## Presentation to the Treasury Borrowing Advisory Committee

U.S. Department of the Treasury Office of Debt Management January 30, 2007



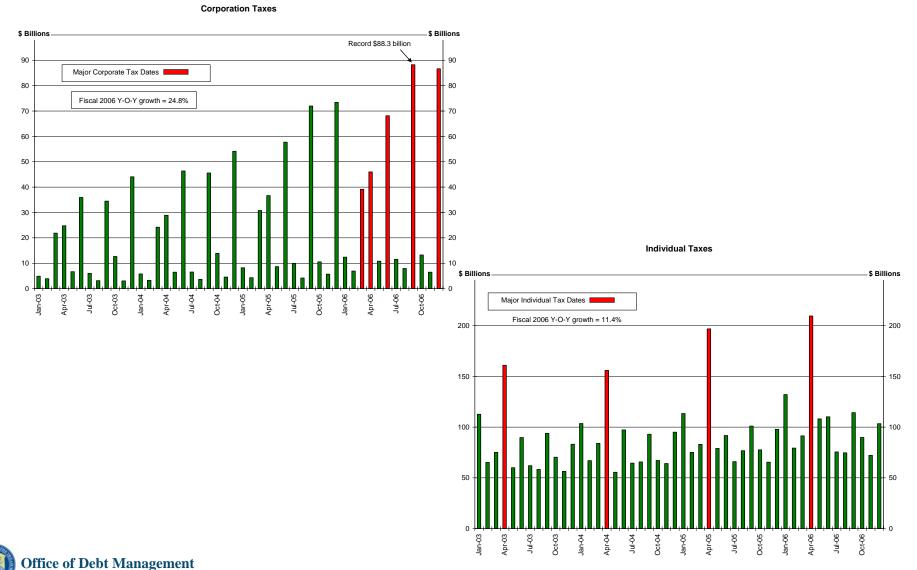
# **Fiscal Perspectives**



# Recent US economic performance has been strong



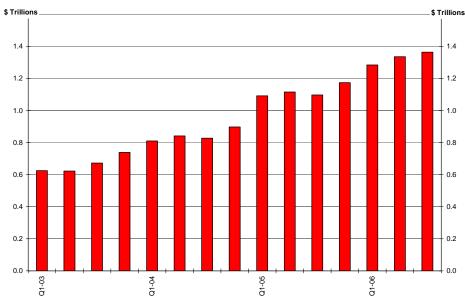
## Corporate and individual tax receipts remain strong



