Chapter 8 - The Market for U.S. Treasury Securities

written for Economics 104 Financial Economics by Professor Gary R. Evans
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As of June 2013, the ***Marketable debt*** of the U.S. Treasury stood at $10.502 trillion, and consisted of **U.S. Treasury Bills**, **Notes**, **Bonds and TIPS**.

By definition, these assets differ by their maturity. A ***U.S. Treasury Bill*** will mature in one year or less (from its date of issue),[1] whereas a ***U.S. Treasury Note*** will have a maturity of more than one year to ten years and a ***U.S. Treasury Bond*** will have a maturity date of more than ten years, where twenty or thirty years is typical.[2] At maturity, the financial asset is redeemed, or "paid off" by the Treasury.

Figure 1
Total Marketable Treasury Debt
(external, $ billions)
June 2013

Bills:	1,568.1
Notes:	7,574.0
Bonds:	1,320.6
TIPS:	913.2
Total Marketable Debt:	11,375.9

TIPS are Treasury Inflation Protected Securities.
Source: Treasury Bulletin, September 2013, Table FD-2

Bills also differ from notes and bonds in the manner in which the interest is paid. A U.S. Treasury Bill is called a ***discounted*** financial asset because no direct interest is paid to the owner of the bill. Instead, the bill is sold at less than its maturity value (sold at a **discount**) and is redeemed at its maturity value, so the interest is implicit in its appreciation in price.

For example, a $10,000 U.S. Treasury Bill, 52-week series, might be sold to an investor by the treasury for $9,300. One year later when it matures the bill can be redeemed for $10,000, yielding a return of $700 (no interest would be paid otherwise). This return of $700 to an original investment of $9,300 amounts to an effective rate of return of about 7.5%.

In contrast, both U.S. Treasury Notes and U.S. Treasury Bonds pay ***coupon*** interest. **Semi-annual** interest payments are made to the registered owners of these securities at the stipulated **coupon rate**.

For example, an investor who purchases a ten-year $10,000 U.S. Treasury Bond yielding a coupon rate of 8% will be paid two payments annually of $400 each.

Figure 1 above shows the total level of marketable Treasury Bills, Notes, Bonds, and TIPS (to be explained below) outstanding for the date shown. As can be seen, notes make up the bulk of U.S. Treasury debt.

Marketable Debt has that name because U.S. Treasury Bills, Notes and Bonds are sold to whomever wants to buy them, and they can be resold, and typically are, in a huge secondary market. For example, a three-year U.S. Treasury Note might be sold to a private investor who might then resell it sixth months later to a bank or mutual fund. Prices for these securities fluctuate in value on the secondary markets, just like stocks, and their prices are quoted daily in the nation's larger newspapers and online.

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[1] A yield-bearing financial asset having a maturity or one year or less is typically called a "**bill**." Such assets are also called "**money market assets**" and **money market mutual funds** are made up almost entirely of bills. As financial assets, they tend to be characterized by their relatively low yields but high safety or low risk (especially treasury bills).

[2] These bonds should not be confused with the popular and inexpensive **U.S. Savings Bonds**, which can be purchased for as little as $50. These are classified under Non-Marketable Debt and the amount outstanding in June 2011 was $186 billion.

As stated above, virtually anyone can buy these securities, including foreign governments and foreign citizens. **Figure 2** below shows the breakdown of ownership of marketable debt (bills, notes, and bonds) for March 2013, comparing percentage ownership to December 1995. As can be seen, the debt is spread around, with more than 55% owned by foreign investors, mostly foreign governments (compared to 25% in 1995).

