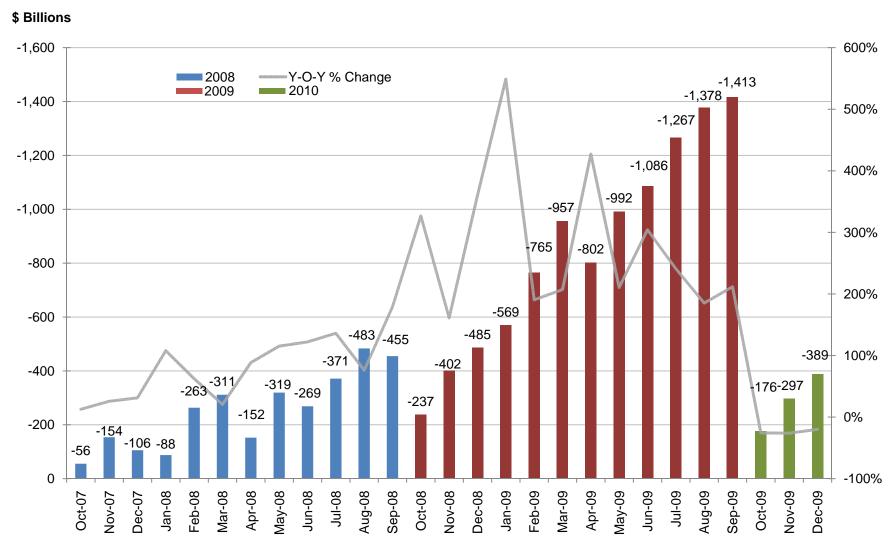
# **Presentation to the Treasury Borrowing Advisory Committee**



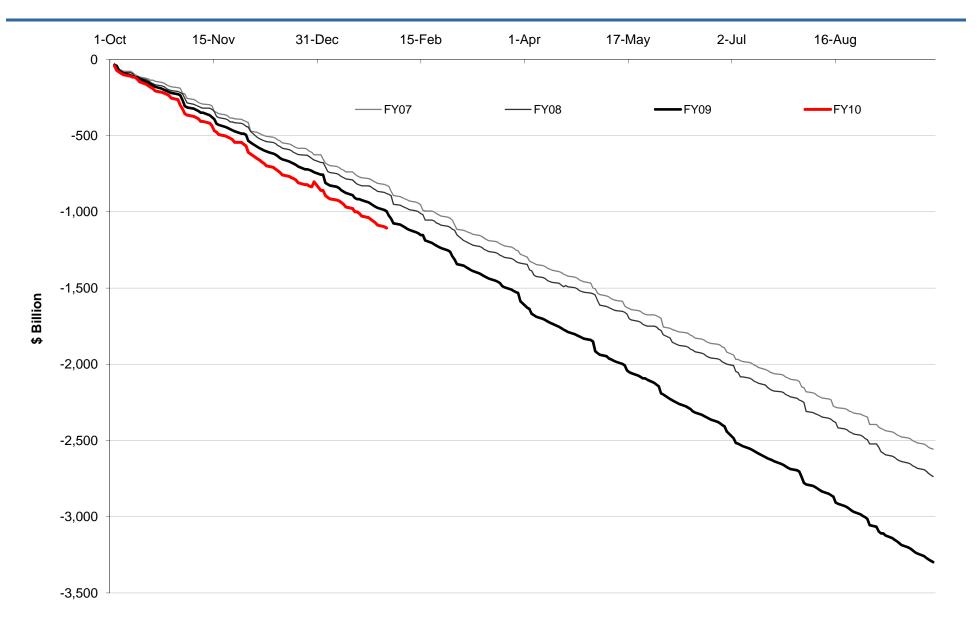
U.S. Department of the Treasury Office of Debt Management February 2, 2010