## Corporate profits and equity markets continue to rise

Source: Haver Analytics

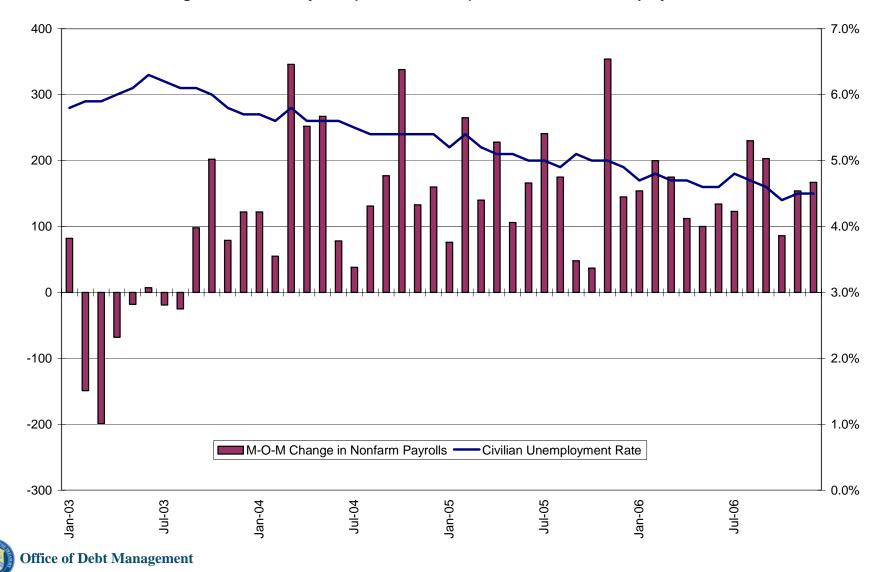
After-tax Corporate Profits







# Nonfarm payrolls continue to post gains while the unemployment rate remains low



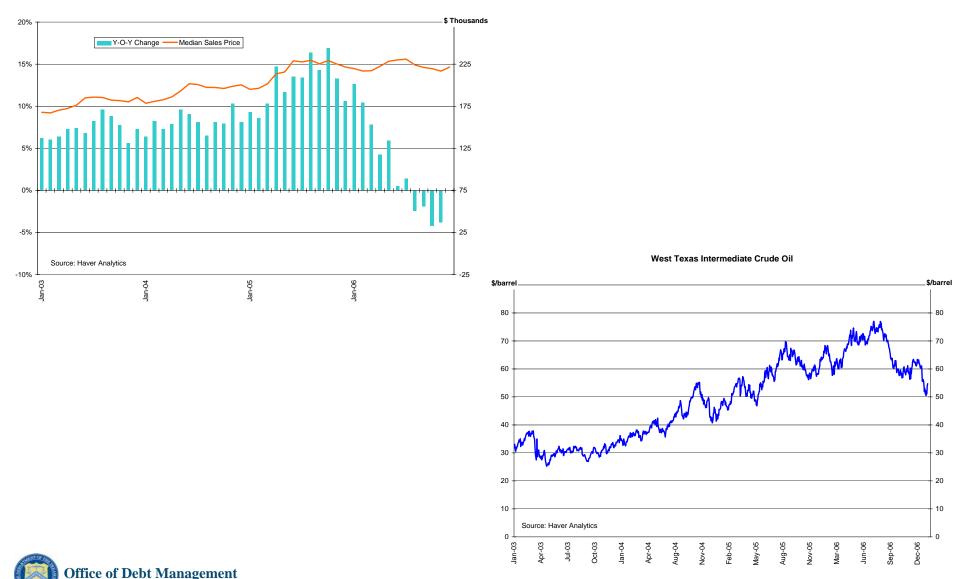
Change in Nonfarm Payrolls (SA, Thousands) and the Civilian Unemployment Rate

# Treasury continues to monitor other trends



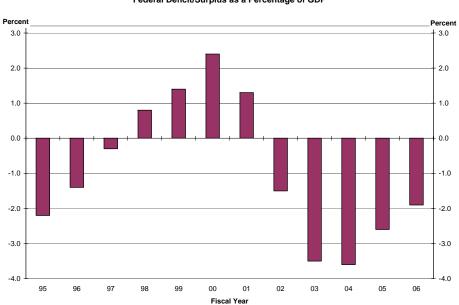
# Housing market trends appear uneven, and energy prices, while moderating, remain volatile



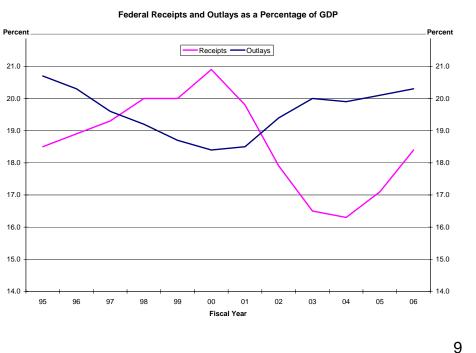


8

### And while deficits have been declining, government expenditures continue to outpace receipts



Federal Deficit/Surplus as a Percentage of GDP





Given recent trends, we would like the Committee's views on the following:

- What is the Committee's view on the fiscal outlook in 2007 and beyond?
- Is Treasury's issuance calendar adequately placed to address its future funding needs?



