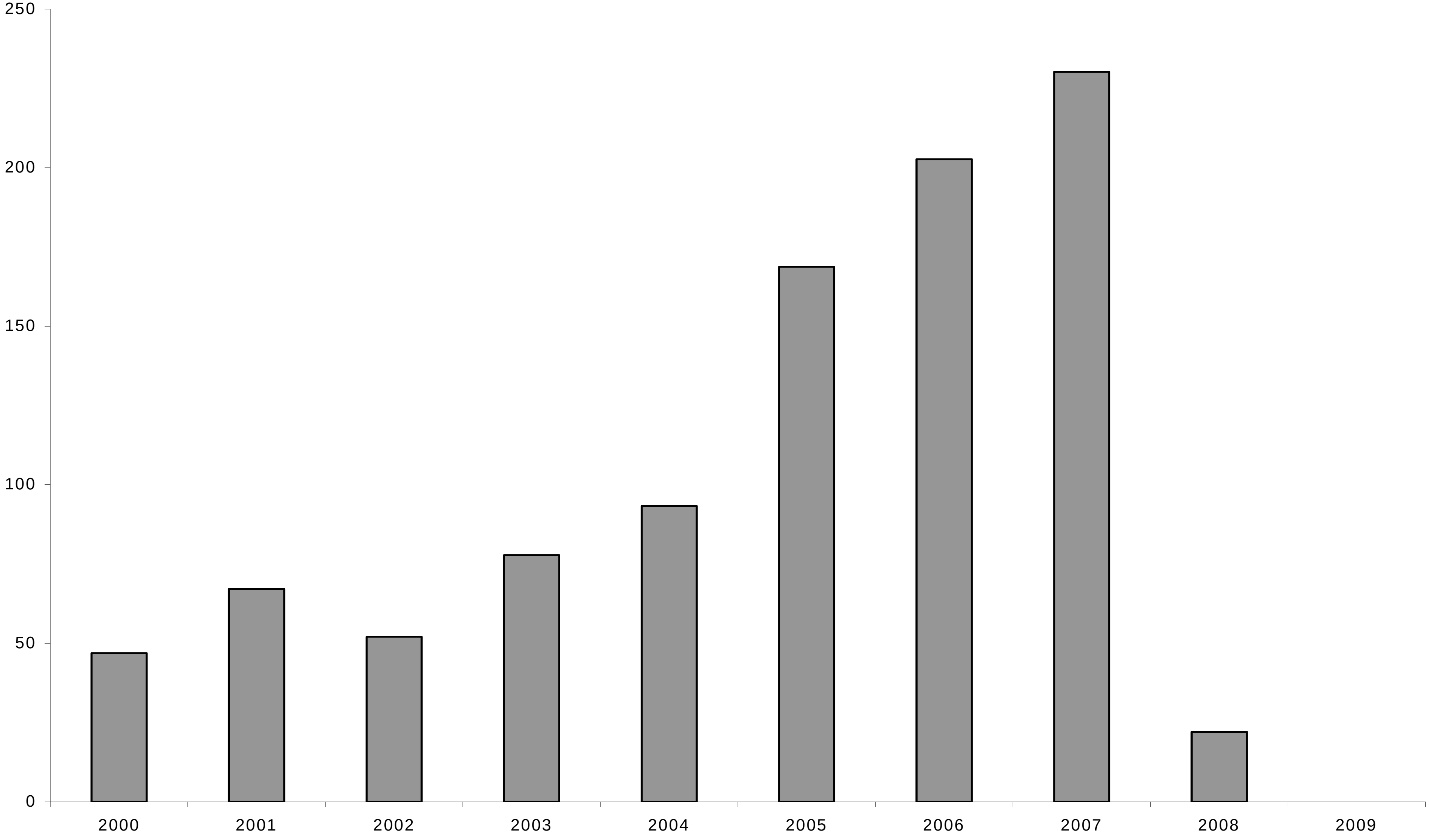
Gross Issuance of Home Equity Loan ABS ($ bn)



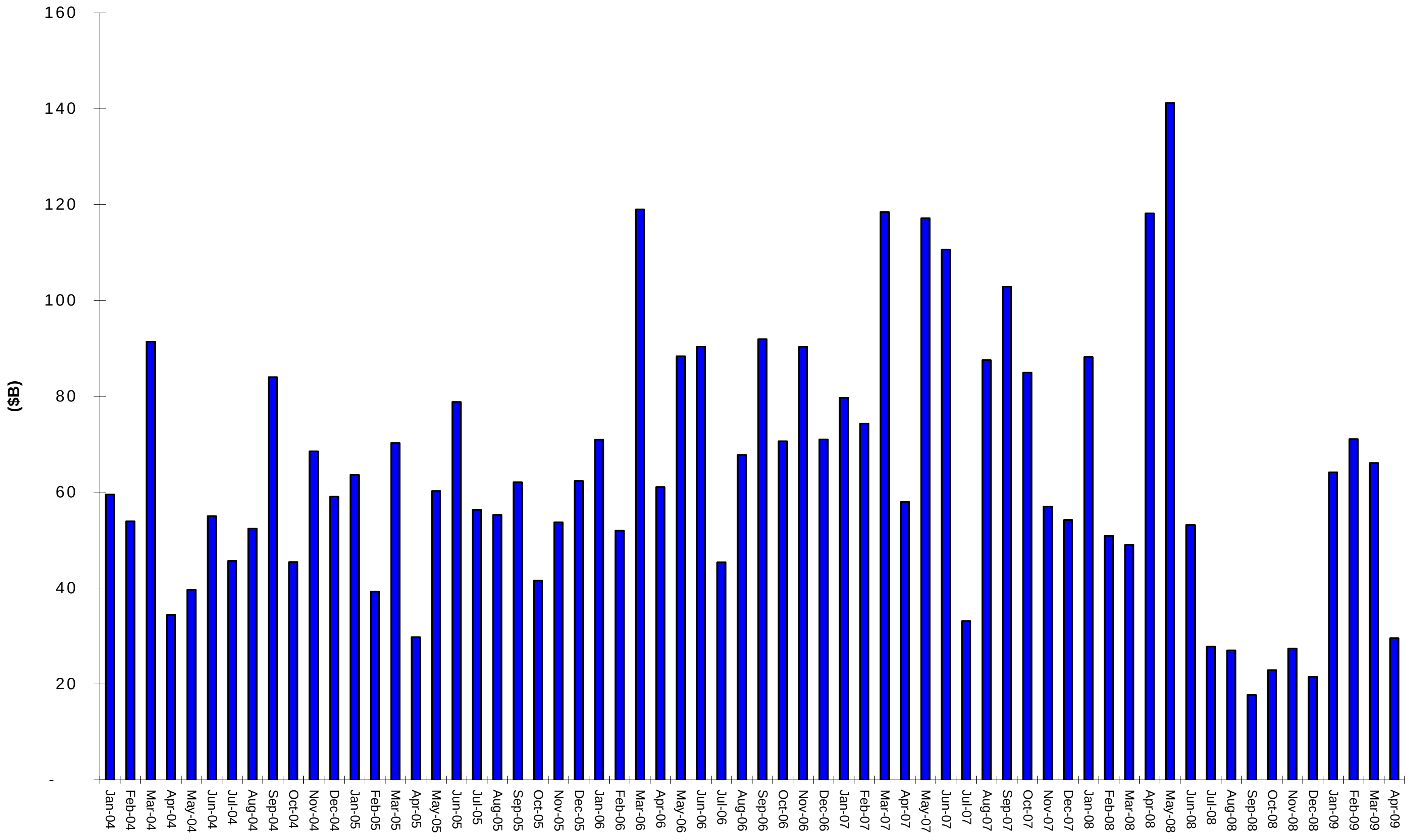
Gross Issuance of Non-Agency MBS ($ bn)