Figure 2
Ownership of Privately Held U.S. Treasury Debt

	December 1995		March 2013	
	Billions $	% total	Billions $	% total
Deposit institutions	315.4	9.5%	341.4	3.4%
US Savings Bonds	155.0	4.7%	181.7	1.8%
Private pension funds	142.9	4.3%	457.7	4.5%
S&L govt pension funds	208.2	6.3%	229.0	2.3%
Insurance companies	241.5	7.3%	263.3	2.6%
Mutual funds	225.1	6.8%	946.4	9.4%
State & local governments	289.8	8.8%	474.5	4.7%
Foreign holdings	835.2	25.3%	5,724.2	56.6%
Other (mostly individuals)	864.6	26.1%	1,496.5	14.8%
Total privately held	3,307.7	100.0%	10,114.8	100.0%
Memo:				
Total Debt:			16,771.6	
Held by FRS & IG accounts:			6,656.8	39.7%

Source: *U.S. Treasury Bulletin* , Septemeber 2013, Table OFS-2

U.S. Treasury Bills, Notes, and Bonds are no longer sold in discreet denominations. That is, the treasury does not sell large numbers of gilt-edged $10,000 bonds. Instead, the treasury may announce an offering of 3-year notes on some future date for a total subscription of $10 billion. Purchase requests (called tenders) may be for any part of this divisible by $100. The purchaser, for example, may buy $56,000 worth of these notes, or any other amount divisible by $100. The minimum purchase allowable has been reduced considerably by the U.S. Treasury in recent years to make the assets more accessible to the general public and is currently $100 for all of these securities.

Figure 3 below provides specific information about the range of bills notes and bonds that were available at the time of this publication.

A small investor can buy and sell these securities directly through ***TreasuryDirect.***[3] The purchaser submits a **tender** for a **competitive bid** or a **noncompetitive tender**. The latter, used by small purchasers, accepts the yield determined by the competitive bidding. This bidding process is explained below in greater detail.

In recent years, the Treasury has been selling inflation-indexed notes called TIPS (Treasury Inflation Protected Securities). According to the ***TreasuryDirect*** website cited above,

Figure 3
U.S Treasury Securities Offered to the Public

Security	Maturity	Now Offered
Bills:	Less than one year	4,13,26 and 52 weeks
Notes:	More than one to ten years	2,3,5,7,9 and 10*
Bonds:	20 to 30 years	30 years*
Inflation Indexed:	5, 10, and 20 years	All*

*These are sometimes approximate. E.g. a 30 year bond might have a maturity of 29 years and 11 months.

"Treasury Inflation-Protected Securities (TIPS) are marketable securities whose principal is adjusted by changes in the Consumer Price Index. With inflation (a rise in the index), the principal increases. With a deflation (a drop in the index), the principal decreases.

The relationship between TIPS and the Consumer Price Index affects both the sum you are paid when your TIPS matures and the amount of interest that a TIPS pays you every six months. TIPS pay interest at a fixed rate. Because the rate is applied to the adjusted principal, however, interest payments can vary in amount from one period to the next. If inflation occurs, the interest payment increases. In the event of deflation, the interest payment decreases."

Regardless of the size of the issue, the securities' prices are listed at ***par***, which equals 100. Therefore secondary market prices will fluctuate around this amount. The security is said to be trading at ***premium*** if the quoted price is *above* 100 and at ***discount*** if the quoted price is *below* 100.

[3] (http://www.treasurydirect.gov).

These same securities can be purchased from brokers and be sold through brokers. With a broker you will pay a commission. No commission is charged by a ***TreasuryDirect***.

There are also many **bond mutual funds** and **ETFs** that specialize in U.S. Treasury securities, offering the investor a diversified portfolio at low cost and for small transactions.