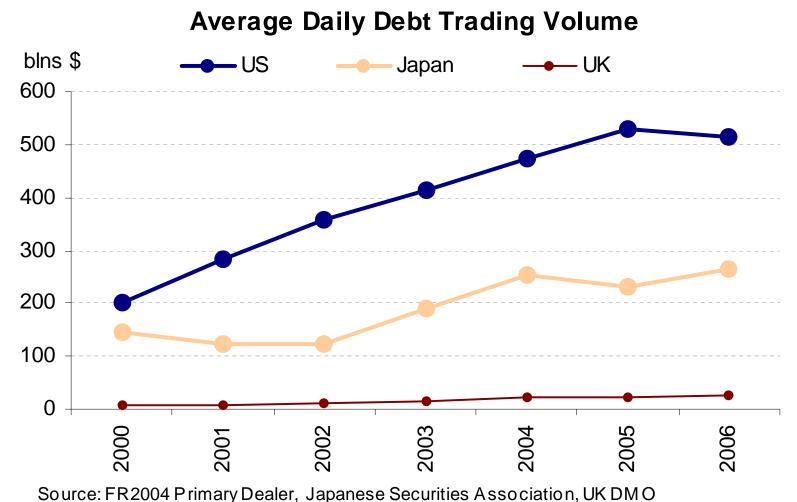
# Competitiveness of the US Treasury Market



# The US Treasury market is the most liquid government debt market in the world



# Among major sovereign debt markets, average daily trading volume is highest in the US Treasury market





### **Treasury market liquidity remains healthy**

- Primary auction demand is deep and continues to evolve
- Average daily trading volume in the on-the-run US Treasuries continues to grow
- Bid-ask spreads remain narrow
- Average trade sizes in the secondary market are growing
- Growth of the US inflation-linked market has surpassed that of all other major inflation-linked debt issuers



## Features of the US Treasury market:

- Transparency
- Regular and predictable issuance
- Minimal regulatory burden



# Secretary Paulson's Principles on Competitiveness in US Capital Markets

Treasury remains committed to strengthening not only the Treasury market but also US capital markets as a whole.

Global view

- Evolving and responsive regulatory structure
- Rules based on sound principles
- Risk-based approach to regulation
- Enforcement to deter bad behavior, not hinder innovation or responsible risk taking



We welcome the Committee's views on the following:

- How does the competitiveness of the US Treasury market compare to that of foreign bond markets?
- Are there steps that we should undertake to ensure that the Treasury market remains the preeminent debt market?