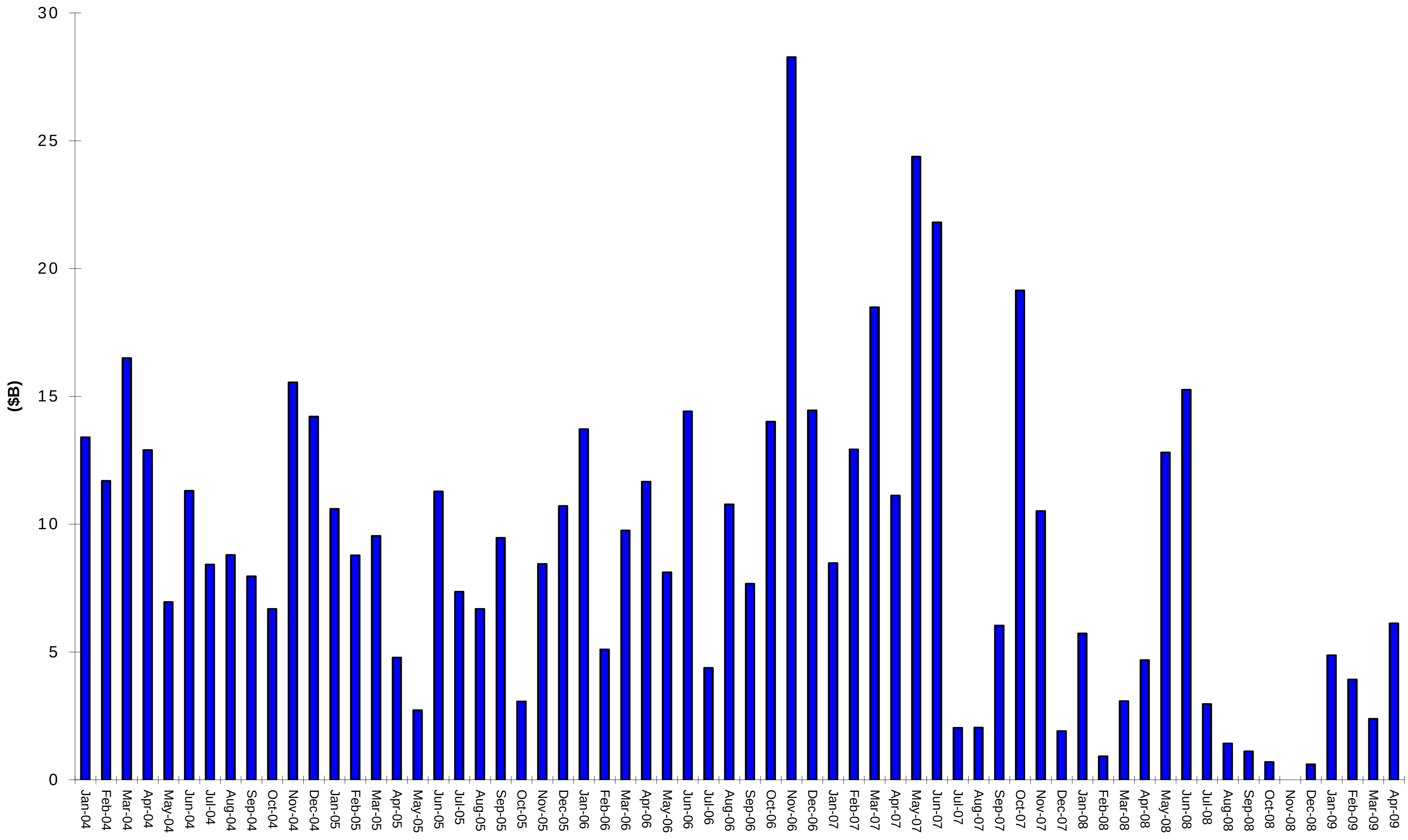
Gross Issuance of CMBS ($ bn)