#### **Federal Budget Deficits Year-to-Date**

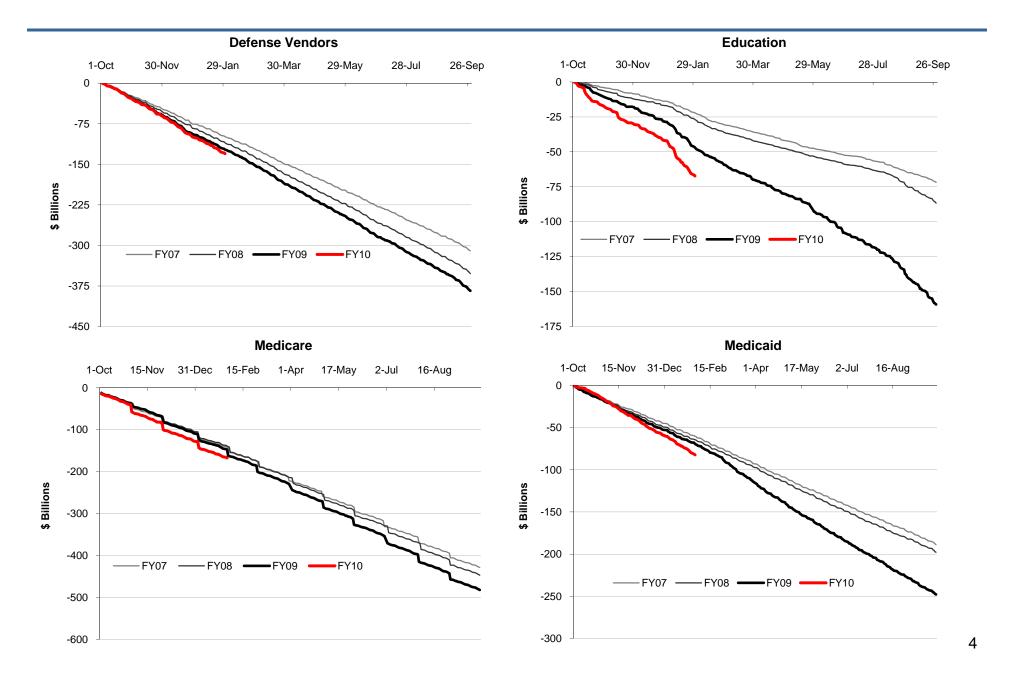




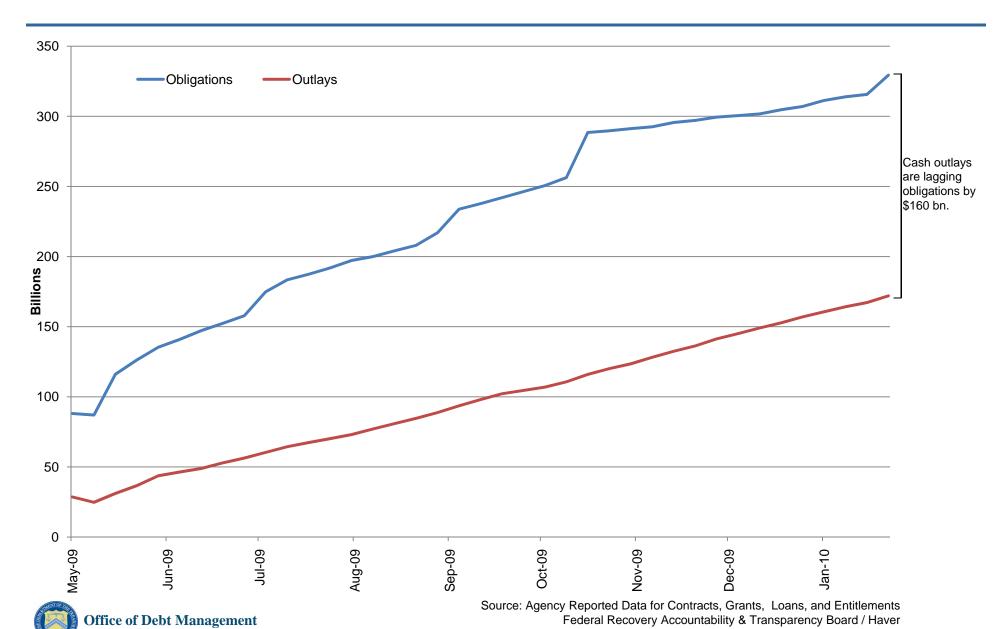
# **Federal Cash Outlays Year-to-Date**



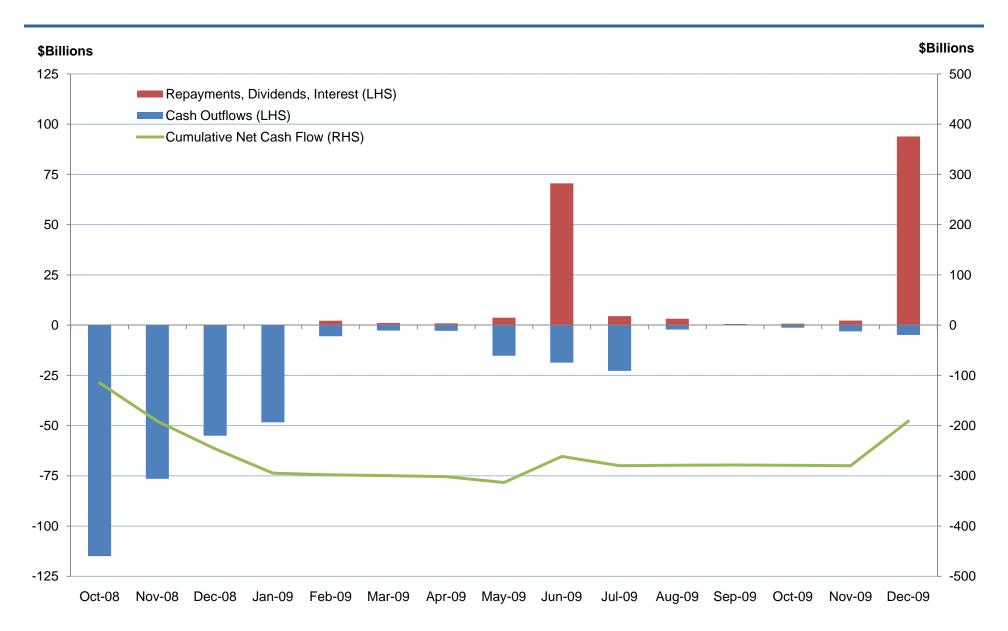
#### **Federal Cash Outlays Breakdown**



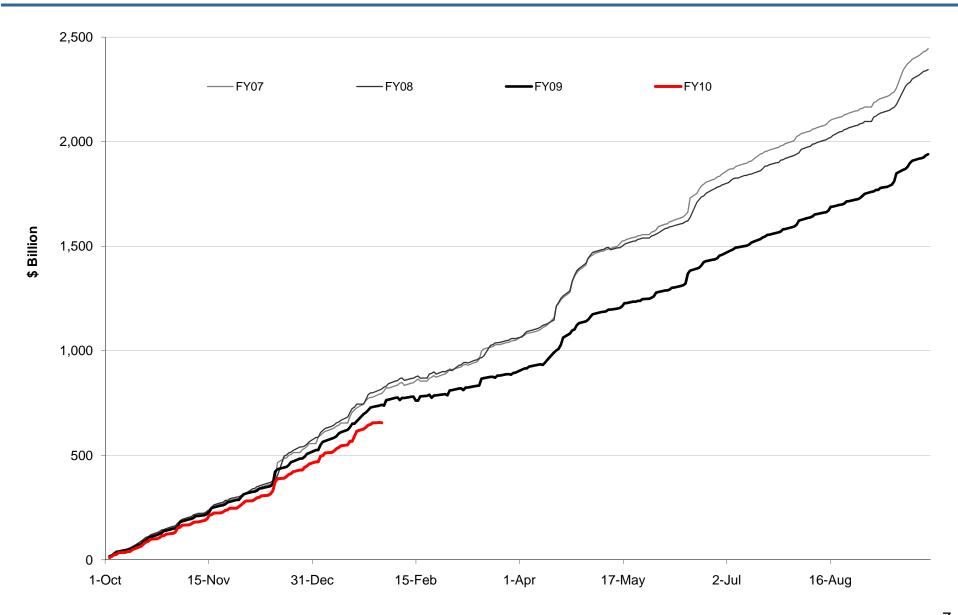
#### **Obligations and Cash Outlays for the Recovery Act**



