

Tenth Annual

OECD/World Bank/IMF Bond Market Forum

Secondary Market Liquidity in Domestic Debt Markets

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The US Fiscal Outlook and Treasury Debt Issuance Presentation to 10th OECD Global Bond Market Forum



Stephen M Vajs Office of Debt Management April 30, 2008

Topics for today's discussion

- I. Roles of Treasury, Federal Reserve, and Bureau of Public Debt
- II. Regular and predictable issuance with a set issuance calendar
- III. Role and regulation of primary dealers
- IV. Secondary market liquidity and market regulation



Roles of Treasury, Federal Reserve, and Bureau of Public Debt

Treasury Department

- Responsible for Federal government finances, including: receipts, payments, and financing.
- Manages Federal government debt portfolio.

Federal Reserve System

- Is the US central bank system. Conducts US monetary policy with dual mandate of: price stability and full employment.
- Acts as the Federal government's *fiscal agent*, holds our cash balances and assists with receipts, payments and auction operations.
- Assists with financing of the Federal government through their primary dealers system.
- Regulates the primary dealers.

Bureau of Public Debt (BPD)

• Responsible for the financing operations of the federal government – they operate the auction systems. Whereas Treasury Department officials make financing, issuance and portfolio decisions, BPD carries them out.



Treasury Issuance Objectives and Constraints

Our Objectives

- Long-term: Lowest cost of financing over time
- Short-term: Adequate cash balances to cover expenses

Constraints

- Uncertainty: Forecast errors, legislation, etc. all create uncertainty in deficit forecasts, debt limit problems
- Size: Treasury is too large to behave opportunistically
- Fluctuations in non-marketable debt (Savings Bonds, State and Local Government Securities (SLGS))

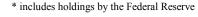
Policy Outcomes

- We are regular market participants, not market timers -- "Regular and Predictable"
- We don't react to interest rate levels
- We need flexibility
- We strive for transparency



Size of US Treasury Debt Operations is Hard to Grasp

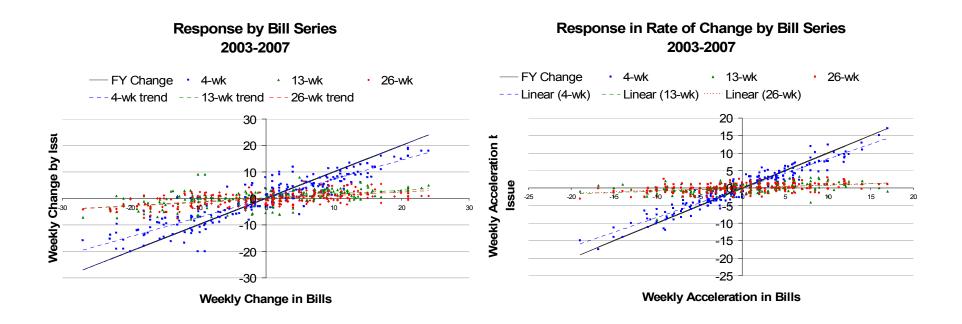
- \$4.4 trillion issued in 219 auctions in FY 2007
- \$238 billion paid in net interest in FY 2007
 - represented 8.7% of Government expenditures
- More than \$1 trillion moved between accounts on NBES daily
- More than \$500 billion traded daily (primary dealers)
 - For comparison NYSE trades about \$50 billion in equity daily
- \$4.4 trillion in marketable debt* outstanding end of FY 2007
 - represents roughly a quarter of U.S. credit markets





Rates of Change in Issuance and Cash Needs

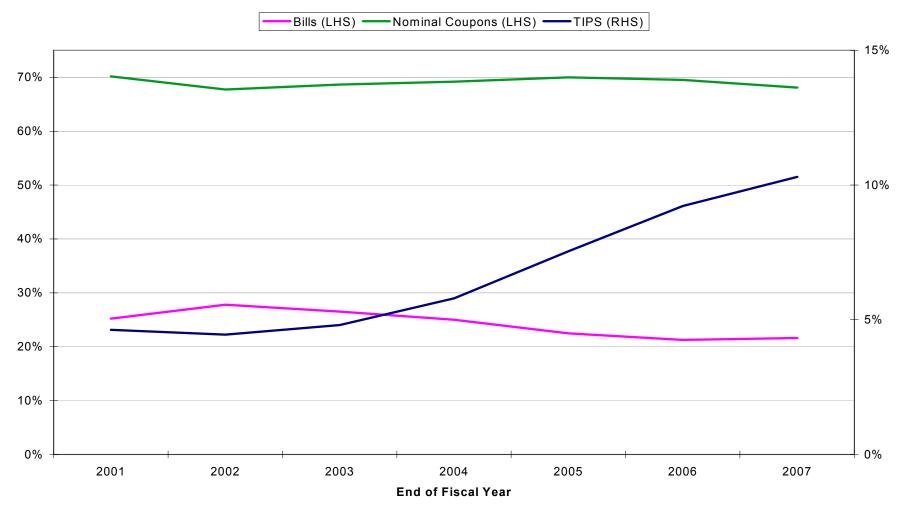
The 4-week bill moves the most in concert with changes in overall financing.