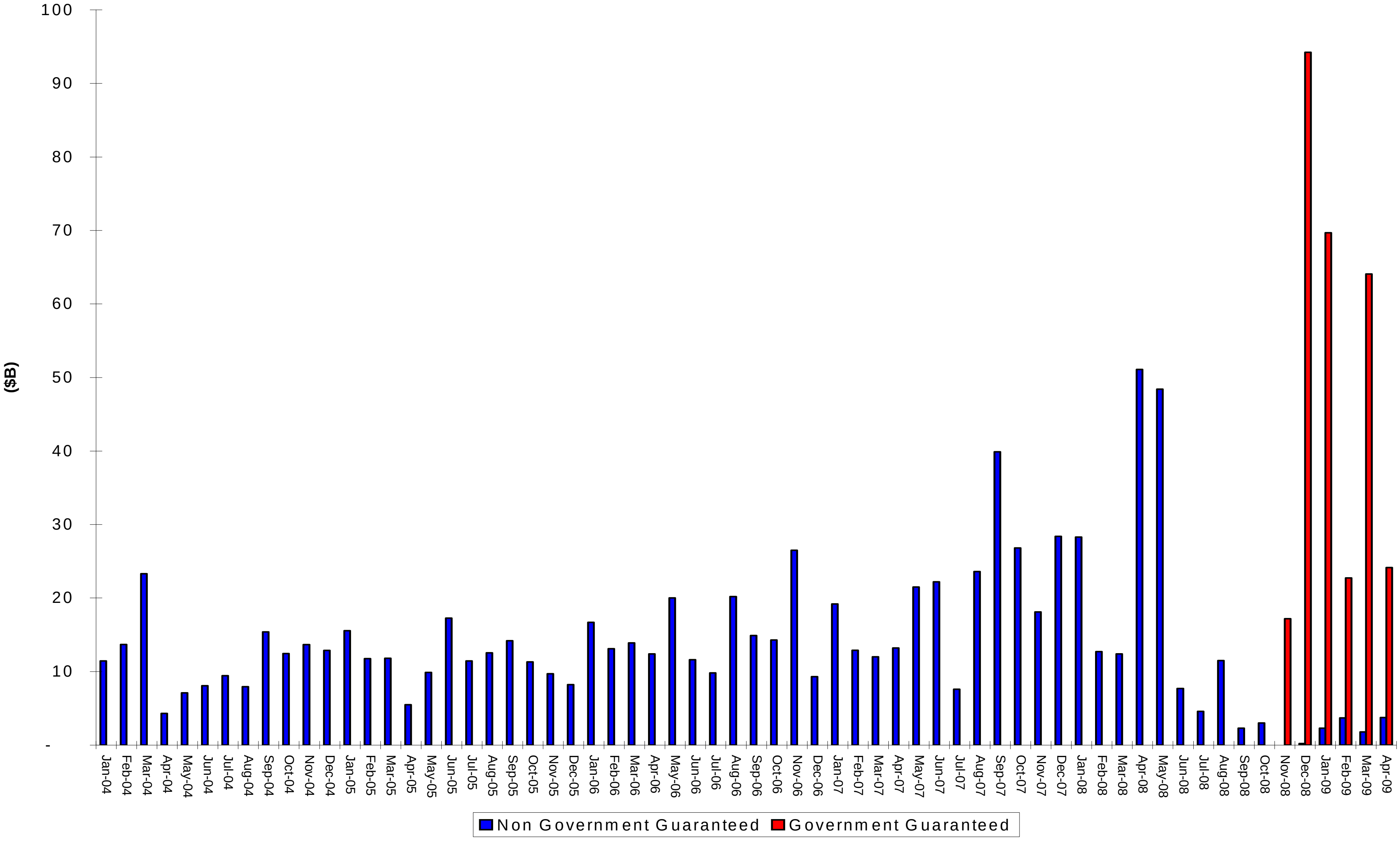
US Investment Grade Corporate Debt Issuance ($ bn)



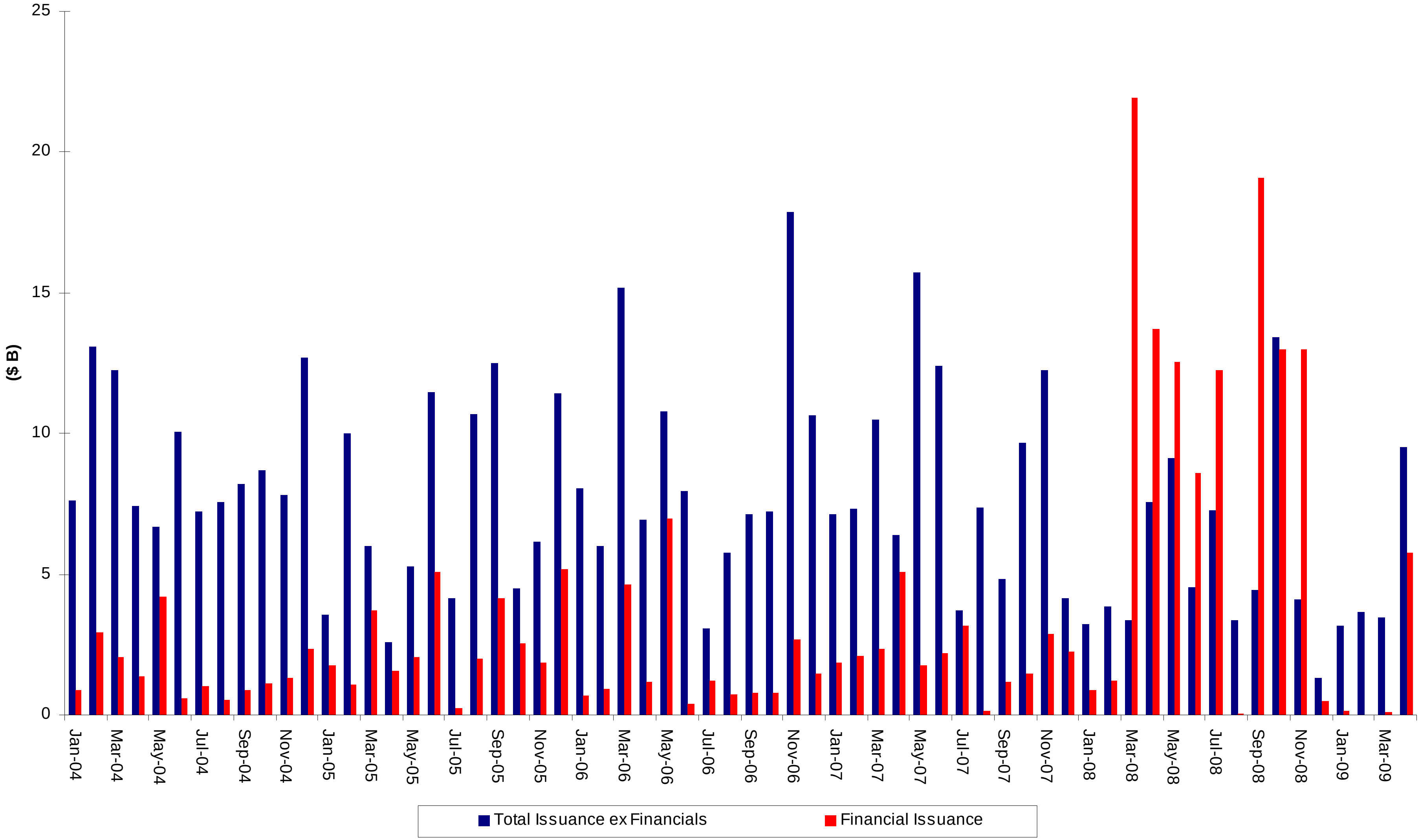
High Yield Corporate Debt Issuance ($ bn)