#### **TARP Outflows and Inflows**

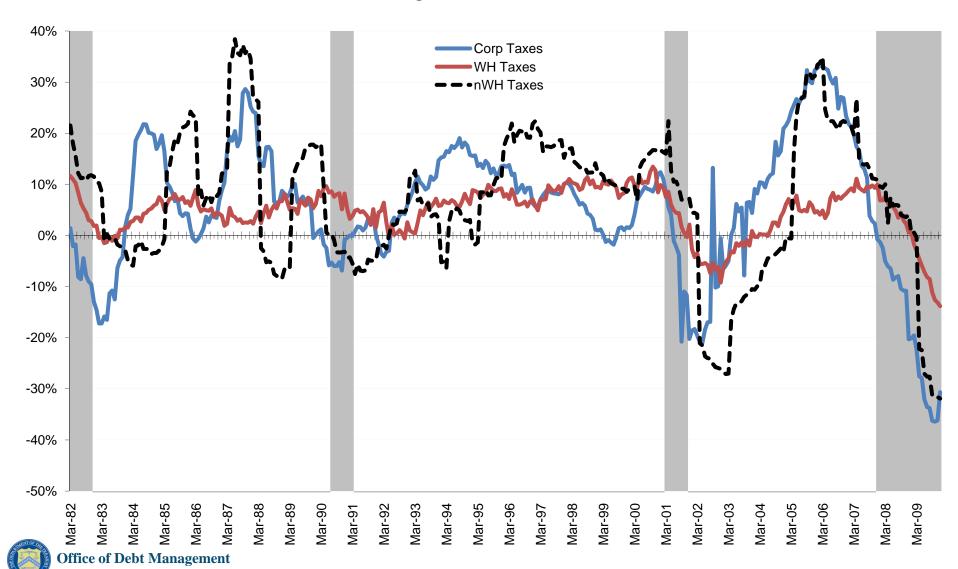


# **Federal Cash Receipts Year-to-Date**

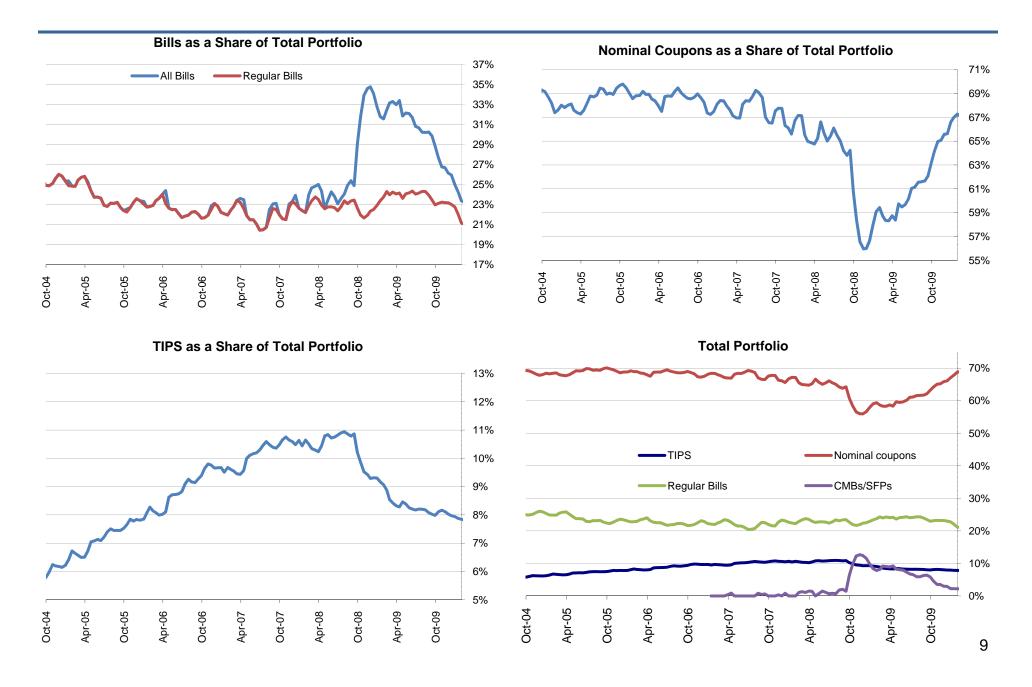


#### **Optimism for Future Receipts in the Slowing Decline in Corporate Taxes**

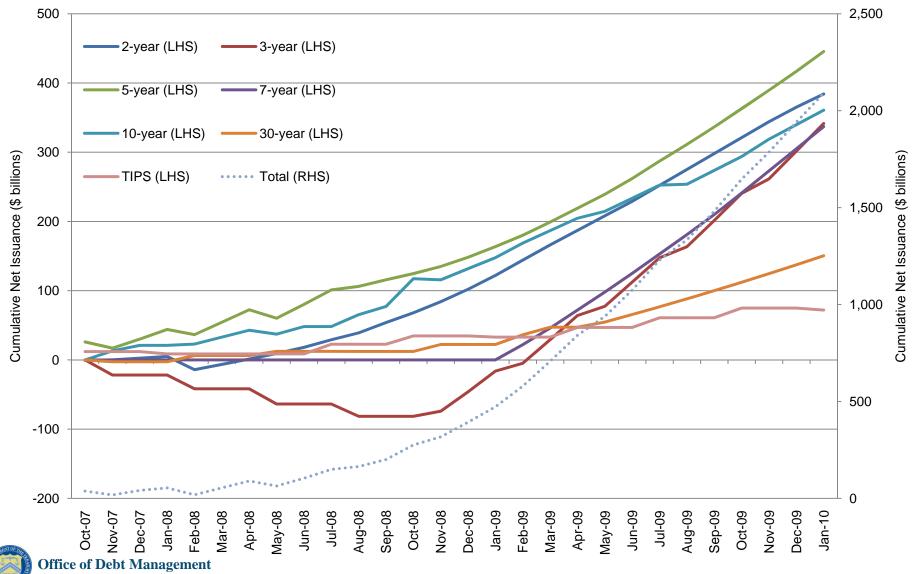




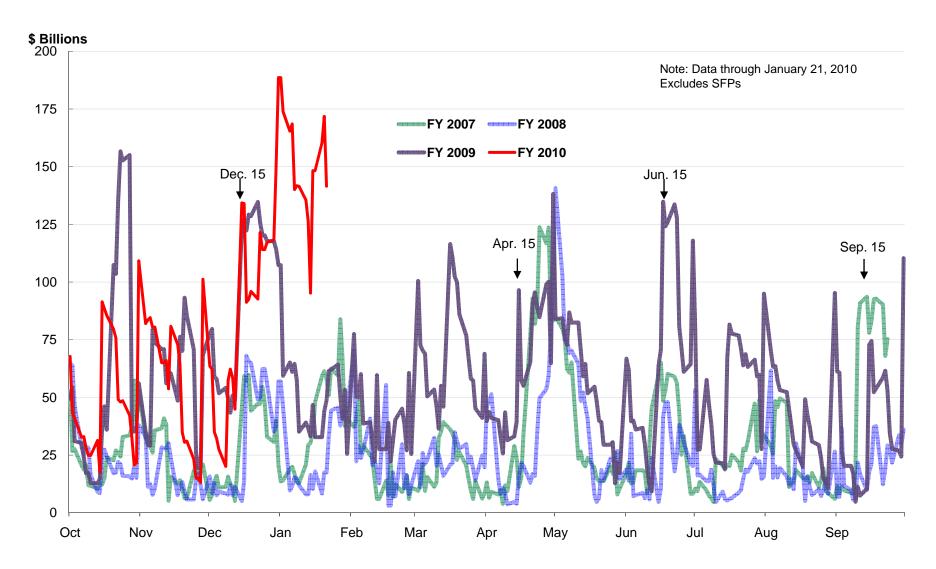
#### **Portfolio Distribution**



#### **Cumulative Net Coupon Issuance since FY 2007**

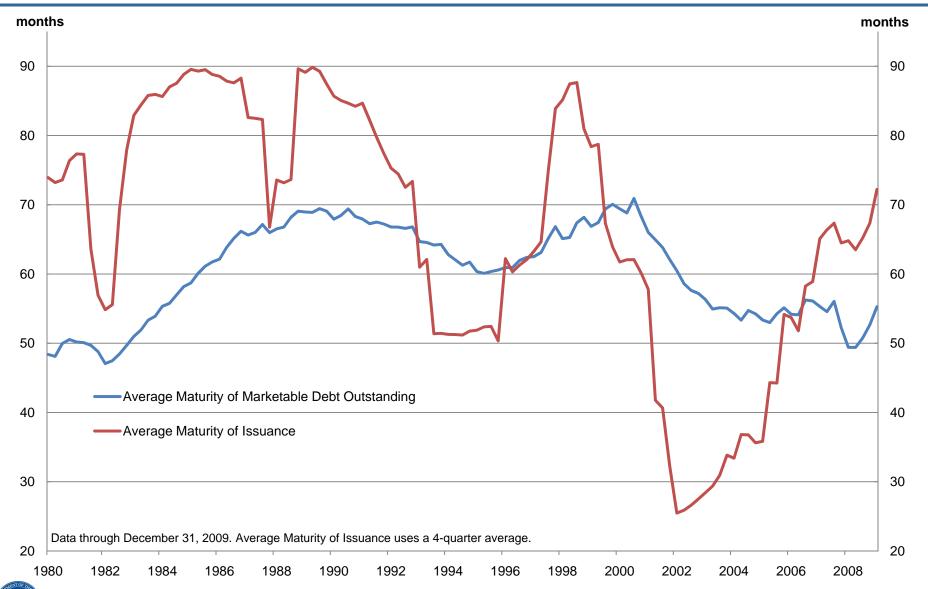


### **Treasury Daily Operating Cash Balance**

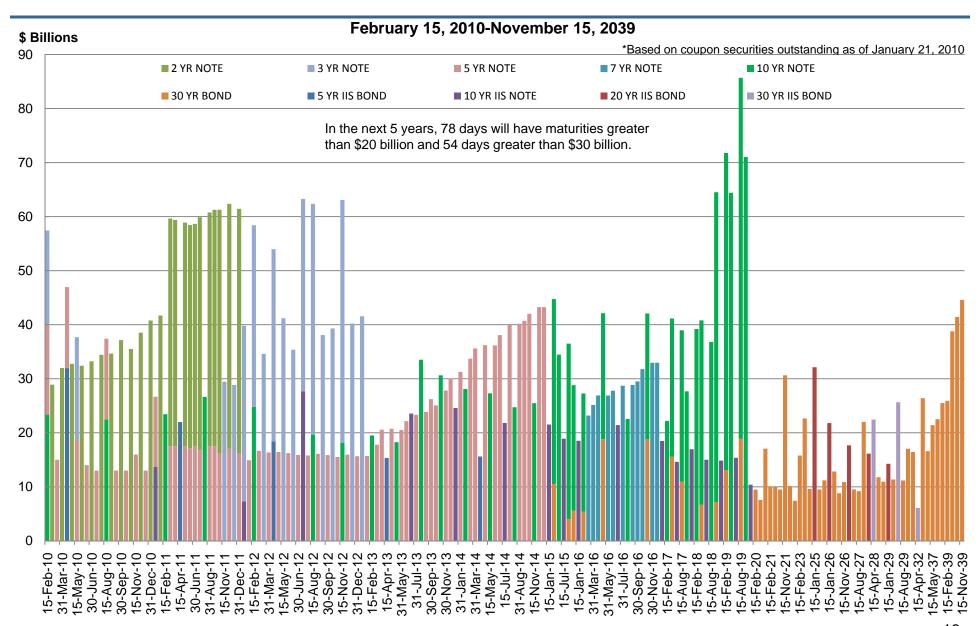




#### **Debt Maturity Measures**



#### **Maturing Coupons**



#### **Primary Dealer and Government Deficit Estimates**

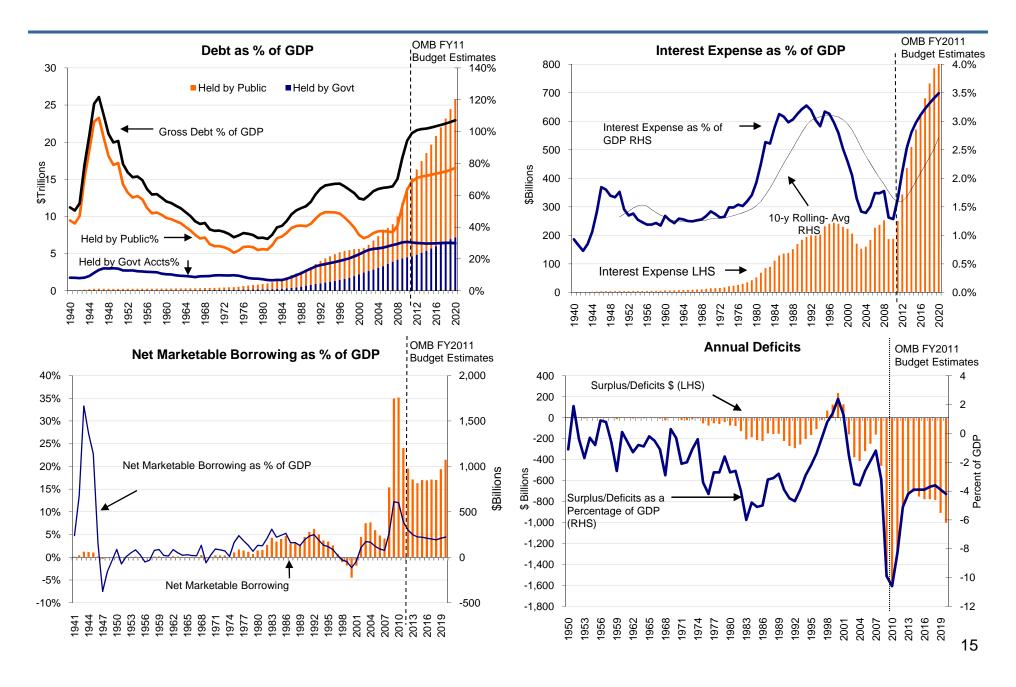
Deficit Estimates			\$ billions	
	Primary Dealers*	CBO**	OMB	
FY2010:	1,357	1,349	1,556	
Range	900-1,750			
FY2011:	1,121	980	1,267	
Range	750-1,800			
Estimates as of:	January 2010	January 2010	February 2010	
FY 2010 Marketable Borrowing Estimate*	1,363	1,253	1,753	
FY 2011 Marketable Borrowing Estimate*	1,150	988	1,201	

<sup>\*</sup> Primary Dealers reflect average estimate. Based on Primary Dealer feedback on January 28, 2010.

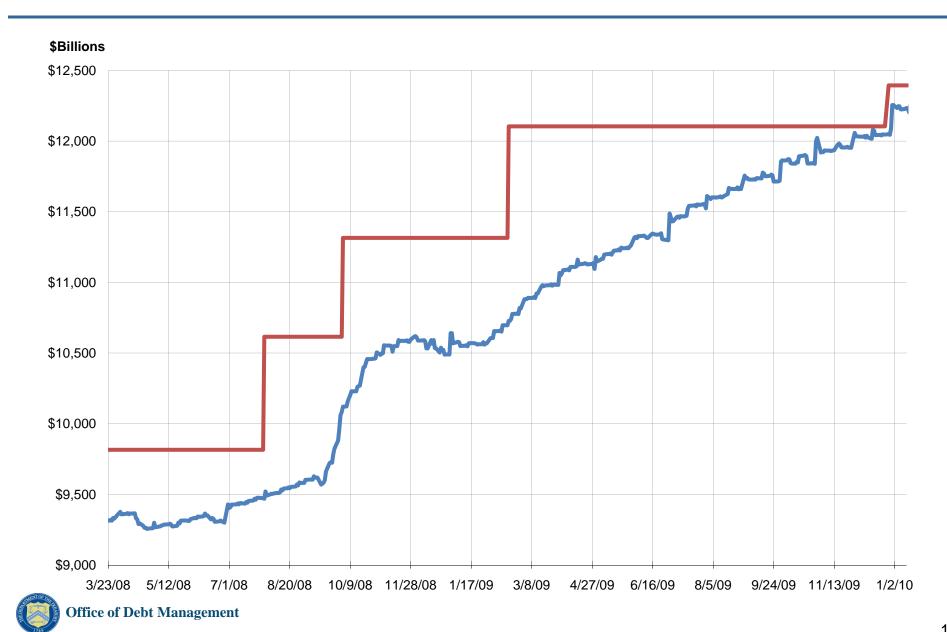


<sup>\*\*</sup> Based on if current law and policies stayed unchanged (whereas OMB's projections are based on current law and proposed policy).

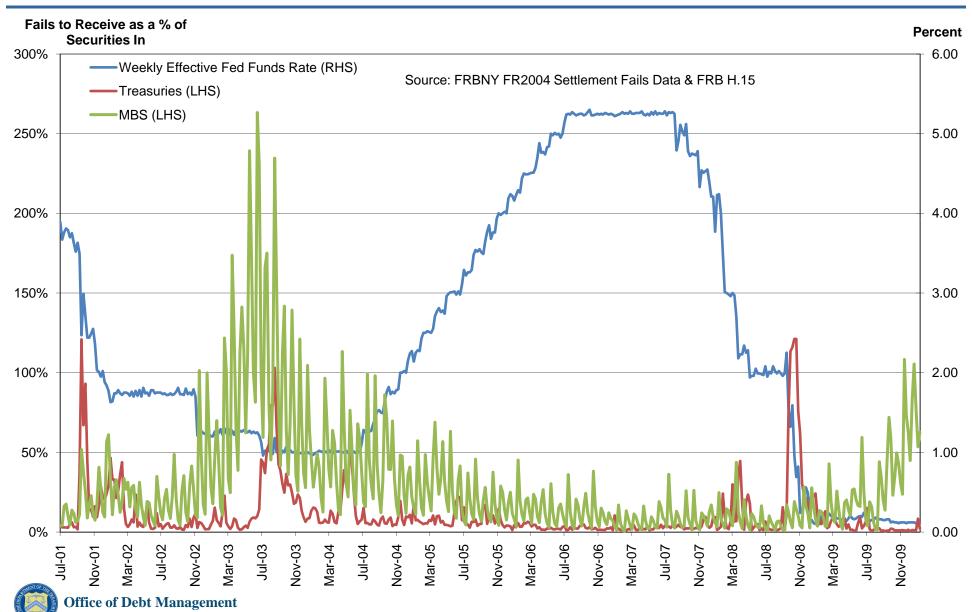
#### **OMB Long-term Deficit and Borrowing Projections**



#### **Outstanding Debt Subject to Debt Limit**



#### **Primary Dealer Settlement Fails in Treasuries and Agency MBS**



What adjustments to debt issuance, if any, should Treasury make in consideration of its financing needs in the short, medium, and long term?