Figure 4
Select U.S. Treasury ETFs

Family	Fund	Symbol
iShares	Treasury Bill	SHV
iShares	1-3 Year Treasury Note	SHY
iShares	3-7 Year Treasury Note	IEI
iShares	7-10 Year Treasury Note	IEF
iShares	10-20 Year Treasury Bond	TLH
iShares	20+ Year Treasury Bond	TLT
iShares	TIPS Bond	TIP
SPDR	1-3 Month Treasury Bill	BIL
SPDR	Intermediate Term Treasury	ITE
SPDR	Long Term Treasury	TLO
SPDR	TIPS	IPE
Vanguard	Short Term Government	VGSH
Vanguard	Intermediate Term Government	VGIT
Vanguard	Long Term Government	VGLT

Some of the fund names are abbreviations of the formal names assigned to the funds.
Source: *SeekingAlpha*

Figure 4 shows many of the ETFs made available for different maturities of U.S. Treasury securities. Most of the shorter maturities (especially below 7 years) are nearly riskless and although they have low yields, can be a safe bet for adding stability to a large portfolio, especially in times of financial stress. Many of these ETFs have been extremely popular since the financial meltdown that began in 2008.

It should be noted that some of these ETFs are much more liquid than others. When shopping for U.S. Treasury security ETFs, always compare the average daily volume of some of the candidate investments and consider choosing those with higher volume.

For example, in the fall of 2013, the iShares **TLT** 20+ year Treasury Bond fund has average daily volume of over 8.5 million shares. The SPDR competitor **TLO** averaged around 17,000 shares daily over the same period. Consequently a long-term U.S, Treasury bet should probably be made with **TLT** rather than **TLO.**

The bond investor should also keep in mind that bond values, including Treasury bonds, do fluctuate , and so there is market risk in holding bond investments. This behavior is explained in the next chapter.

U.S. Treasury Auctions

U.S. Treasury Bills, Notes and Bonds are used to finance the budget deficits of the United States government. In years when those deficits are huge, as is presently the case, the securities are auctioned to the general public and other buyers at a torrid pace. For example, the total level of marketable U.S. Treasury debt shown in **Figure 1**, at $11.4 trillion, was an increase from the previous year of $900 billion, because the U.S. Government ran a budget deficit over that period of approximately that size. This means, therefore, that some new combination of bills, notes, and bonds equaling that amount must be sold to the public. Further, all during the year older issues are maturing, and in years when the government is running a budget deficit, the redemptions of older bills, notes, and bonds must be financed by reselling new securities. In other words, every time a U.S. Treasury 2-year note matures, it must be financed by the reissue of another Treasury security. Perhaps that will be another 2-year note but not necessarily. The Treasury can and does change maturities to fit their cash management needs.

Given this huge funding requirement, the Treasury is obliged to sell and resell this full range of securities throughout the year. Because the yields must be competitive with other bills, bonds, and notes from other governments and corporate competitors, the Treasury allows those yields to be market-determined by auctions. To be more specific, the Treasury allows the market to set the effective yields on newly issued bills, notes, and

bonds by using a process called a ***dutch auction***.

These auctions are scheduled throughout the week every non-holiday week of the year. **Appendix 1** of the three appendices at the end of this document shows the auction schedule for U.S. Treasury securities between early August 2011 and late January 2012. In order to appreciate the complexity of these auctions, look at the auction calendar in **Appendix 1**. For each auction, there are three key dates: (1) the announcement dates where preliminary terms of the specific auction, including amount and expected yield, are announced to prospective bidders, (2) the actual date of the auction when bids are received, and (3) the settlement day when successful bidders pay for their securities.

Appendix 2 shows an example of an auction announcement for $21 billion worth of 10-year notes (actually 9-year, 10-month - as stated earlier general maturities in the modern era are approximate) auctioned on October 12, 2011. Look at this announcement very carefully, paying attention to the lines highlighted in yellow.

The CUSIP Number is the serial number of this security.

The interest payment dates make it clear that interest is paid on this note twice a year (true for all U.S. Treasury notes and bonds), on February 15 and August 15.

When looking at the information about the interest rate and yield, it appears that the intended interest rate for this 10-year note is 2.125%, but the announcement declares that the yield will be "determined at auction." Below there is another potentially confusing line that declares that a premium or discount will also be determined at auction. Remembering that a premium refers to a price above the par value of $100 and a discount refers to any price below that amount, what could these terms possibly mean for a newly issued note?