Monthly Guaranteed & Non-Guaranteed Financial Issuance ($ bn)



Monthly Equity Market Issuance (IPOs and Secondaries, $ bn)



Improved Markets

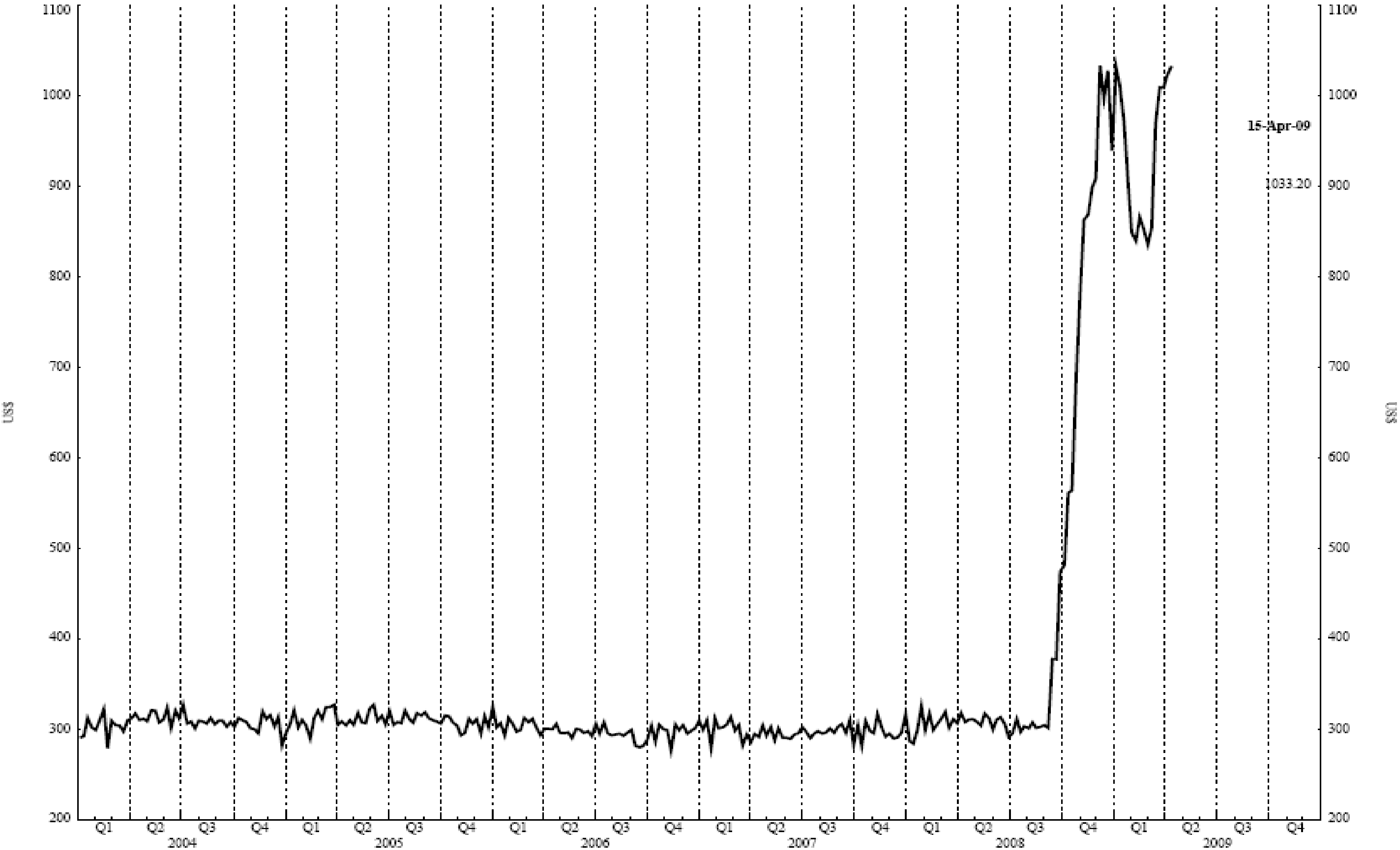
- Libor → Capital Purchase Program and TLGP
- ABS → TALF
- Mortgage basis → Fed purchases
- Additional steps must target assets that have not normalized
- Additional steps must target economic growth