# **TBAC** Presentation to Treasury

**February 2, 2010** 

# Global Sovereign Borrowers

**February 2, 2010** 

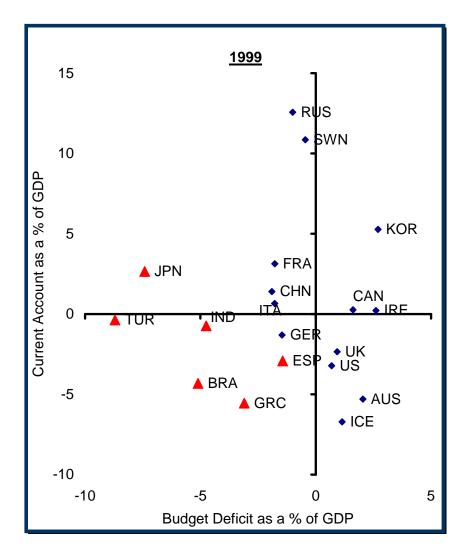
#### **Global Sovereign Borrowers**

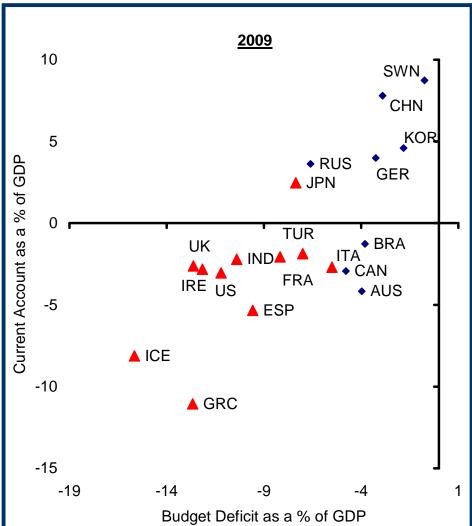
Please assess the challenges faced by the global sovereign borrowers over the short, medium and long term. How are these challenges similar or different to the case of the United States?

#### **Summary:**

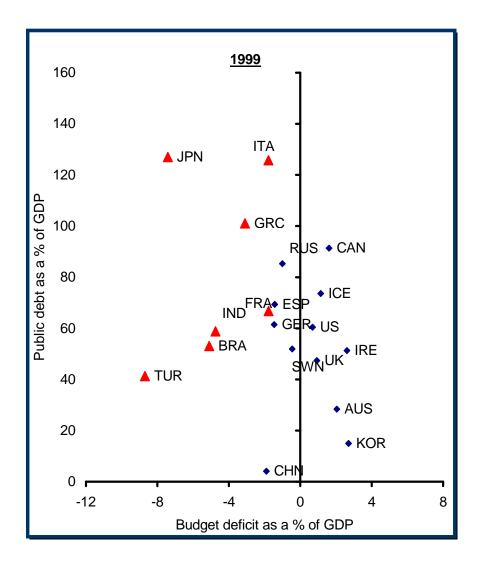
- Sovereign stress has shifted from the emerging world to the developed world
- Empirical evidence shows fiscal consolidation is achievable
- •Challenges:
  - Political will
  - Generating growth
    - Some countries used foreign exchange depreciation and monetary policy to cushion the fiscal restraint
    - Others relied on positive externalities, including strong global growth and one-off opportunities (privatization proceeds, lower interest rates, peace dividend)
    - Current task more difficult, owing to dearth of growth drivers and more constrained policy options

### Current Account (% GDP) vs. Budget Deficit (% GDP): 1999 vs. 2009





# Public Debt (% GDP) vs. Budget Deficit (% GDP): 1999 vs. 2009



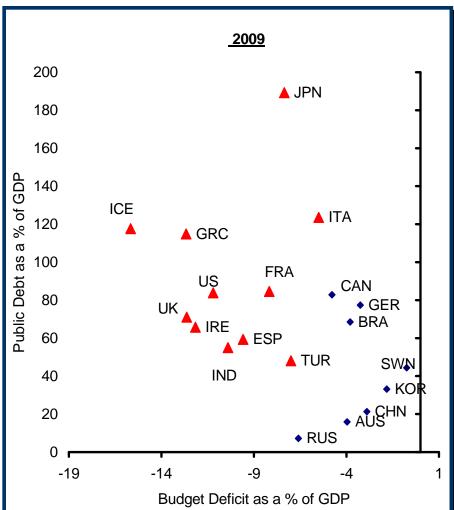
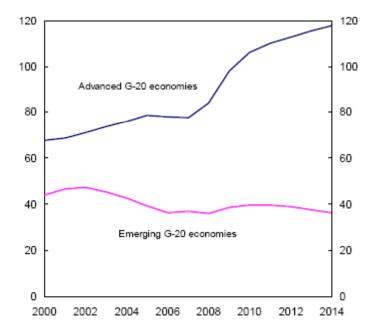
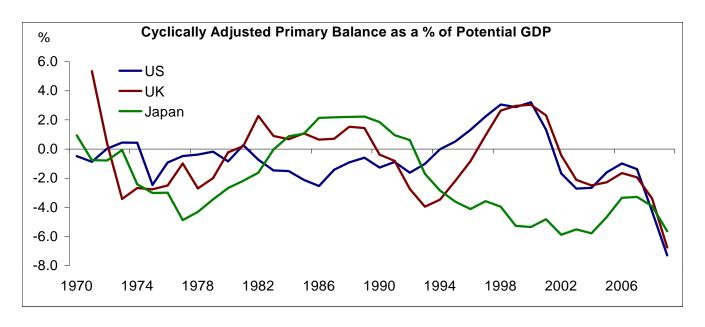


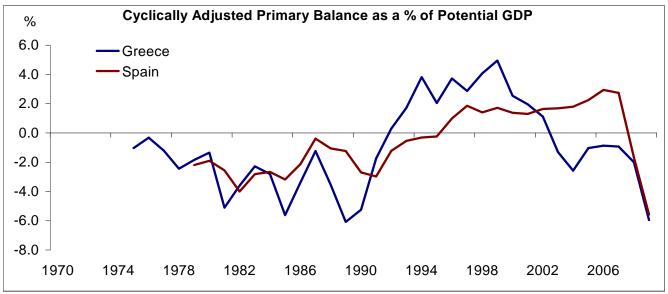
Figure 3. G-20 Countries: General Government Debt Ratios, 2000–14 (In percent of GDP)

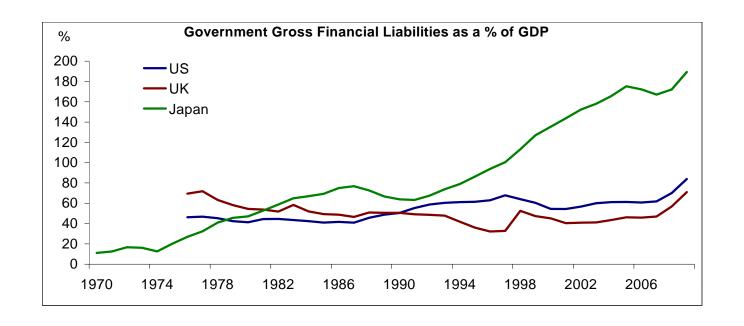


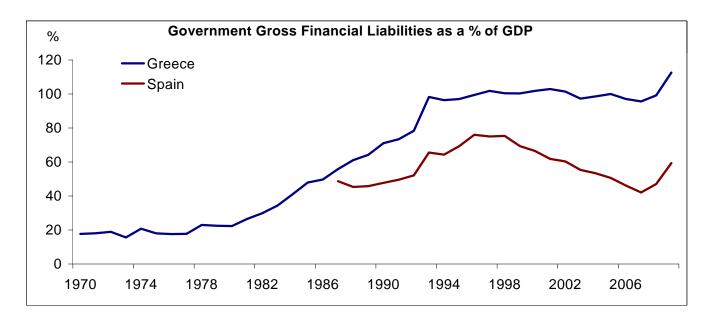
Source: IMF World Economic Outlook

	Fiscal Balance as a % of GDP	Cyclically Adjusted Primary Position as a % of potential GDP	Gross Debt as a % of GDP
US	-11.2%	-7.3%	84%
UK	-12.6%	-6.8%	71%
Japan	-7.4%	-5.6%	189%
Greece	-12.7%	-6.0%	113%
Spain	-9.6%	-5.6%	59%





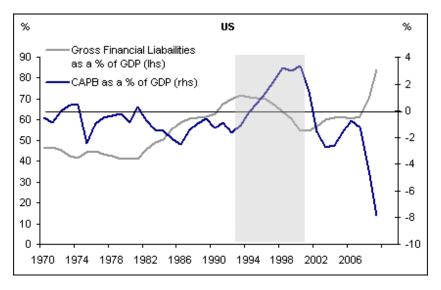


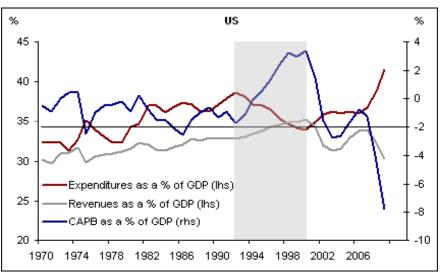


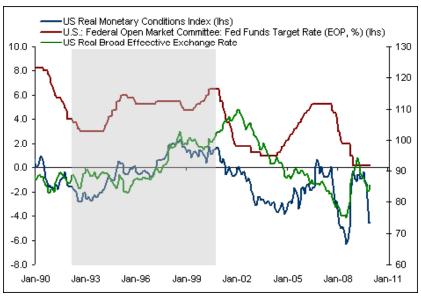
	Date - Trough Fiscal Balance	Starting Fiscal Balance	Date - Peak Fiscal Balance	Ending Fiscal Balance	Change in Fiscal Balance	Date - Trough CAPB	Starting Cyclically Adjusted Primary Balance	Date - Peak CAPB	Ending Cyclically Adjusted Primary Balance	Change in Cyclically Adjusted Primary Balance
		% GDP		% GDP	% GDP		% potential GDP		% potential GDP	% potential GDP
Greece	1990	-14.0	1999	-3.1	10.9	1989	-6.1	1999	5.0	11.0
Spain	1993	-7.3	2006	2.0	9.3	1991	-3.0	2006	2.9	5.9
Sweden	1993	-11.2	2000	3.7	14.9	1993	-4.8	2000	4.7	9.5
US	1992	-5.9	2000	1.5	7.4	1992	-1.6	2000	3.2	4.8
UK	1993	-8.0	2000	3.7	11.7	1993	-4.0	2000	3.0	7.0
Japan	1978	-5.8	1990	2.0	7.8	1977	-4.9	1989	2.2	7.1