This complication arises from the fact that the "interest rate" on this note, at 2.125% annually, must be declared at the date of this announcement, October 6, even though the auction is not until October 12. Interest rates on such securities, because they are market-determined, can and do change even if only by a small amount. Also to understand this we have to remember that the final effective interest rate, the "yield," is determined by the auction, not the announcement. Therefore, although the final effective yield earned by the owners of these securities will be very close to the "interest rate," which we will hereafter call the ***coupon rate*** (this distinction becomes very important in the next chapter), it will not be exactly 2.125%, it will be slightly above or slightly below that yield, depending upon the results of the auction. And how is that made possible? This note will not actually sell for par. It will sell for a very slight premium or a very slight discount because of the auction.

This is best shown by example. **Appendix 3** shows the actual auction result for this same 10-year note. Again, look at the yellow-highlighted features. Because of competitive bidding (described below) the actual yield on this note will be 2.271% (for the moment ignore why this is called "high yield"). This is because this note sold new at a discount, specifically at the price of 98.717572 rather than par, 100. This means that anyone buying, say, $10,000 worth of this note would have paid $9,871.57 for an asset that will redeem in 9 years and 10 months for $10,000. Because the note pays a ***coupon rate*** of 2.125% against a ***par value*** of 100, given that the note was purchased for ***less*** than 100 gives it an ***effective yield*** slightly higher than the coupon rate![4] That is how the auction reconciles the announced coupon rate with the final effective yield.
During the auction, the Treasury accepts two types of bids, competitive bids and noncompetitive bids. The bids are typically submitted online. Retail buyers will typically submit bids through ***TreasuryDirect***.

A ***noncompetitive bid*** is submitted if the buyer is willing to accept whatever yield results from the submission of competitive bids. The non-competitive bidder does not contribute to the determination of the yield.
Non-competitive bids may be submitted for any amount between $100 and $5 million divisible by $100.

[4] This admittedly confusing scenario will be explained mathematically in the next chaper.

In contrast, parties submitting ***competitive bids*** specify the amount they would like to purchase (restricted to any amount between $100 and what the offering announcement specifies as the Maximum Award, which was $7.350 billion in the case of the 10-year note - see **Appendix 2**) and the ***minimum interest rate*** that they are willing to accept, specified up to three decimal positions. For example, a competitive bid might be submitted for $2 billion at a yield of 2.262%.

Looking again at **Appendix 3**, it can be seen that more than $60 billion in competitive bids were submitted (tendered), of which slightly less than $21 billion were accepted. Additionally slightly more than $11 million in noncompetitive bids were submitted and accepted.

The means by which the Dutch Auction determines the final yield, which in this case was 2.271%, is best illustrated by a simplified example.

Figure 4

Mudd Finance

How the Dutch Auction Works

In this example, the Treasury is selling $10 billion worth of 2-year notes. Tenders are received for $2 billion of non-competitive bids (gray area).

Tenders are also shown for the competitive bids (green and yellow) totaling $15 billion. Each bidder bids the *minimum* yield that he will accept up to 3 decimal places. Starting with the lowest bid the auction works up until the competitive subscription is filled at $8 billion. Winners (green) are awarded the *highest* yield accepted. Those who bid at the cutoff are pro-rated.

Amount	Bids	Result
2	4.389	Rejected
3	4.388	Rejected
4	4.387	Pro-rated 50% at 4.387
2	4.386	Accepted at 4.387
1	4.385	Accepted at 4.387
2	4.384	Accepted at 4.387
1	4.383	Accepted at 4.387
2	NC	Accepted at 4.387

Refer to **Figure 4**, which is a simplified example taken from lecture.

Here the Treasury is accepting offers for $10 billion worth of 2-year notes. $2 billion dollars of noncompetitive bids have been submitted, leaving $8 billion eligible for competitive bids. The table in **Figure 4** shows that $15 billion in competitive bids have been submitted (green and yellow rows) a bids ranging from a low of 4.383% to a high of 4.389%. The notes are fully subscribed at the rate of 4.387%. Any bids above that amount are rejected.