Haircut Grid

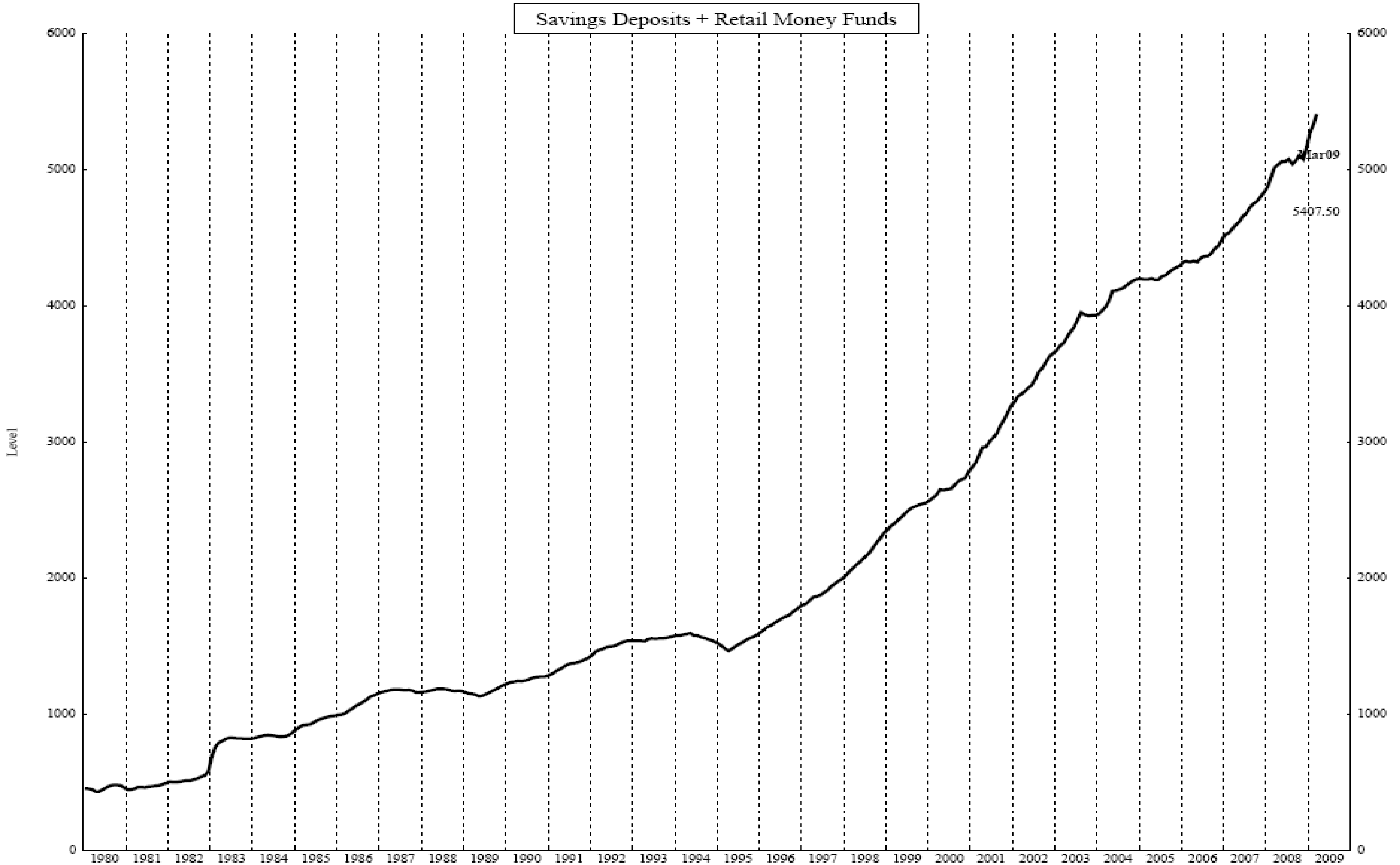
	ABS	RMBS	CMBS	Investment Grade Corporate Debt	High Yield Corporate Debt
Pre Lehman	10-25%	20-30%	10-20%	5-15%	20-30%
Post Lehman	15-30%	30-50%	20-40%	20-30%	30-50%
Current	20-40%	30-50%	20-40%	10-20%	30-50%
Spread Tightening with Pre-Lehman Haircut Levels	25-75 bps	150-250 bps	200-300 bps	25-75 bps	250-350 bps

If volatility continues to remain low, haircuts will improve across the board in 1-2 months