	Fiscal Consolidation Period	Change in Expenditures as a % of GDP	Change in Revenues as a % of GDP	Average GDP Growth (trend past 20 years)	Date - Peak Debt to GDP Ratio	Starting Debt	Date - Trough Debt to GDP Ratio	Ending Debt	Debt Reduction
		% GDP	% GDP	%		% GDP		% GDP	% GDP
Greece	1989 - 1999	3.8	12.8	2.1 (3.1)	1993	98	1994	96	2.0
Spain	1991 - 2006	-5.9	0.9	3.0 (3.2)	1996	76	2007	42	33.9
Sweden	1993 - 2000	-14.0	1.0	2.8 (2.4)	1996	84	2008	47	37.4
US	1992 - 2000	-4.8	2.6	3.8 (3.2)	1993	72	2001	54	17.4
UK	1993 - 2000	-8.7	3.0	3.4 (2.6)	1995	52	2001	40	11.2
Japan	1977 - 1989	1.0	6.4	4.0 (4.4)	1987	77	1991	63	13.6

#### <u>US: 1992 - 2000</u>

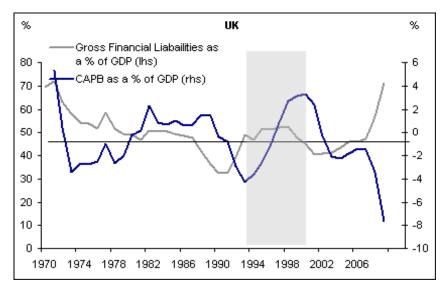


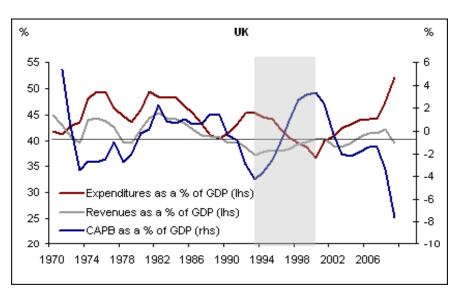


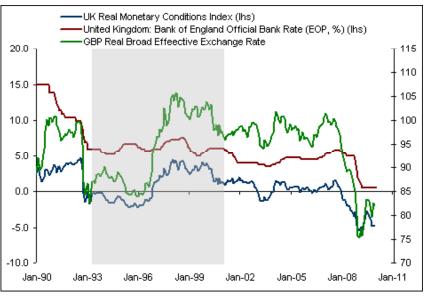


- Clinton Era / Defense Cuts
- Government expenditures cut 4.5 percentage points of GDP.
- Economic / productivity boom, mortgage deregulation, tech bubble.
- Revenues rose by 2.6 percentage points of GDP.
- Monetary conditions were stimulative at the beginning of the adjustment process, progressively tightened.

#### UK: 1993 - 2000

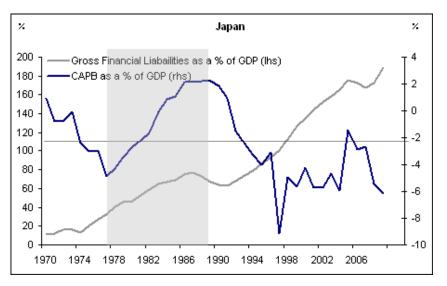


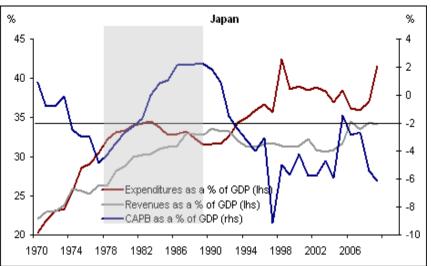




- Post -ERM Fiscal Consolidation
- Government expenditures cut 8.7 percentage points of GDP.
- Government employees cut by 10% between 1992 and 1998.
- Revenues rose by 3.0 percentage points of GDP.
- Pound weak, monetary conditions easy, strong US
   / global growth.

#### Japan: 1977 - 1989

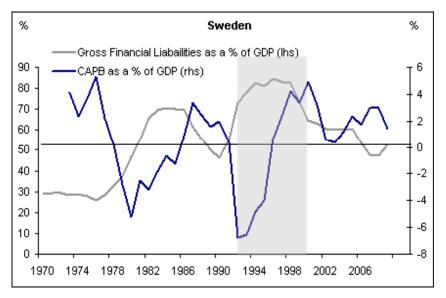


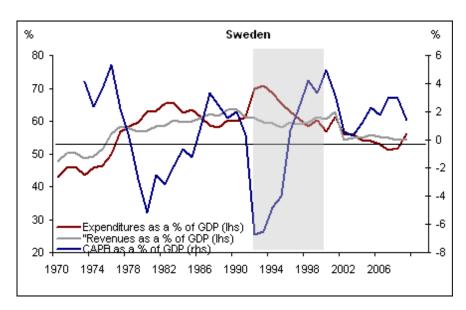


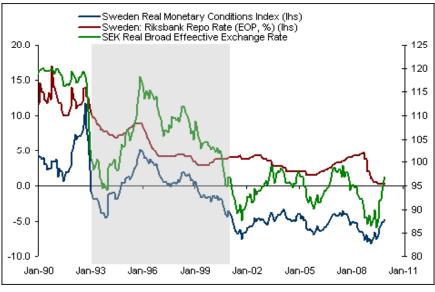


- Japan "Economic Miracle"
- Very strong revenue growth of 6.4 percentage points of GDP due to surging exports, strong manufacturing, housing bubble.
- Yen was weak, monetary conditions relatively accommodative.

#### Sweden: 1993 - 2000

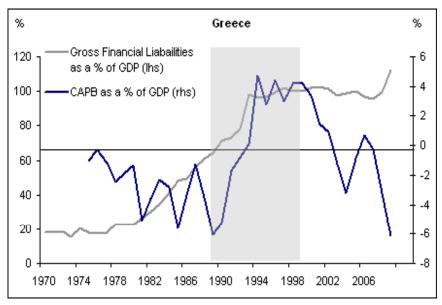


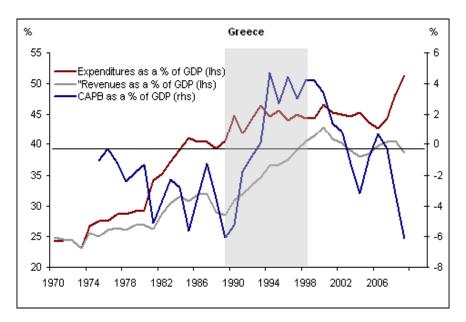


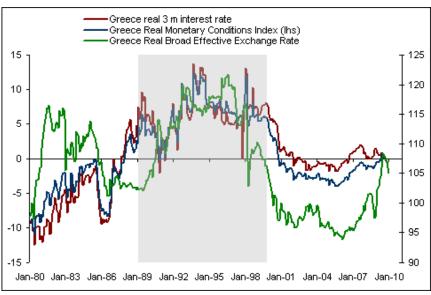


- Post-banking crisis
- Most aggressive cuts to government expenditures
  14 percentage points of GDP over 7 years.
- Revenues rose modestly by 1 percentage point of GDP.
- Real effective exchange rate declined 27% from 1992 to 2001. Led to export surge.
- Monetary conditions easy throughout adjustment.

#### Greece: 1989 - 1999

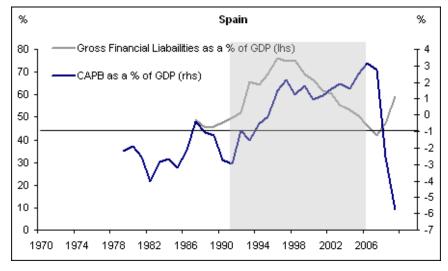


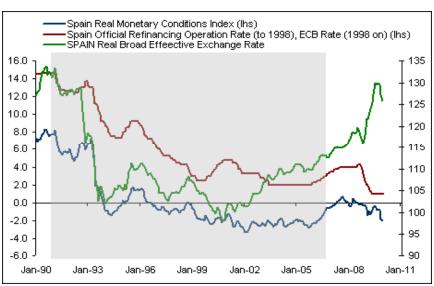




- EMU convergence
- Government expenditures rose by 3.8 percentage points of GDP.
- Improvement entirely on the revenue side. Revenues rose 12.8 percentage points of GDP. Around 3.6% of this increase was due to privatizations.
- •<u>Tight monetary conditions in first half of adjustment period led to disinflation, followed by massive easing in monetary conditions.</u>
- Convergence/risk premium compression: interest payments as a % of GDP fell from 11.2 to 4.1 between 1995 and 2007. During this period, government spending exinterest rose by 6.2 percentage points of GDP.

#### Spain: 1991 - 2006







- EMU convergence / Housing boom
- Expenditures cut 6.9 percentage points of GDP.
- Revenues rose by 0.9% over the adjustment period. Around 0.2% of this increase was due to privatizations. From 1998 to 2006 they rose 2.3% due to the housing boom.
- Monetary conditions easy during EMU convergence.
   Following Euro launch, ECB rates were accommodative for Spanish growth.
- Convergence/risk premium compression: interest payments as a % of GDP fell from 5.1 to 1.6 between 1995 and 2007. During this period, government spending ex-interest fell by 1.7% percentage points of GDP.