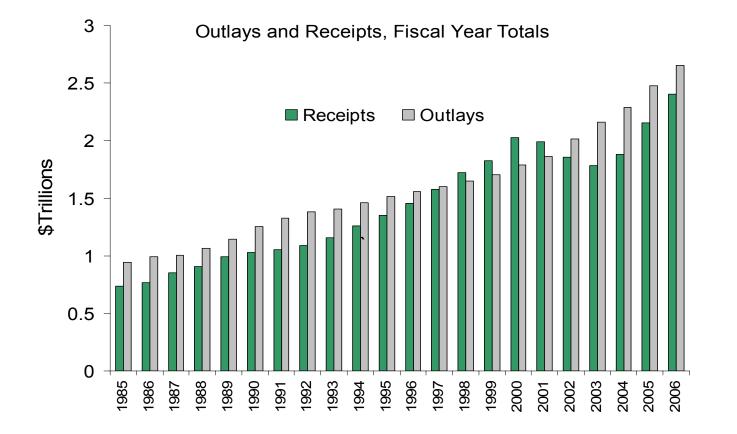
Ч

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

**January 30, 2007** 

A Review of Short-Term Debt Issuance as it Relates to Short-Term Borrowing Needs

#### **U** Outlays and Receipts Rising

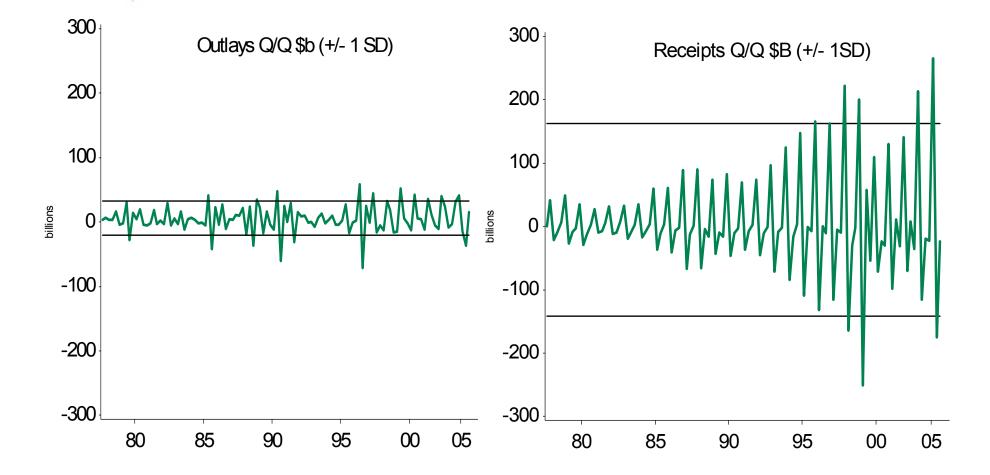


PAGE 2

Ч

- The question before this committee, and the investment community at large, is whether the steps taken by the Treasury and others have been sufficient to withstand a future wide scale disruption, or whether additional measures should be considered and implemented at this time.
- This report will touch upon the following:
  - Current borrowing need volatility
  - The factors that will contribute to further volatility in borrowing needs
  - The effectiveness of short-term debt securities in the current environment
  - Treasury's effectiveness of managing high cash balances (TT&L--Treasury Tax and Loan and the TIO--Term Investment Option, a pilot program offered to TT&L participants)
  - If the market were to face a large scale disruption at a time when Treasury cash balances were low, is the Treasury well placed to handle such a contingency event? Is Wall Street Prepared?
  - Review the suggestions presented to Congress by the GAO; both positive and negative
  - Additional tools or issues the Treasury should consider at this time

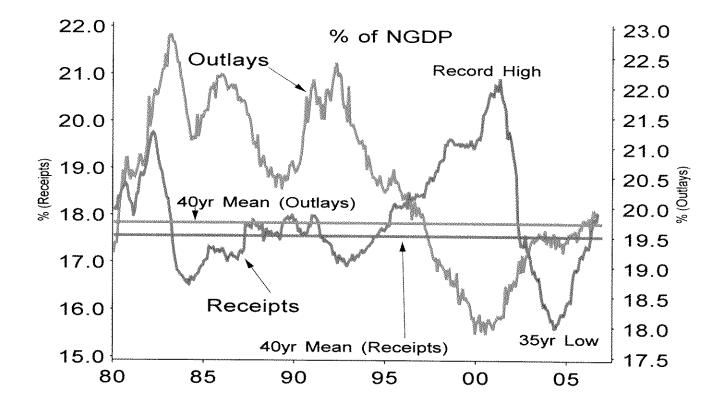
#### **Volatility of Borrowing Needs in Dollar Terms**



Source: US Department of Treasury

PAGE 4

#### Volatility of Borrowing Needs as a Percentage of Nominal GDP



#### Borrowing Have Been Trending Lower, Despite Volatility in Outlays & Receipts

Fiscal Year	Budget	Budget % GDP
2003	-\$375	3.4%
2004	-\$411	3.5%
2005	-\$321	2.5%
2006	-\$248	1.9%
2007 Estimates	Budget	Budget % GDP
OMB	-\$339	-2.4%
CBO	-\$172	-1.3%
Primary Dealers	-\$275	-2.0%

PAGE 6

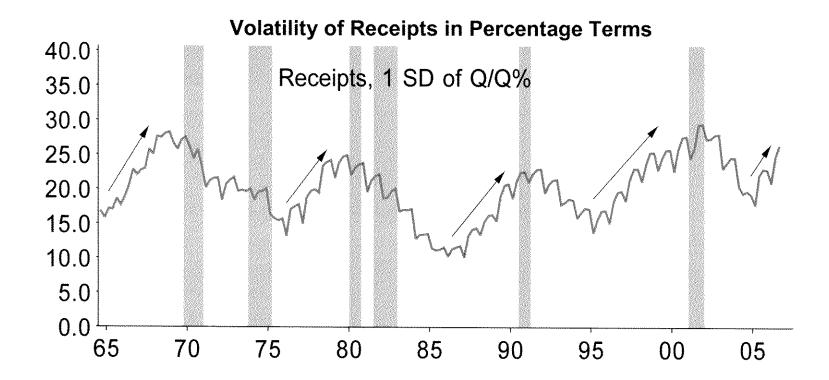
\$Billions

Source: US Department of Treasury

#### **Contributing Factors to Forecast Errors: Reviewing the Obvious**

- Cyclical Influences
- Price of Oil
- Supplemental Appropriations
- Aging Population
- Tax Provisions