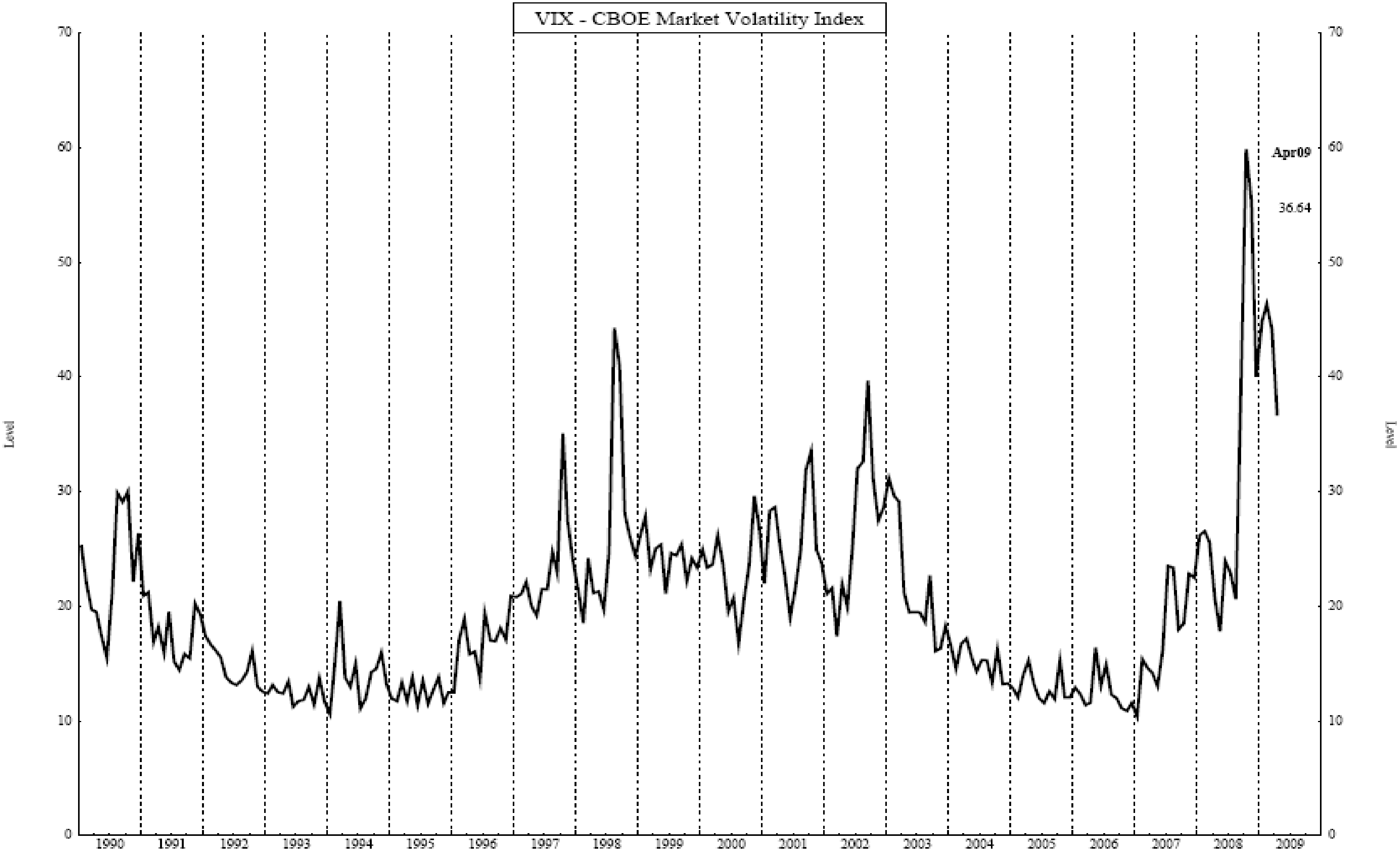
Cash Assets on Commercial Bank Balance Sheets ($ bn)



Cash Held By Individuals ($ bn)