### Fiscal Adjustment Scenarios: 5 year

US: Reduction in primary of	US: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 5 yrs)					
Nominal		Nominal GDP growth				
Interest Rate	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0			
2.0	1.1 - 1.5	0.8 - 1.1	0.5 - 0.8			
4.0	1.5 - 1.8	1.1 - 1.5	0.8 - 1.1			
6.0	1.8 - 2.1	1.5 - 1.8	1.1 - 1.5			
8.0	2.1 - 2.5	1.8 - 2.1	1.5 - 1.8			

Initial debt-to-GDP ratio is 84%, and the initial primary balance is -7.3% of GDP

Nominal	deficit pa needed to stabilise the	eficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 5 yrs)  Nominal GDP growth			
Interest Rate	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0		
2.0	1.1 - 1.3	0.8 - 1.1	0.5 - 0.8		
4.0	1.4 - 1.6	1.1 - 1.4	0.8 - 1.1		
6.0	1.6 - 1.9	1.4 - 1.6	1.1 - 1.4		
8.0	1.9 - 2.1	1.6 - 1.9	1.4 - 1.6		

Initial debt-to-GDP ratio is 71%, and the initial primary balance is -6.8% of GDP

Japan: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 5 yrs)					
Nominal		Nominal GDP growth			
Interest Rate	0.0 - 1.5	1.5 - 3.5	3.5 - 5.5		
0.0	0.6 - 1.1	-0.2 - 0.6	-1.00.2		
2.0	1.3 - 1.9	0.6 - 1.3	-0.2 - 0.6		
4.0	2.1 - 2.6	1.3 - 2.1	0.6 - 1.3		
6.0	2.8 - 3.4	2.1 - 2.8	1.3 - 2.1		

Initial debt-to-GDP ratio is 189%, and the initial primary balance is -5.6% of GDP

### Fiscal Adjustment Scenarios: 5 year

Greece: Reduction in prim	Greece: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 5 yrs)					
Nominal		Nominal GDP growth				
Interest Rate	3.0 - 5.0	5.0 - 7.0	7.0 - 9.0			
2.0	0.5 - 1.0	0.1 - 0.5	-0.4 - 0.1			
4.0	1.0 - 1.4	0.5 - 1.0	0.1 - 0.5			
6.0	1.4 - 1.9	1.0 - 1.4	0.5 - 1.0			
8.0	1.9 - 2.3	1.4 - 1.9	1.0 - 1.4			

Initial debt-to-GDP ratio is 113%, and the initial primary balance is -6.0% of GDP

Spain: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 5 yrs)					
Nominal		Nominal GDP growth			
Interest Rate	3.0 - 5.0	5.0 - 7.0	7.0 - 9.0		
2.0	0.8 - 1.0	0.5 - 0.8	0.3 - 0.5		
4.0	1.0 - 1.2	0.8 - 1.0	0.5 - 0.8		
6.0	1.2 - 1.5	1.0 - 1.2	0.8 - 1.0		
8.0	1.5 - 1.7	1.2 - 1.5	1.0 - 1.2		

Initial debt-to-GDP ratio is 59%, and the initial primary balance is -5.6% of GDP

#### Fiscal Adjustment Scenarios: 10 year

US: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 10 yrs)					
Nominal		Nominal GDP growth			
Interest Rate	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0		
2.0	0.6 - 0.7	0.4 - 0.6	0.2 - 0.4		
4.0	0.7 - 0.9	0.6 - 0.7	0.4 - 0.6		
6.0	0.9 - 1.1	0.7 - 0.9	0.6 - 0.7		
8.0	1.1 - 1.2	0.9 - 1.1	0.7 - 0.9		

Initial debt-to-GDP ratio is 84%, and the initial primary balance is -7.3% of GDP

UK: Reduction in primary of	JK: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 10 yrs)					
Nominal		Nominal GDP growth				
Interest Rate	2.0 - 4.0	4.0 - 6.0	6.0 - 8.0			
2.0	0.5 - 0.6	0.4 - 0.5	0.3 - 0.4			
4.0	0.7 - 0.8	0.5 - 0.7	0.4 - 0.5			
6.0	0.8 - 0.9	0.7 - 0.8	0.5 - 0.7			
8.0	1.0 - 1.1	0.8 - 1.0	0.7 - 0.8			

Initial debt-to-GDP ratio is 71%, and the initial primary balance is -6.8% of GDP

Japan: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 10 yrs)					
Nominal		Nominal GDP growth			
Interest Rate	0.0 - 1.5	1.5 - 3.5	3.5 - 5.5		
0.0	0.3 - 0.6	-0.1 - 0.3	-0.50.1		
2.0	0.7 - 0.9	0.3 - 0.7	-0.1 - 0.3		
4.0	1.0 - 1.3	0.7 - 1.0	0.3 - 0.7		
6.0	1.4 - 1.7	1.0 - 1.4	0.7 - 1.0		

Initial debt-to-GDP ratio is 189%, and the initial primary balance is -5.6% of GDP

### Fiscal Adjustment Scenarios: 10 year

Greece: Reduction in primary deficit pa needed to stabilise the gross govt debt-to-GDP ratio (% pt change over 10 yrs)					
Nominal		Nominal GDP growth			
Interest Rate	3.0 - 5.0	5.0 - 7.0	7.0 - 9.0		
2.0	0.3 - 0.5	0.0 - 0.3	-0.2 - 0.0		
4.0	0.5 - 0.7	0.3 - 0.5	0.0 - 0.3		
6.0	0.7 - 0.9	0.5 - 0.7	0.3 - 0.5		
8.0	0.9 - 1.2	0.7 - 0.9	0.5 - 0.7		

Initial debt-to-GDP ratio is 113%, and the initial primary balance is -6.0% of GDP

Spain: Reduction in prima	ry deficit pa needed to stabilise	the gross govt debt-to-GDP ratio	o (% pt change over 10 yrs)
Nominal		Nominal GDP growth	
Interest Rate	3.0 - 5.0	5.0 - 7.0	7.0 - 9.0
2.0	0.4 - 0.5	0.3 - 0.4	0.1 - 0.3
4.0	0.5 - 0.6	0.4 - 0.5	0.3 - 0.4
6.0	0.6 - 0.7	0.5 - 0.6	0.4 - 0.5
8.0	0.7 - 0.9	0.6 - 0.7	0.5 - 0.6

Initial debt-to-GDP ratio is 59%, and the initial primary balance is -5.6% of GDP

#### **Conclusions:**

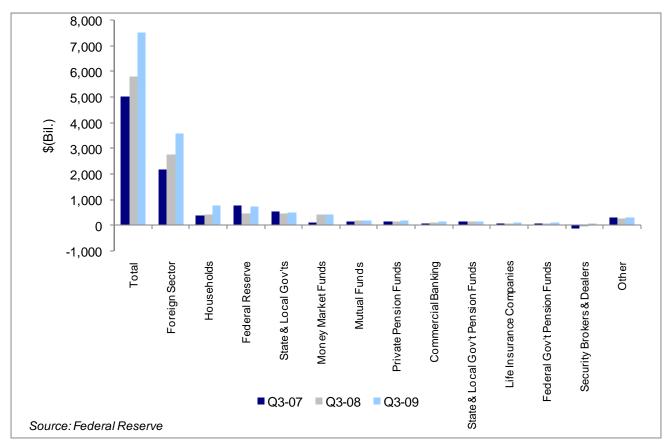
- Fiscal consolidation can happen could result in slower than desired growth
- Similarities with the US
  - Easy monetary conditions as a a starting point
  - <u>Difficult political environment</u>
  - Modest global growth
  - Lack of positive externalities
- <u>Differences with the US</u>
  - Lack of autonomous monetary policy
  - Currency flexibility
  - Historical precedent
- If all countries need to stimulate, who will provide the savings? Global growth rebalancing is key.

# Demand for Treasury Securities and 2010 Spread Outlook

**February 2, 2010** 

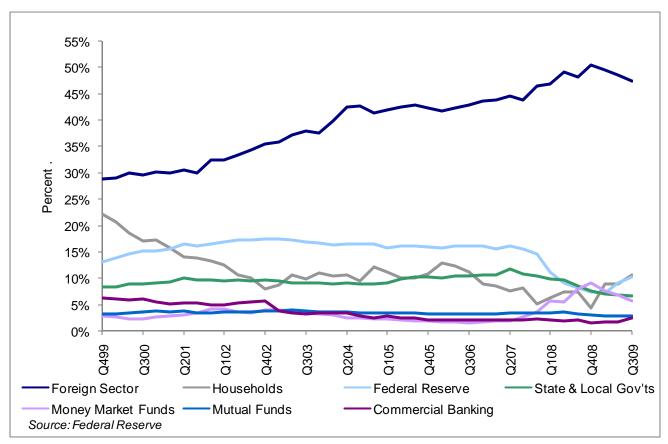
### Foreigners are the largest holders of Treasuries, followed by households and the Fed

Fig. 1 Treasury Holdings by Sector



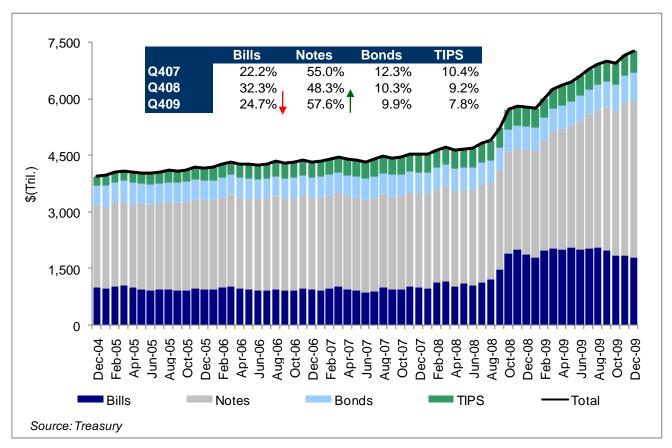
#### Large shifts in % share of holdings occurred in 2008-2009