Bids below that amount are accepted but the yield earned is not the yield submitted but instead the effective yield at the point the issue is fully subscribed, referred to as ***High Yield*** in **Appendix 3** (2.217$), and which is 4.387% in **Figure 4**. This means that the noncompetitive bids and all accepted competitive bids will yield the same

amount, 4.387%.

Because the full amount of bids submitted at the high yield will sum to more that the subscription amount, only a certain percent of the bids submitted at the high yield will be allotted. In **Figure 4**, those who submitted $4 billion in bids at 4.387% will be allowed to purchase an amount equal to half of their subscription amount ($2 billion of the $4 billion). It can be seen in **Appendix 3** that the amount allotted at high yield was 32.58% of bids submitted at the High Yield of 2.271%

The Dutch Auction is a fair and equitable process that clearly allows the market to set the yields paid on U.S. Treasury securities.

Again, it should be remembered that because the published coupon yield (again, called merely the "interest rate" in **Appendix 3**) will typically be slightly different than the actual yield generated by the Dutch Auction, the security will be sold at a slight discount (if the yield is above the coupon rate) or a slight premium (if the yield is below the coupon rate).

But what determines the price exactly? That is the subject of the next chapter.

Appendix 1 - U.S. Treasury Auction Calendar

Tentative Auction Schedule of U.S. Treasury Securities					
Security Type			**Announcement Date**	**Auction Date**	**Settlement Date**
3-Year NOTE			**Wednesday, August 03, 2011**	**Tuesday, August 09, 2011**	**Monday, August 15, 2011**
10-Year NOTE			**Wednesday, August 03, 2011**	**Wednesday, August 10, 2011**	**Monday, August 15, 2011**
30-Year BOND			**Wednesday, August 03, 2011**	**Thursday, August 11, 2011**	**Monday, August 15, 2011**
13-Week BILL			Thursday, August 04, 2011	Monday, August 08, 2011	Thursday, August 11, 2011
26-Week BILL			Thursday, August 04, 2011	Monday, August 08, 2011	Thursday, August 11, 2011
4-Week BILL			Monday, August 08, 2011	Tuesday, August 09, 2011	Thursday, August 11, 2011
13-Week BILL			Thursday, August 11, 2011	Monday, August 15, 2011	Thursday, August 18, 2011
26-Week BILL			Thursday, August 11, 2011	Monday, August 15, 2011	Thursday, August 18, 2011
5-Year TIPS	**R**	**T**	**Thursday, August 11, 2011**	**Thursday, August 18, 2011**	**Wednesday, August 31, 2011**
4-Week BILL			Monday, August 15, 2011	Tuesday, August 16, 2011	Thursday, August 18, 2011
13-Week BILL			Thursday, August 18, 2011	Monday, August 22, 2011	Thursday, August 25, 2011
26-Week BILL			Thursday, August 18, 2011	Monday, August 22, 2011	Thursday, August 25, 2011
52-Week BILL			Thursday, August 18, 2011	Tuesday, August 23, 2011	Thursday, August 25, 2011
2-Year NOTE			**Thursday, August 18, 2011**	**Tuesday, August 23, 2011**	**Wednesday, August 31, 2011**