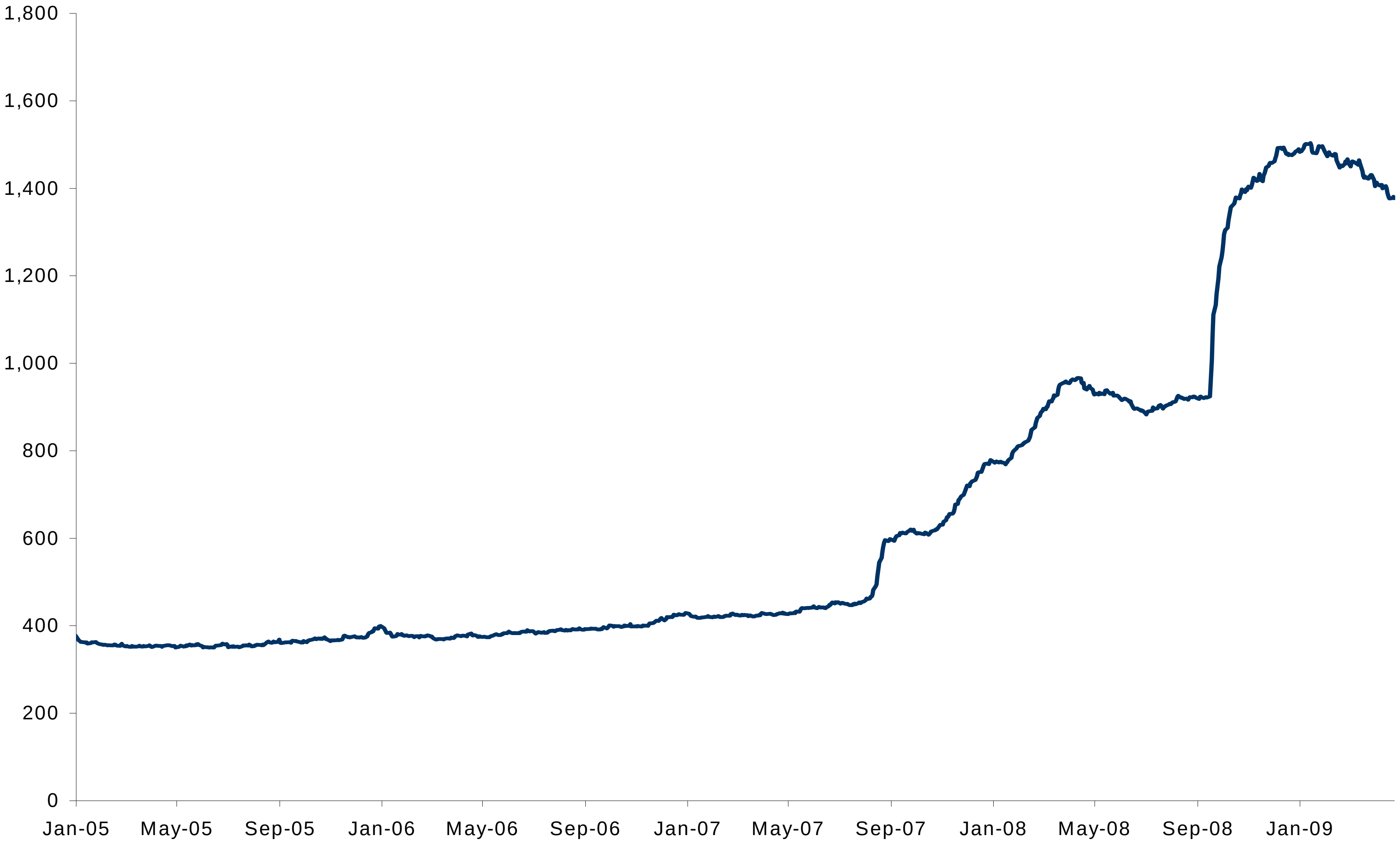


VIX

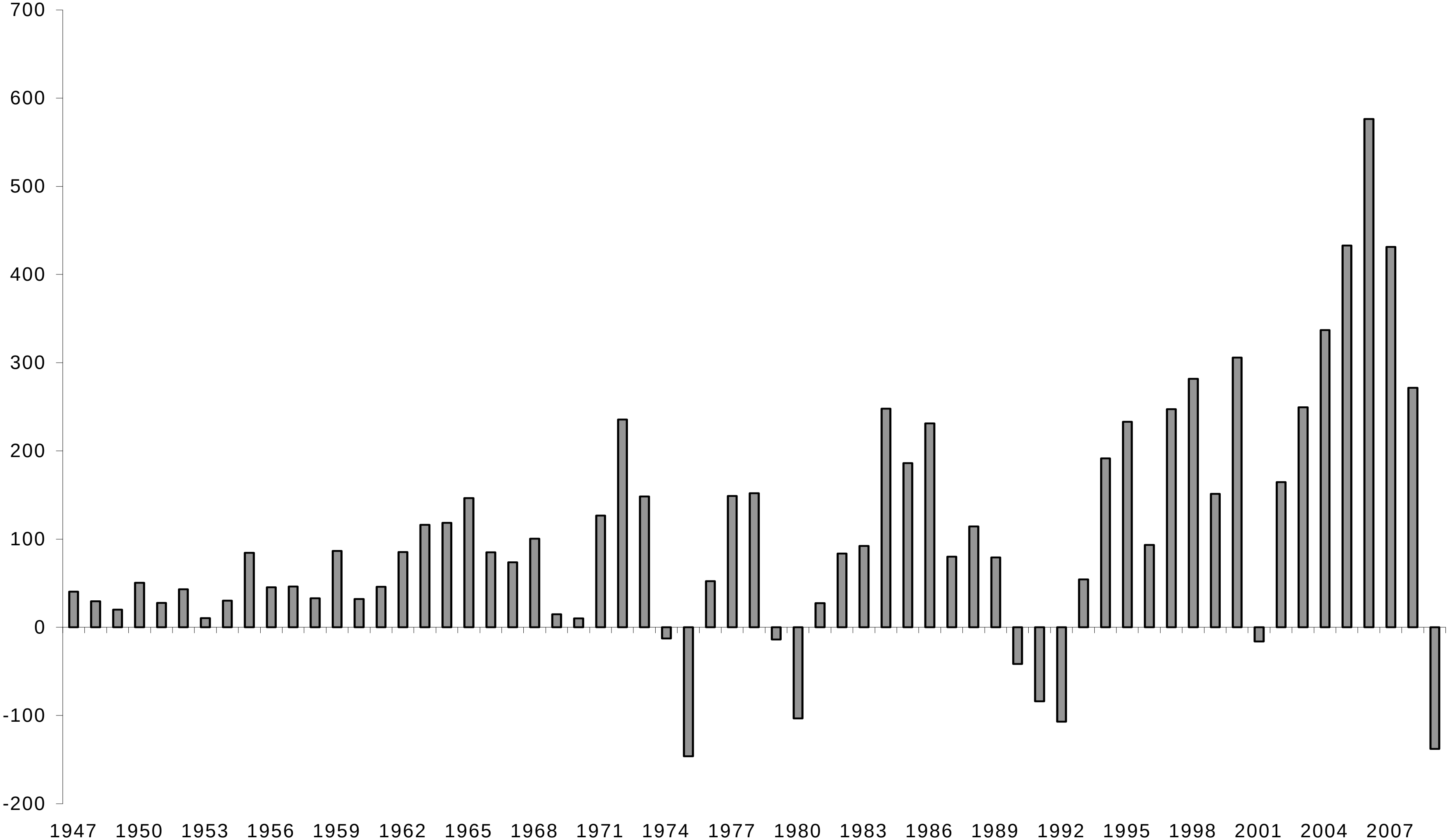


VIX - CBOE Market Volatility Index
Level
Apr09
36.64
0
10
20
30
40
50
60
70
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009

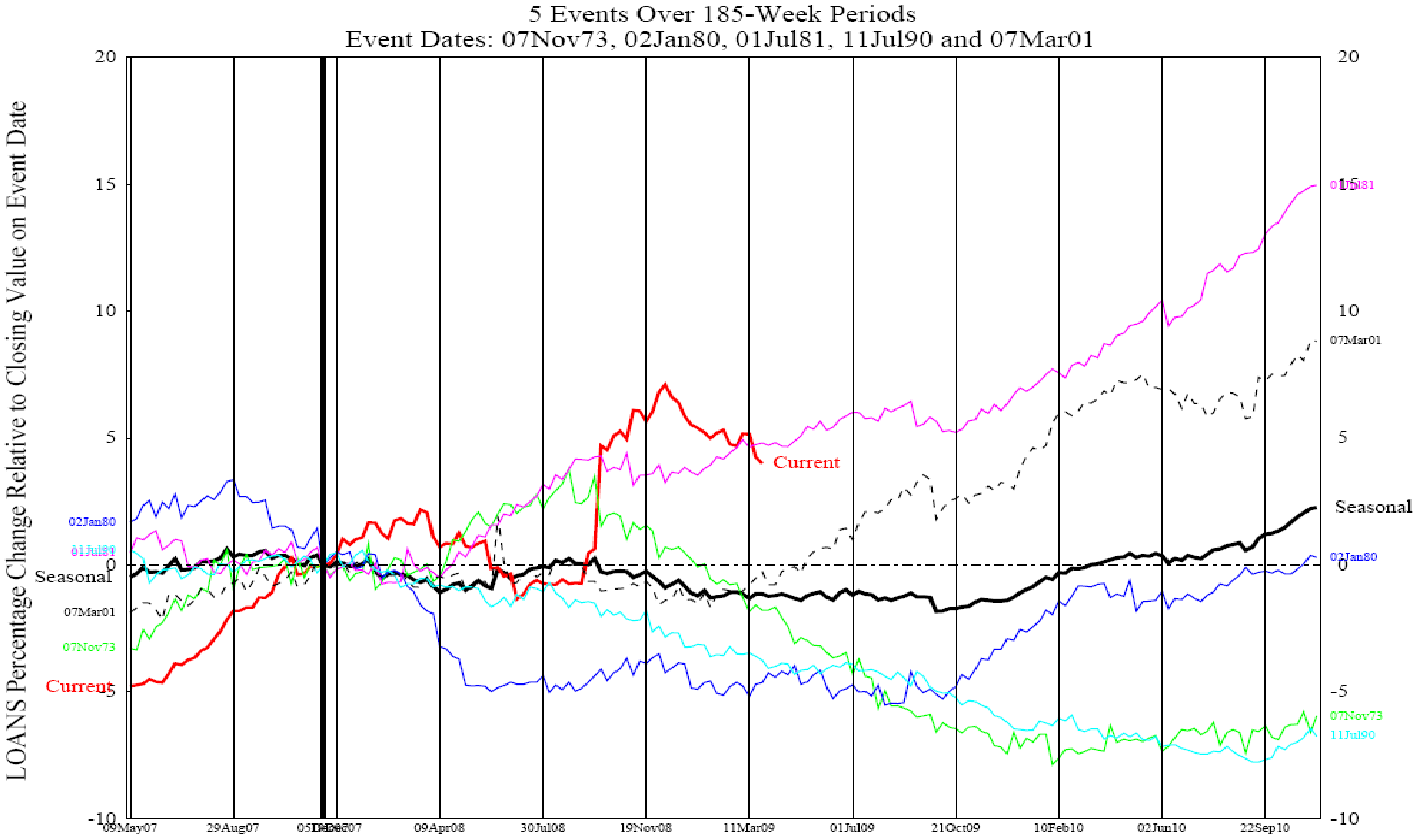
Government Money Market Fund Assets Outstanding ($ bn)