Fig. 2 Share of Treasury Holdings



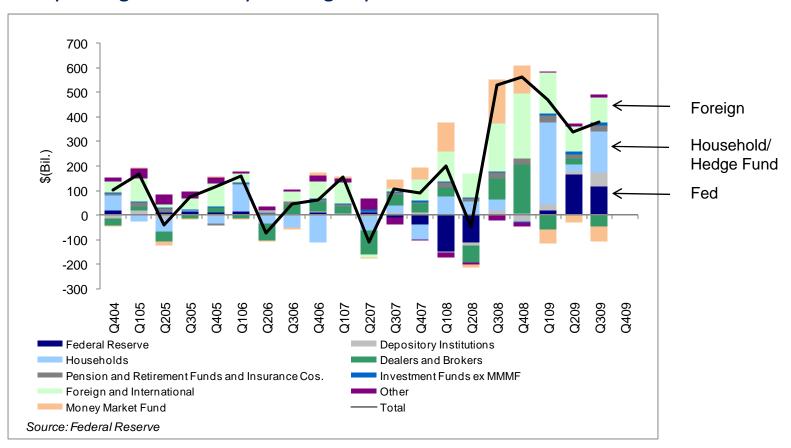
### With the expanding federal debt, long-term Treasury securities outstanding rose significantly

Fig. 3 Treasury Holdings by Type



### Fed data suggests the Fed, foreigners and households (incl. hedge funds) dominated the '09 increase in Treasury holdings

Fig. 4 Quarterly Change in Treasury Holdings by Purchaser



Foreigners' accumulation in 2009 outpaced prior years

Foreign official institutions are larger holders than foreign private (non-US banks, pension funds, insurance)

Fig. 5 Foreign Net Purchases of Long-Term Treasuries (Year-to-date)

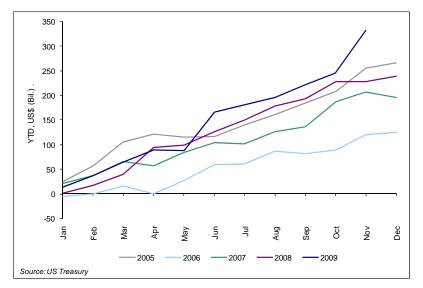
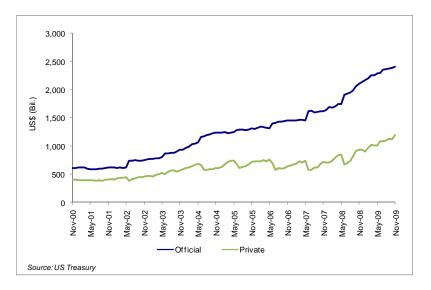
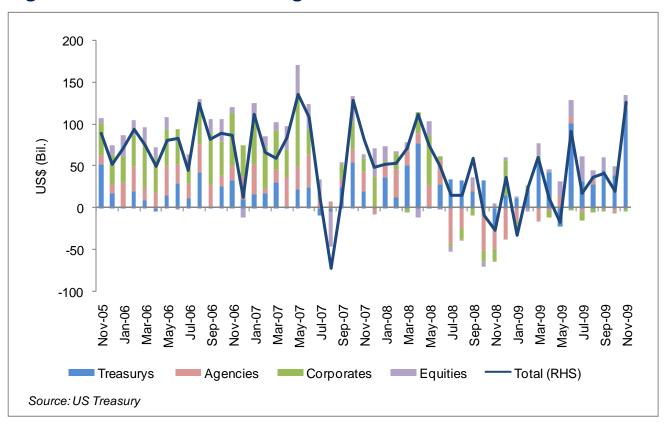


Fig. 6 Foreign Treasury Holdings: Official vs. Private



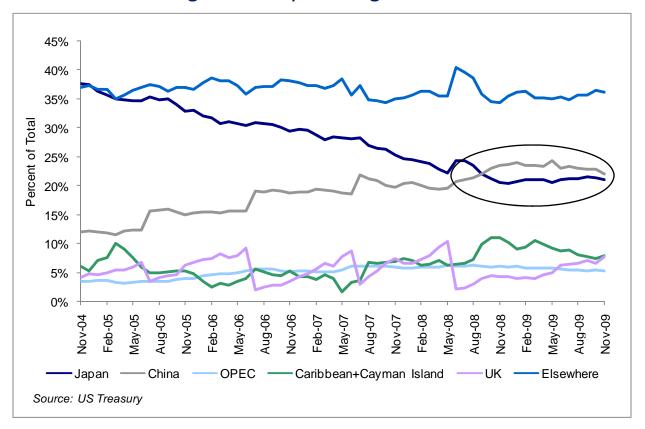
#### Foreigners shift to Treasuries, away from agencies

Fig. 7 Foreign Net Purchases of US Long-Term Assets



China surpassed Japan to become the largest foreign holder; this trend stalled in 2009, though holdings in dollar terms rose

Fig. 8 Share of Total Foreign Treasury Holdings



Foreigners' demand for Treasuries shifted from bills to bonds in 2009 as risk aversion fell and the yield curve steepened, and this trend should continue in 2010

Fig. 9 Foreign Net Purchases Bonds vs. Bills (Private Holders)

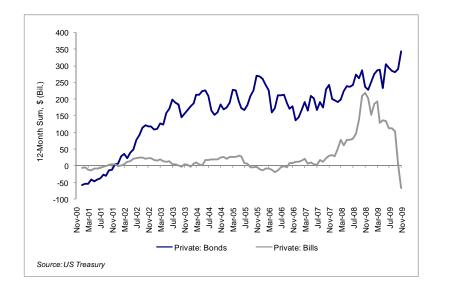
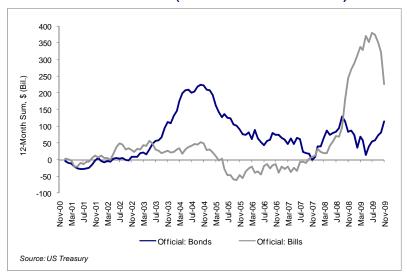
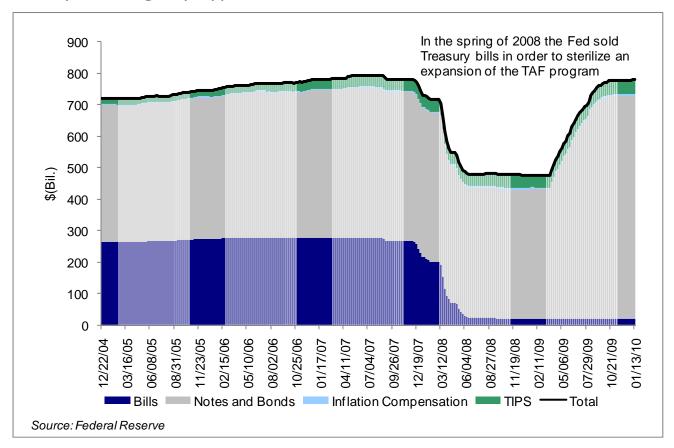


Fig. 10 Foreign Net Purchases Bonds vs. Bills (Official Holders)



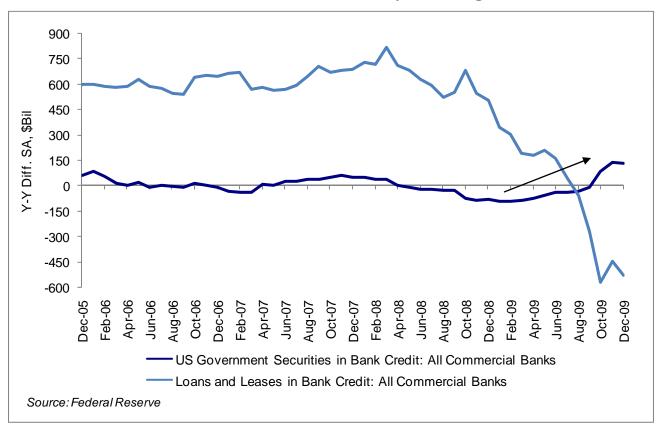
## The Fed increased holdings in 2009, mostly in notes and bonds, holding fewer bills after the financial crisis started

Fig. 11 Treasury Holdings by Type



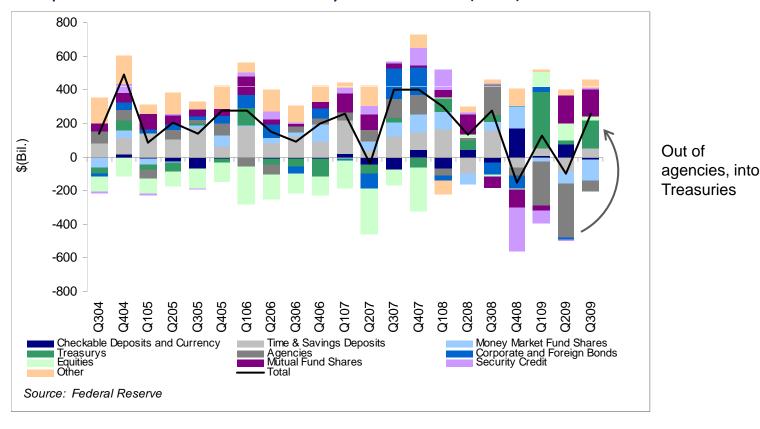
### As loan demand fell cyclically, US commercial banks held more government securities

Fig. 12 Bank Loans vs. Commercial Banks Treasury Holdings



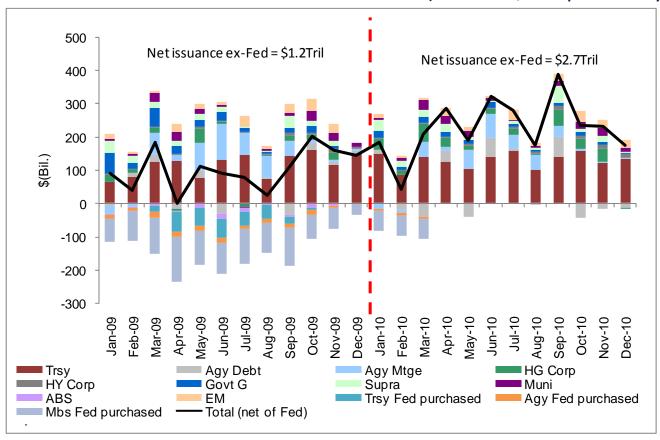
## The household category has substituted from agencies to Treasuries; household category likely includes hedge funds