Evaluating the proper number, type and mix of securities in our portfolio is an ongoing effort

Percent of Total Outstanding Treasury Marketable Debt





Universal debt management objective

Lowest cost of financing over time.

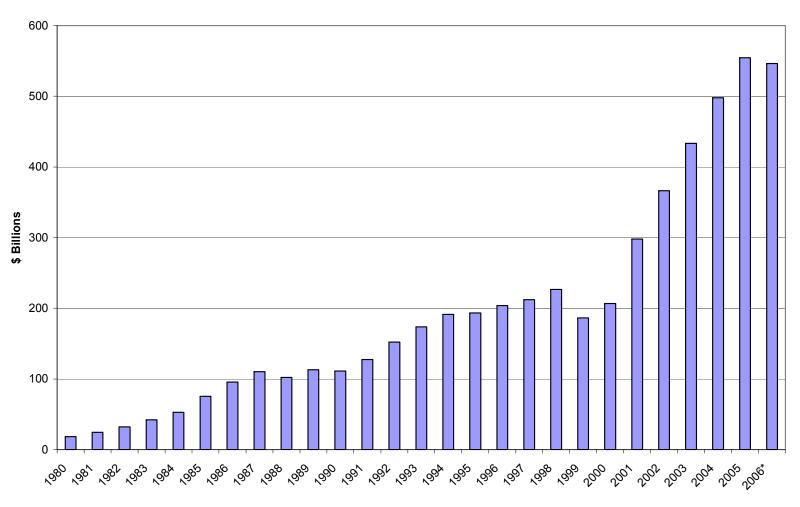
Different debt management philosophies

- Regular and predictable issuance using a set issuance calendar,
- Opportunistic issuance,
- A hybrid model is probably best suited for most countries.



Transparency and Predictability Leads to Greater Investor Participation over the Long Run

Average Daily Trading Volume of U.S. Treasury Securities (annual)







- An *opportunistic issuance* philosophy tries to finance the government by timing the markets, thereby achieving cheap rates.
- Opportunistic issuance appears appealing but can you consistently outsmart the markets over time, should you even try?
- Can you build a thoughtful, balanced, risk mitigating portfolio from opportunistic financing?
- Can you develop a full, domestic yield curve critical to local market development from opportunistic financing?



What does regular and predictable debt issuance mean? Policy outcomes

- Regular market participants, but not market timers,
- Don't react to interest rate levels,
- Strive for transparency in decision making,
- Provide certainty of supply to the market place,
- Engage in "regular and predictable" auctions, of a set of straight forward securities, on a <u>set issuance schedule</u>.



US Treasury issuance schedule – Pattern of financing

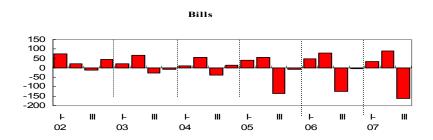
•	Nominal Securities	<u>Frequency</u>	Max Increments
	 4-week bills (52x) 	Weekly	\$7 billion
	• 13-& 26-week bills (52x)	Weekly	\$2 billion
	• 2-year notes (12x)	Monthly	\$2 billion
	• 5-year notes (12x)	Monthly	\$1 billion
	• 10-year notes (8x)	Quarterly, with reopening	\$1 billion
	• 30-year bonds (4x)	Ouarterly	\$1 billion

Treasury Inflation Protected Securities (TIPS, our inflation linked product)

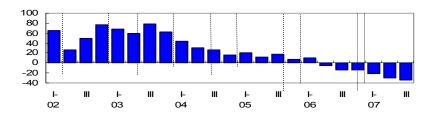
•	5-year TIP (2x)	Semi-annual	\$2 billion
•	10-year TIP $(4x)$	Quarterly	\$2 billion
•	20-year TIP (2x)	Semi-annual	\$2 billion