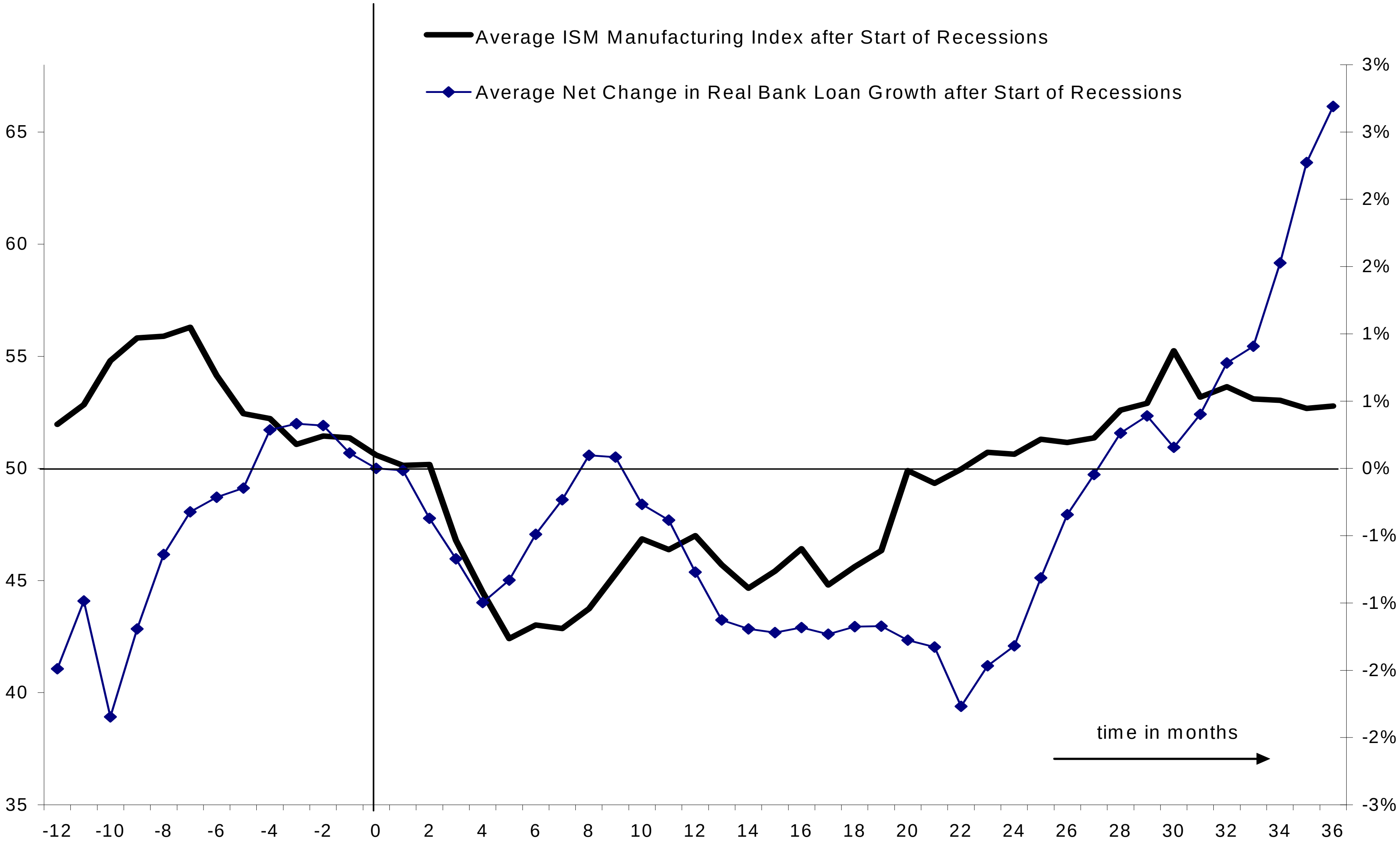
Real Net Bank Loan Growth (billions of 2009 USD)



Real Bank loan Growth Following Recession Start Dates



ISM Leads Real Bank Loan Growth Out of Recessions



US Debt to GDP with Recessions Shaded