5-Year NOTE			**Thursday, August 18, 2011**	**Wednesday, August 24, 2011**	**Wednesday, August 31, 2011**
7-Year NOTE			**Thursday, August 18, 2011**	**Thursday, August 25, 2011**	**Wednesday, August 31, 2011**
4-Week BILL			Monday, August 22, 2011	Tuesday, August 23, 2011	Thursday, August 25, 2011
13-Week BILL			Thursday, August 25, 2011	Monday, August 29, 2011	Thursday, September 01, 2011
26-Week BILL			Thursday, August 25, 2011	Monday, August 29, 2011	Thursday, September 01, 2011
4-Week BILL			Monday, August 29, 2011	Tuesday, August 30, 2011	Thursday, September 01, 2011
13-Week BILL			Thursday, September 01, 2011	Tuesday, September 06, 2011	Thursday, September 08, 2011
26-Week BILL			Thursday, September 01, 2011	Tuesday, September 06, 2011	Thursday, September 08, 2011
Holiday - Monday, September 05, 2011 - Labor Day					
4-Week BILL			Tuesday, September 06, 2011	Wednesday, September 07, 2011	Thursday, September 08, 2011
13-Week BILL			Thursday, September 08, 2011	Monday, September 12, 2011	Thursday, September 15, 2011
26-Week BILL			Thursday, September 08, 2011	Monday, September 12, 2011	Thursday, September 15, 2011
3-Year NOTE			**Thursday, September 08, 2011**	**Monday, September 12, 2011**	**Thursday, September 15, 2011**
10-Year NOTE	**R**		**Thursday, September 08, 2011**	**Tuesday, September 13, 2011**	**Thursday, September 15, 2011**
30-Year BOND	**R**		**Thursday, September 08, 2011**	**Wednesday, September 14, 2011**	**Thursday, September 15, 2011**
4-Week BILL			Monday, September 12, 2011	Tuesday, September 13, 2011	Thursday, September 15, 2011
13-Week BILL			Thursday, September 15, 2011	Monday, September 19, 2011	Thursday, September 22, 2011
26-Week BILL			Thursday, September 15, 2011	Monday, September 19, 2011	Thursday, September 22, 2011
52-Week BILL			Thursday, September 15, 2011	Tuesday, September 20, 2011	Thursday, September 22, 2011
10-Year TIPS	**R**	**T**	**Thursday, September 15, 2011**	**Thursday, September 22, 2011**	**Friday, September 30, 2011**
4-Week BILL			Monday, September 19, 2011	Tuesday, September 20, 2011	Thursday, September 22, 2011
13-Week BILL			Thursday, September 22, 2011	Monday, September 26, 2011	Thursday, September 29, 2011
26-Week BILL			Thursday, September 22, 2011	Monday, September 26, 2011	Thursday, September 29, 2011
2-Year NOTE			**Thursday, September 22, 2011**	**Tuesday, September 27, 2011**	**Friday, September 30, 2011**
5-Year NOTE			**Thursday, September 22, 2011**	**Wednesday, September 28, 2011**	**Friday, September 30, 2011**
7-Year NOTE			**Thursday, September 22, 2011**	**Thursday, September 29, 2011**	**Friday, September 30, 2011**
4-Week BILL			Monday, September 26, 2011	Tuesday, September 27, 2011	Thursday, September 29, 2011
13-Week BILL			Thursday, September 29, 2011	Monday, October 03, 2011	Thursday, October 06, 2011
26-Week BILL			Thursday, September 29, 2011	Monday, October 03, 2011	Thursday, October 06, 2011
4-Week BILL			Monday, October 03, 2011	Tuesday, October 04, 2011	Thursday, October 06, 2011