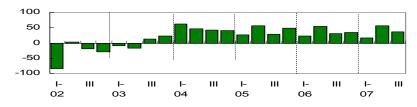
Quarterly Debt Issuance Patterns



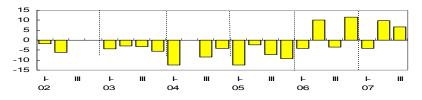




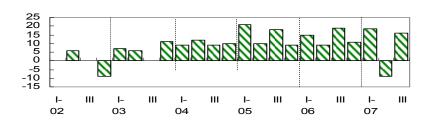
Five to Ten Years



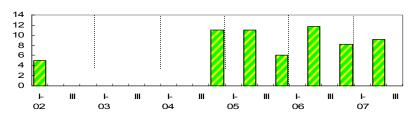
Over Ten Years



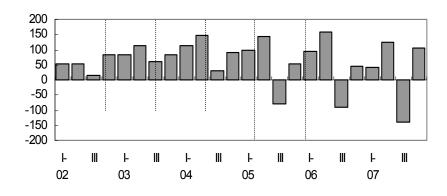
Five to Ten Year TIPS



Over Ten Years TIPS



Net Marketable Borrowing





How do you achieve lowest cost financing through regular and predictable issuance?

- By providing certainty of supply, through a set auction schedule and transparent decision making, as an issuer you promote investor participation and are rewarded with a *liquidity premium*,
- Instead of timing the market, you achieve lower borrowing costs through consistent investor demand for your liquid securities.



Advantages of regular and predictable issuance allows you to prudently spread debt across maturities to

- Capture a liquidity premium and lower borrowing costs,
- Facilitate local market development by building a full yield curve,
- Reduce risk: spreading out issuance reduces rollover risk, mitigating interest cost fluctuations,
- Diversify the investor base, and fill maturities preferences,
- Improve cash management, issue regularly to dynamically meet fluctuating cash needs.



Regular and predictable debt management policy tools

- Auction Sizes: within certain established increments,
- Auction Frequency,
- Security Offering Menu,
- Auction Regulations,
- Market monitoring, consultation, and surveillance.



Role and regulation of primary dealers

Primary dealers are banks and securities firms who <u>may</u> trade directly with the Federal Reserve System, they are required to

- To make bids and offers with the Federal Reserve when they conduct open market operations monetary policy,
- To actively participate in <u>all</u> U.S. Treasury auctions,
- Provide information about the financial markets to the Federal Reserve and Treasury Department,
- Consult with the Treasury about financing the federal government.

Primary dealer facts

- Currently there are 21 primary dealers, at one time there were over 40,
- Firms represent a wide geographic distribution, 11 are non-US based firms,
- They are: BNP, Bank of America, Barclays, Bear Stearns, Cantor Fitzgerald, Citigroup, Countrywide, Credit Suisse, Daiwa, Deutsche Bank, Dresdner, RBS Greenwich, Goldman Sachs, HSBC, JP Morgan, Lehman Brothers, Merrill Lynch, Mizuho, Morgan Stanley, Nomura, and UBS.



Role and regulation of primary dealers

Advantages of being a primary dealer

- Access to trading with the Federal Reserve and the information flows that accompany that,
- Because dealers purchase a vast majority of Treasury securities this allows dealers to be an intermediary between Treasury and ultimate investors,
- Opportunity to consult frequently with monetary and fiscal policy authorities.

The Federal Reserve regulates the primary dealers, not the Treasury Department

- Federal Reserve periodically meets with the leadership of the primary dealers and grades their performance in open market operations and in Treasury auctions,
- The Federal Reserve uses moral suasion with the dealers to ensure their active performance participation and performance,
- Although Treasury does not regulate the primary dealers, Treasury does meet with them twice a year to gather their views on: the financial markets, federal government budget financing, and their auction performance.



Promote market transparency

- Make transparent, predictable issuance decisions,
- Regular issuance provides a structured framework for investor participation,
- Issuers must be available to customers for feedback and guidance, listen and be credible.

Ensure proper regulation and market integrity

- Broadly speaking you must protect investors to attract participants,
- Establish consistent, fair practices across markets, level playing field for participants,
- Instills investor confidence in markets.

But don't over regulate

- Don't interfere with price discovery,
- Don't interfere with occasionally volatile markets, let participants work through issues

 don't over react,
- Let participants develop trading practices,
- Encourage innovation through market based, private working groups.