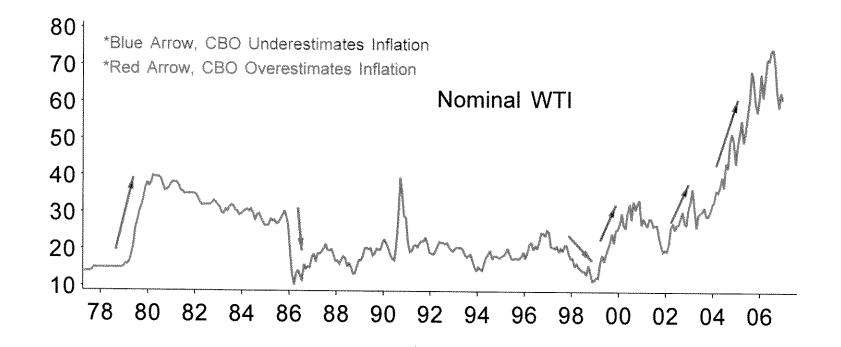
#### **Solution Contributing Factors: Cyclical Influences**



Source: US Department of Treasury

PAGE 8

#### Southing Sectors: Oil



Source: Energy Information Administration (EIA)

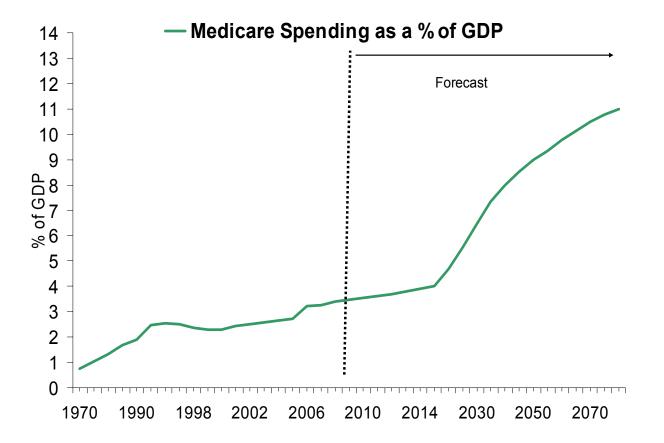
PAGE 9

#### **Contributing Factors: Supplemental Appropriations**

Supplemental Appropriations: 2000-2006				
Year	\$Millions	Informal Title		
2000 \$16,952		Military Construction		
		Defense		
2001 \$27,479		Emergency Supplemental and Resc.		
		Recovery Response to Terrorist Acts		
2002 \$45,3	\$45,317	Defense		
		Emergency Supplemental and Resc.		
2003 \$81	\$81,107	Emergency Wartime Supplemental Appropriations		
		Emergency Supplemental Appropriations for Disaster Relief Act		
		Legislative Branch		
2004	\$117,703	Supp for Defense/Iraq/Afghanistan		
		Defense 2005		
		2004 Emergency Disaster Relief Supp.		
2005	\$160,410	Emergency Supplemental for Hurrican Disasters Assistance Act, 2005		
		Emerg. Supp. Approp. Act for Defense, Global War on Terror and Tsunami Relief, 2005		
		Emerg. Supp. Approp. Act to Meet Immediate Needs Arising from		
		Consequences of Hurrican Katrina, 2005		
		Second Emergency Supp. Appropriations Act for Katrina, 2005		
2006	\$94,430	Defense Approp. Actm, includes Katrina, Avian Flu, and a-t-b		
		SBA disaster loans program account		
		Act for Defense, the Global War on Terror, and Hurrican Recovery		