13-Week BILL			Thursday, October 06, 2011	Tuesday, October 11, 2011	Thursday, October 13, 2011
26-Week BILL			Thursday, October 06, 2011	Tuesday, October 11, 2011	Thursday, October 13, 2011
3-Year NOTE			**Thursday, October 06, 2011**	**Tuesday, October 11, 2011**	**Monday, October 17, 2011**
10-Year NOTE	**R**		**Thursday, October 06, 2011**	**Wednesday, October 12, 2011**	**Monday, October 17, 2011**
30-Year BOND	**R**		**Thursday, October 06, 2011**	**Thursday, October 13, 2011**	**Monday, October 17, 2011**
Holiday - Monday, October 10, 2011 - Columbus Day					
4-Week BILL			Tuesday, October 11, 2011	Wednesday, October 12, 2011	Thursday, October 13, 2011
13-Week BILL			Thursday, October 13, 2011	Monday, October 17, 2011	Thursday, October 20, 2011
26-Week BILL			Thursday, October 13, 2011	Monday, October 17, 2011	Thursday, October 20, 2011
52-Week BILL			Thursday, October 13, 2011	Tuesday, October 18, 2011	Thursday, October 20, 2011
30-Year TIPS	**R**	**T**	**Thursday, October 13, 2011**	**Thursday, October 20, 2011**	**Monday, October 31, 2011**
4-Week BILL			Monday, October 17, 2011	Tuesday, October 18, 2011	Thursday, October 20, 2011
13-Week BILL			Thursday, October 20, 2011	Monday, October 24, 2011	Thursday, October 27, 2011
26-Week BILL			Thursday, October 20, 2011	Monday, October 24, 2011	Thursday, October 27, 2011
2-Year NOTE			**Thursday, October 20, 2011**	**Tuesday, October 25, 2011**	**Monday, October 31, 2011**
5-Year NOTE			**Thursday, October 20, 2011**	**Wednesday, October 26, 2011**	**Monday, October 31, 2011**
7-Year NOTE			**Thursday, October 20, 2011**	**Thursday, October 27, 2011**	**Monday, October 31, 2011**
4-Week BILL			Monday, October 24, 2011	Tuesday, October 25, 2011	Thursday, October 27, 2011
13-Week BILL			Thursday, October 27, 2011	Monday, October 31, 2011	Thursday, November 03, 2011
26-Week BILL			Thursday, October 27, 2011	Monday, October 31, 2011	Thursday, November 03, 2011
4-Week BILL			Monday, October 31, 2011	Tuesday, November 01, 2011	Thursday, November 03, 2011
3-Year NOTE			**Wednesday, November 02, 2011**	**Tuesday, November 08, 2011**	**Tuesday, November 15, 2011**
10-Year NOTE			**Wednesday, November 02, 2011**	**Wednesday, November 09, 2011**	**Tuesday, November 15, 2011**
30-Year BOND			**Wednesday, November 02, 2011**	**Thursday, November 10, 2011**	**Tuesday, November 15, 2011**
13-Week BILL			Thursday, November 03, 2011	Monday, November 07, 2011	Thursday, November 10, 2011
26-Week BILL			Thursday, November 03, 2011	Monday, November 07, 2011	Thursday, November 10, 2011
4-Week BILL			Monday, November 07, 2011	Tuesday, November 08, 2011	Thursday, November 10, 2011
13-Week BILL			Thursday, November 10, 2011	Monday, November 14, 2011	Thursday, November 17, 2011
26-Week BILL			Thursday, November 10, 2011	Monday, November 14, 2011	Thursday, November 17, 2011
52-Week BILL			Thursday, November 10, 2011	Tuesday, November 15, 2011	Thursday, November 17, 2011