Fig. 13 Net Acquisition of Financial Assets By Households (NSA)



Most research agrees that, net of Fed purchases, net fixed income issuance will surge by approximately \$1.5 T

Fig. 14 Net Fixed Income Issuance ex-Fed Purchases (Notional, Coupons Only)



#### Sources of marginal demand for excess net issuance

Fig. 15 Possible Treasury Demand by Sector

Assume No Fed & O5-09 % Share of Comparable Behavior to '08/09 Holdings  Fed 0 300 0 0 0 0 Foreigners 445 620 935 Money Mkt+MF -165 80 155 Other 40 145 430 High Households 650 495 -150		(\$ billions)		2009		2010	
Assume No Fed & O5-09 % Share of Comparable Behavior to '08/09 Holdings  Fed 0 300 0 0 0 Foreigners 445 620 935 Money Mkt+MF -165 80 155 Other 40 145 430 High Households 650 495 -150				Coupons +		Net Coupo	ons + TIPS
Assume No Fed & O5-09 % Share of Comparable Behavior to '08/09   Holdings Holdings		Net Supply (Act.+Est.)	-73	1385	-400	1400	1400
Net Demand -73 1385 -400 1400 1400	Price Sensitivity	Foreigners Money Mkt+MF Other Banks Households		445 -165 40 115 650		Comparable Behavior to '08/09 0 620 80 145 60 495	Assume No Fed & 05-09 % Share of Net Change in Holdings 0 935 155 430 30 -150
		Net Demand	-73	1385	-400	1400	1400

Foreigners add

Depends on asset allocation and savings behavior "Other" categories includes pensions and broker dealers Depends on loan demand and liquidity requirements Households/Hedge Funds behavior most price sensitive

Sources: Federal Reserve, US Treasury

#### Treasury issuance of bills and coupon securities

Fig. 16 Treasury Supply (Bills)
Actual and Estimate

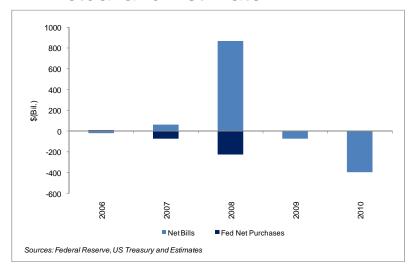
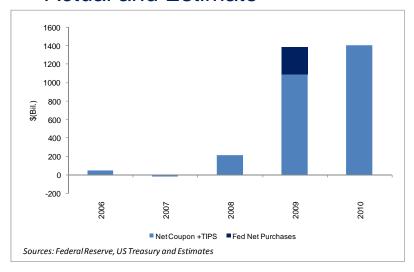


Fig. 17 Treasury Supply (Coupons)
Actual and Estimate



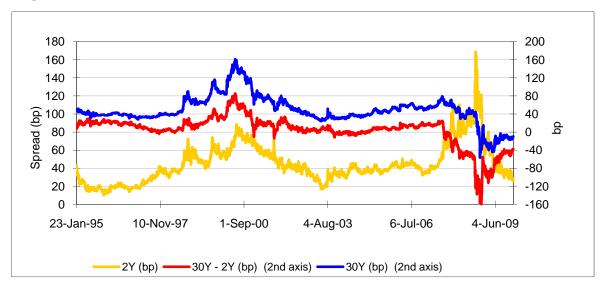
#### Expectations for the performance of spread products in 2010

- Long-dated swap spreads should widen while short-dated swap spreads should remain stable or tighten slightly
- Corporate credit spreads should continue to stabilize tighter
- Municipal spread levels have tightened with strong demand, but fundamental deterioration continues
- CMBS spreads should continue to improve
- Mortgage basis should widen modestly

### The term structure of swap spreads should normalize in 2010

- Long (15-30y) spreads should widen
  - Increased balance sheet demand for 0% risk-weighted assets that trade LIBOR plus
  - Very negative forward spread levels
- Short (0-5y) spreads should remain stable or tighten slightly as systemic risk concerns continue to wane

Fig. 18 Historical Swap Spreads



#### Corporate credit spreads should continue compressing

- Corporate credit spreads tightened in 2009 in line with market normalization
- · Growth recovery and moderate volatility support tightening
- · Risks include double-dip recession, deterioration in housing, and investor retrenchment

Fig. 19 Corporate Yields and Spreads

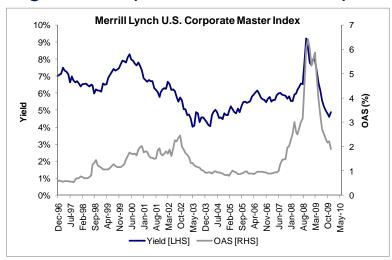
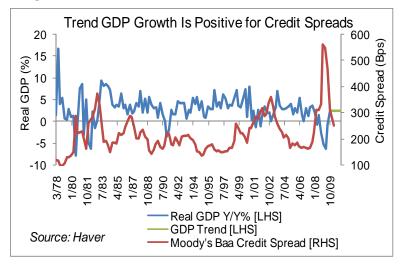


Fig. 20 Credit Spreads vs. GDP



#### Credit normalization driven by improving fundamentals

- Default rate projections suggest Moody's Speculative Grade Default Rate peaking
- Strong corporate balance sheets with negative financing gap
- Favorable technicals high grade gross supply to fall

Fig. 21 Corporate Cash/Assets

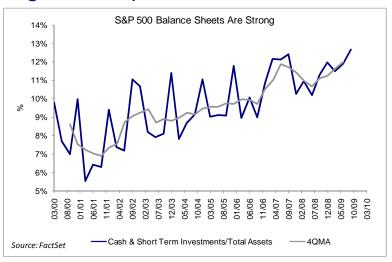
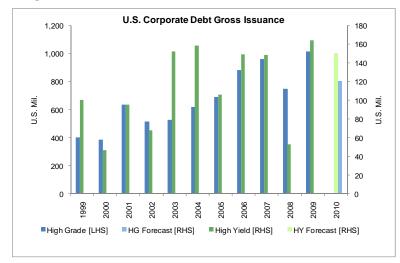


Fig. 22 Projected Corporate Issuance



### Weak municipal fundamentals will be somewhat offset by supportive technicals

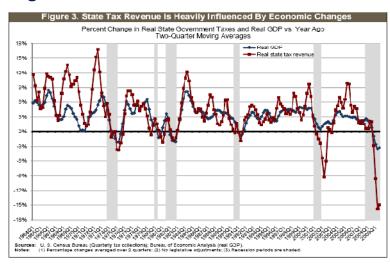
- Municipal revenues have fallen sharply
- Fundamentals and ratings trends remain negative in the municipal market with headline and downgrade risk remaining elevated in 2010
- Spread levels should be sustained with favorable technicals for tax-exempt securities inflow of money into municipal funds and shift towards BABs supply

Fig. 23 Muni to Treasury Ratio



Source: Bloomberg

Fig. 24 GDP vs. State Tax Revenue



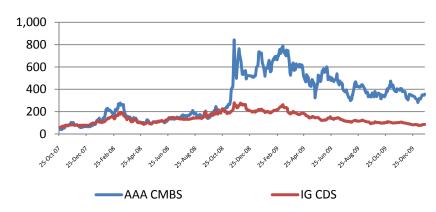
Source: Rockefeller Institute.

### High Grade CMBS spreads should continue to improve due to positive technicals

- CRE and CMBS fundamentals will continue to deteriorate in the coming months.
- However, tight spreads and light supply should provide a solid tone to high grade CMBS spreads.
- Despite tighter credit spreads, growth of CRE borrowing / financing is small. Market participants are, however, expecting the whole loan market to increase in activity by 2H10.

#### Fig. 25 CMBS Spreads

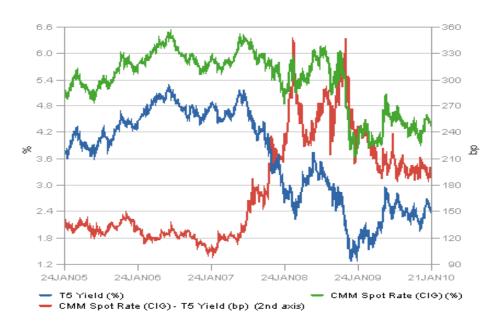
#### **HG CMBS Spreads are still elevated relative to HG Corporates**



#### Mortgage spreads should see limited widening in 2010

- Mortgage basis should widen as Fed exits market
- Widening will be limited due to:
  - smaller net issuance
  - the fact that certain buyers sensitive to short term spread behavior (hedge funds and money managers)
     have already significantly shed mortgages

Fig. 26 UST Rates and CMM Rates/Spreads



### More than sufficient mortgage demand to support the market as the Fed exits

 Significant wild cards are the behavior of overseas investors, convexity hedgers' response to rate movements, and housing price improvements

Fig. 27 MBS Holders

Ownership structure of the Agency MBS market (\$millions)					
	12/08	12/09			
Federal Reserve + Treasury	70	1,300			
Banks + Savings + Credit Unions	1,020	1,080			
GSEs (Fannie + Freddie + FHLBs)	910	970			
Overseas Investors	750	700			
State/Local Governments	250	250			
Agency MBS held by others*	1,800	1,000			
Size of the agency MBS market 4,800 5,30					
*Mutual funds, hedge funds, insurance companies, pension funds					

Fig. 28 Net Supply/Demand Estimates

Supply/Demand Technicals (\$millions)	2009	2010	
Conventionals	2000		\$740MM issuance, assuming \$100MM in buyouts.
Ginnie Mae		215	Sharp growth of importance of FHA/GNMA sector.
ARM		(16)	
Net Supply	480	294	
Federal Reserve + Treasury	1,230	50	
Banks + Savings + Credit Unions	60	50 to 150	Expect fairly strong demand, volatile convexity hedging component.
GSEs (Fannie + Freddie + FHLBs)	20	0	Focused on buyouts.
Overseas Investors	0	-100 to 100	Function of US trade deficit, oil prices, foreign official buying.
Domestic Money Managers	(300)	-100 to 300	Money Managers may need to replace sales.
Others	(530)	???	May re-enter as spreads widen.
Net Demand	480		