Source: CBO

#### Ч **Contributing Factors: Aging Population**

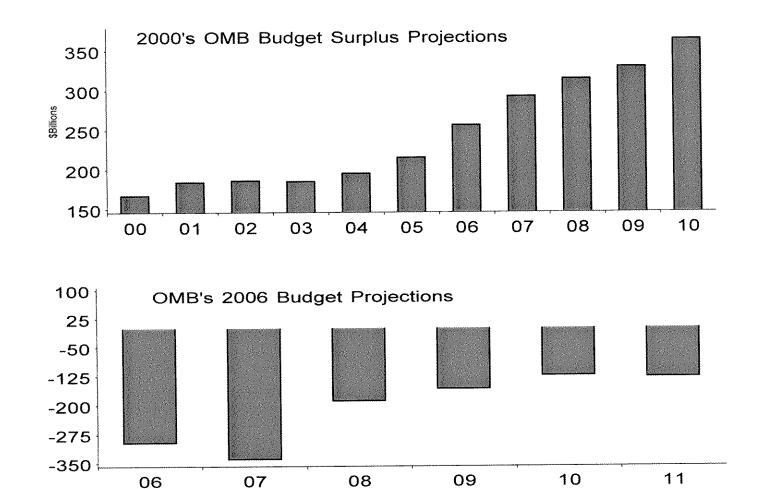


PAGE 11 Source: The Board of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds

#### **Contributing Factors: Tax Provisions**

- Long term borrowing needs rose substantially in the wake of the first round of Bush Tax cuts earlier this decade.
- OMB estimates borrowing needs will decline sharply once those tax provisions expire in 2010.
- Legislated tax changes since February decrease receipts 2006-2009, then increase receipts in both 2010 and 2011.

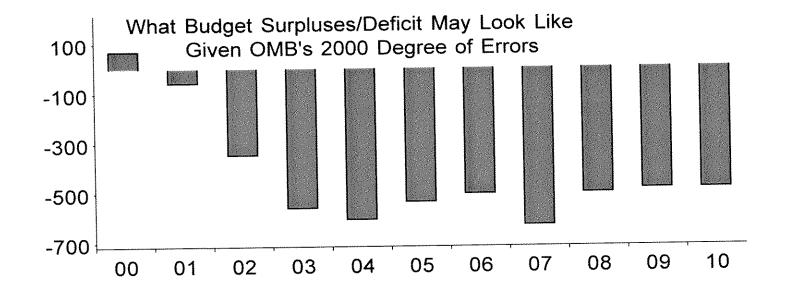
Service Servic



PAGE 13

Source: Office of Management Budget (OMB)

#### Second Se



- Degree of forecasting errors significant, almost \$600 billion in the current fiscal year.
  - "If the forecast errors reverse, however, the current issuance pattern requires heavy reliance on bills in early FY2007" (ODM, Quarterly Refunding, October 30, 2006)

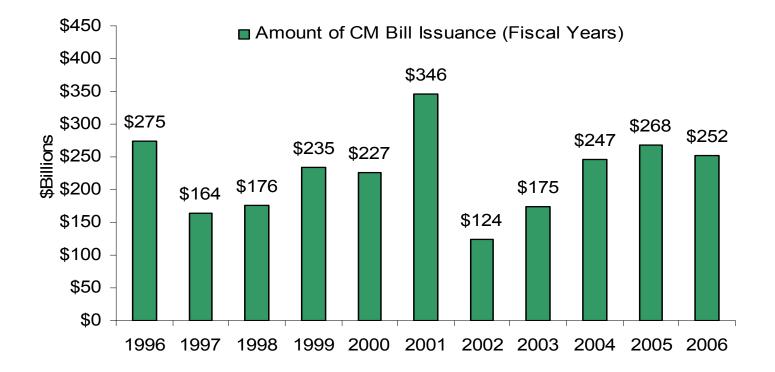


## A Review of the Effectiveness of Short-Term Debt Instruments

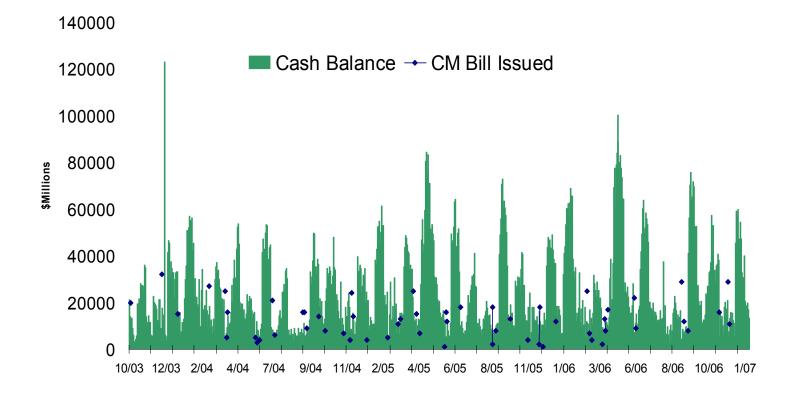
#### **Effectiveness of Short-Term Debt Instruments**