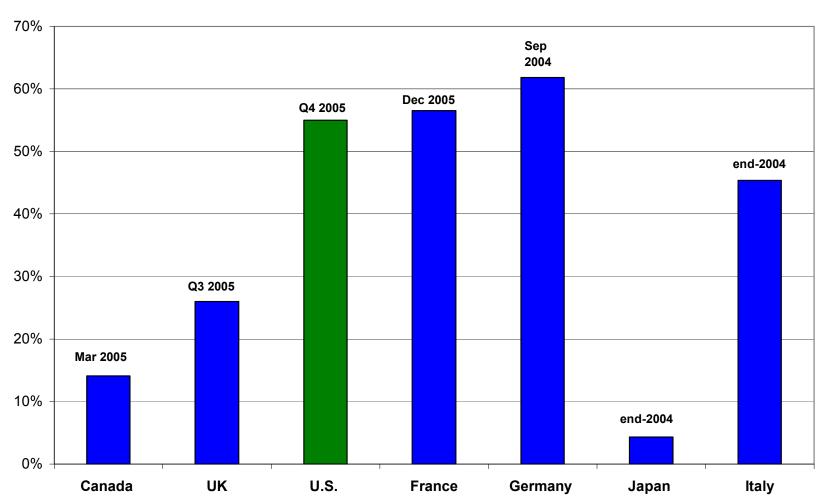


Cornerstones of liquid secondary market

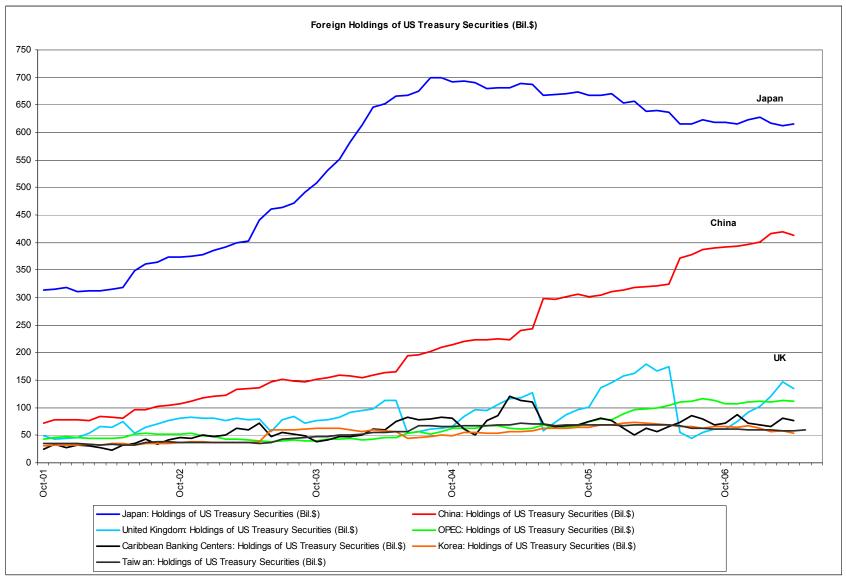
- Concentration of issuance in critical tenors: 1-month, 3-month, 6-month, 2-year, 5-year, 10-year, 30-year, 5- 10- and 20-year TIPS,
- Repo markets and ability to short issues,
- Futures market,
- When issued trading: after announcement, pre-settlement. Facilitates investor demand and price discovery.
- STRIPS market



Share of non-resident participation in G-7 government bond markets









The Top 3 Emerging Buyers of Treasuries have Increased Their Rate of Accumulation. Brazil, for example, is now the 5th Largest Holder of U.S. Treasuries.

Top 3 Emerging Buyers of U.S. Treasuries **Exponential Increase in Holdings** \$ Billions \$Billions 140 240 120 190 OPEC •UK 100 Brazil 140 80 60 90 40 40 20 Jun-00 Jun-01 Jun-02 Jun-03 Jun-04 Jun-05 Jun-06 Jun-07

Note: Flows through the U.K. include Middle-Eastern, Asian, and Hedge Fund flows.



Treasury Monitors and is Supportive of Private-Sector Initiatives for Ensuring the Integrity of the Marketplace for Treasury Securities

- Recent introduction of a principles-based framework a private sector called the Treasury Market Practices Group (TMPG).
- Evaluate and enhance their current activities in the secondary markets and to fulfill their responsibilities as stakeholders in the Treasury market.
- Signs of success and improved liquidity.
- Suggested sites for more information on this important initiative:
 - http://www.newyorkfed.org/tmpg/
 - http://www.newyorkfed.org/newsevents/news/markets/2007/an070209.html