- Over the past several years the Treasury implemented the following innovations in short term financing:
  - July 2001: Introduced 4-week bill program, reducing reliance on cash management (CM) bills
  - 2001: 52 week bill issuance suspended
  - Control Contro
  - 2004: Eliminated compensating balances
  - In line with Treasury's mandate to maintain low cash balances they now operate with a direct pay for services model
  - March 2006: Launched repurchase agreement pilot program

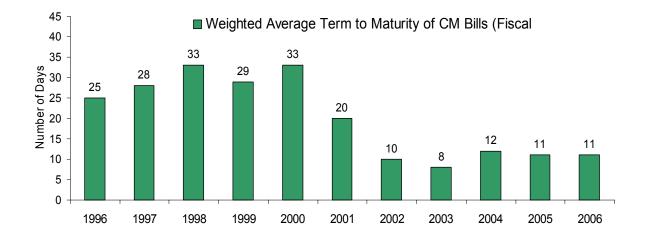
#### **Effectiveness of Short-Term Debt Instruments: 4-Week Bills**

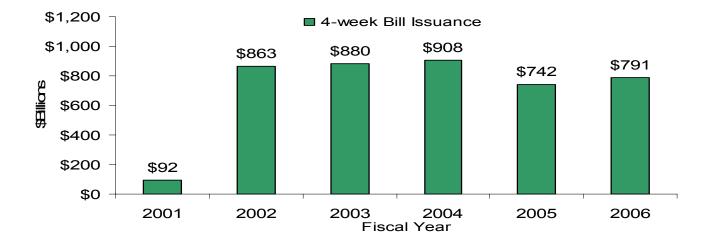


#### **Effectiveness of Short-Term Debt Instruments: CM Bills**



#### Short-term debt instruments: Flexibility in Issuance





PAGE 19

Source: US Department of Treasury

Ч



# The Opposite End of the Spectrum: Managing High Cash Balances

### Managing High Cash Balances: TT&L Accounts

- Treasury Tax and Loan (TT&L) Accounts
  - The TT&L accounts earn Fed Funds less 25 basis points, a rate set by the Treasury in 1978, not in line with current market rates.
  - The interest earned on TT&L accounts creates a negative funding spread for the Treasury. It is insufficient to cover the cost of funding short-term debt instruments.
  - In the late 1990s as financing rates became more transparent, the Treasury proposed to bring the interest rate in line with current market rates, which would have increased the return on Treasury balances by more than 20 basis points.
  - TT&L participants met the Treasury's suggestion with significant resistance citing that the wider spread was appropriate compensation for the transaction.
  - In response to the resistance from TT&L participants, and in an effort to reduce the negative funding spread, the Treasury introduced the Term Investment Option pilot program in 2002.

### Managing High Cash Balances: TIO Accounts

- Term Investment Option (TIO)
  - The TIO pilot program proved successful and transitioned into a permanent program in October 2003.
  - Over the first forty-two auctions, the difference between auction rates and what he Treasury would have earned had it left the balances in Main TT&L Accounts (FF less 25bp) was uniformly positive and averaged 17.3 basis points.<sup>1</sup>
  - The Treasury has continued to successfully pursue new and innovative ways to increase the interest earned on high cash balances: most recently launching a pilot repo program.
  - 70% of high cash balances that flow through TT&L accounts are now redirected into the TIO and Repo programs.

### Managing High Cash Balances: Pilot Repurchase Agreement Program

#### <u>Repurchase Agreement Pilot Program (Repo)</u>

- Repurchase Agreement Pilot Program started in March 2006.
- It operates on a DVP basis only with TT&L depositories.
- The pilot program currently earns a better funding rate than both the TT&L and TIO accounts.<sup>1</sup>
- Since the Treasury launched the pilot Repurchase Agreement Program, over \$206 billion TT&L funds have been invested.<sup>2</sup>

Ч

# Low Treasury Cash Balances and Wide Scale Market Disruptions The Implications

# **GAO's Recommendations to Congress, September 2006**

- Recommendation: examine the requirements for Treasury to establish a line of credit.
  - Financial institutions, specifically large commercial banks, would have to be willing and capable of lending money to Treasury in the appropriate amount and time required by Treasury.
  - Under Basel II, banks would incur 100% capital charges for unsecured loans. Negotiations would have to consider how a collective capital charge in a high stress environment would impact the banking system and define the circumstances under which Base II could be waived.
  - Because the nature and impact of potential future wide-scale disruptions are unknown, uncertainty exists regarding the ability of participating institutions to meet their obligations.
- Recommendation: examine the ability of the Treasury to issue a cash management bill for private placement.
  - Institutions have ability and authority to purchase a CM bill that meets Treasury's funding needs.
  - Federal Reserve plays large role, by providing liquidity to depository institutions.
  - Clearing and settlement systems must function to complete transactions.

#### **GAO's Recommendations to Congress, September 2006**

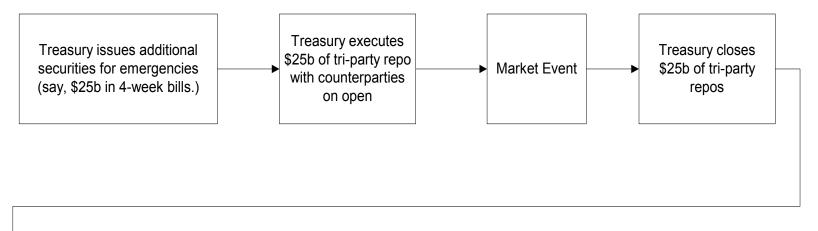
- Recommendation: Congress should consider allowing the Federal Reserve to lend directly to the Treasury during a "wide-scale" disruption using a carefully crafted last resort funding option.
  - Severs the long standing independence of the Federal Reserve.
  - What defines a "wide-scale" disruption? War? National disaster? The most carefully crafted bills are subject to revision.
  - In the event the Federal Reserve lost independence, the cost of future funding would likely increase to compensate for political uncertainty. The amount of risk premium the market could demand is as ambiguous as predicting the future disruption.
  - Congress has provided the Federal Reserve with considerable scope for independently exercising its best judgment as to what monetary policy should be. At the end of the day, it is public confidence that is a central bank's most precious commodity in a democracy.<sup>1</sup>

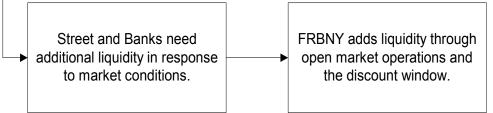
Ы

# Tri-party Repurchase Agreements: A Consideration for Contingency Planning

#### Execution

- Treasury raises cash by issuing securities, e.g. T-Bills, appropriately staggering maturities.
- Treasury invests in open tri-party repurchase agreements at prevailing market rates with banks and primary dealers.
- In the event of a significant market disruption, the Treasury, at its option, may elect to close open tri-party trades and receive proceeds. Banks may return funds directly, primary dealers may make funds available at the clearing banks, BoNY and Chase.
- In the event market participants require additional liquidity, the Federal Reserve, at its option, may perform open market operations and discount window transactions to maintain market stability.





#### **Advantages**

- Disintermediation of Fed and Treasury. Maintains credibility of Federal Reserve.
- If in the event the "auction/security grid" failed, the Treasury would still have cash on hand to fund liabilities.
- Flexibility to scale up auction size over time as social security outlays expand.
- Reduces interest expense by eliminating the negative funding spread.

#### Funding Costs

- Financially, the proposed structure may prove attractive based on T-Bill versus overnight tri-party financing rates.
- Using current market rates, a 4 week bill with a bond equivalent yield of 4.98% compares favorably to the equivalent GC repo yielding 5.18%. In this example Treasury would earn 18 basis points in positive carry.

## <u>Considerations</u>

Ч

- Transaction cost may outweigh potential spread advantage.
- Volatility of daily financing rates may be of concern.
- Repurchase agreements may not be adequate to cover emergency funding needs. Explore private placement CM bills as a second tier alternative or supplement to tri-party participation.