Tentative Auction Schedule of U.S. Treasury Securities					
Security Type			**Announcement Date**	**Auction Date**	**Settlement Date**
10-Year TIPS	**R**	**T**	**Thursday, November 10, 2011**	**Thursday, November 17, 2011**	**Wednesday, November 30, 2011**
Holiday - Friday, November 11, 2011 - Veterans Day					
4-Week BILL			Monday, November 14, 2011	Tuesday, November 15, 2011	Thursday, November 17, 2011
13-Week BILL			Thursday, November 17, 2011	Monday, November 21, 2011	Friday, November 25, 2011
26-Week BILL			Thursday, November 17, 2011	Monday, November 21, 2011	Friday, November 25, 2011
2-Year NOTE			**Thursday, November 17, 2011**	**Tuesday, November 22, 2011**	**Wednesday, November 30, 2011**
5-Year NOTE			**Thursday, November 17, 2011**	**Wednesday, November 23, 2011**	**Wednesday, November 30, 2011**
7-Year NOTE			**Thursday, November 17, 2011**	**Monday, November 28, 2011**	**Wednesday, November 30, 2011**
4-Week BILL			Monday, November 21, 2011	Tuesday, November 22, 2011	Friday, November 25, 2011
13-Week BILL			Wednesday, November 23, 2011	Monday, November 28, 2011	Thursday, December 01, 2011
26-Week BILL			Wednesday, November 23, 2011	Monday, November 28, 2011	Thursday, December 01, 2011
Holiday - Thursday, November 24, 2011 - Thanksgiving Day					
4-Week BILL			Monday, November 28, 2011	Tuesday, November 29, 2011	Thursday, December 01, 2011
13-Week BILL			Thursday, December 01, 2011	Monday, December 05, 2011	Thursday, December 08, 2011
26-Week BILL			Thursday, December 01, 2011	Monday, December 05, 2011	Thursday, December 08, 2011
4-Week BILL			Monday, December 05, 2011	Tuesday, December 06, 2011	Thursday, December 08, 2011
13-Week BILL			Thursday, December 08, 2011	Monday, December 12, 2011	Thursday, December 15, 2011
26-Week BILL			Thursday, December 08, 2011	Monday, December 12, 2011	Thursday, December 15, 2011
3-Year NOTE			**Thursday, December 08, 2011**	**Monday, December 12, 2011**	**Thursday, December 15, 2011**
52-Week BILL			Thursday, December 08, 2011	Tuesday, December 13, 2011	Thursday, December 15, 2011
10-Year NOTE	**R**		**Thursday, December 08, 2011**	**Tuesday, December 13, 2011**	**Thursday, December 15, 2011**
30-Year BOND	**R**		**Thursday, December 08, 2011**	**Wednesday, December 14, 2011**	**Thursday, December 15, 2011**
4-Week BILL			Monday, December 12, 2011	Tuesday, December 13, 2011	Thursday, December 15, 2011
13-Week BILL			Thursday, December 15, 2011	Monday, December 19, 2011	Thursday, December 22, 2011
26-Week BILL			Thursday, December 15, 2011	Monday, December 19, 2011	Thursday, December 22, 2011
5-Year TIPS	**R**	**T**	**Thursday, December 15, 2011**	**Thursday, December 22, 2011**	**Friday, December 30, 2011**
2-Year NOTE			**Thursday, December 15, 2011**	**Monday, December 19, 2011**	**Tuesday, January 03, 2012**
5-Year NOTE			**Thursday, December 15, 2011**	**Tuesday, December 20, 2011**	**Tuesday, January 03, 2012**
7-Year NOTE			**Thursday, December 15, 2011**	**Wednesday, December 21, 2011**	**Tuesday, January 03, 2012**
4-Week BILL			Monday, December 19, 2011	Tuesday, December 20, 2011	Thursday, December 22, 2011
13-Week BILL			Thursday, December 22, 2011	Tuesday, December 27, 2011	Thursday, December 29, 2011
26-Week BILL			Thursday, December 22, 2011	Tuesday, December 27, 2011	Thursday, December 29, 2011
Holiday - Monday, December 26, 2011 - Christmas Day					
4-Week BILL			Tuesday, December 27, 2011	Wednesday, December 28, 2011	Thursday, December 29, 2011
13-Week BILL			Thursday, December 29, 2011	Tuesday, January 03, 2012	Thursday, January 05, 2012
26-Week BILL			Thursday, December 29, 2011	Tuesday, January 03, 2012	Thursday, January 05, 2012
Holiday - Monday, January 02, 2012 - New Year's Day					
4-Week BILL			Tuesday, January 03, 2012	Wednesday, January 04, 2012	Thursday, January 05, 2012
13-Week BILL			Thursday, January 05, 2012	Monday, January 09, 2012	Thursday, January 12, 2012
26-Week BILL			Thursday, January 05, 2012	Monday, January 09, 2012	Thursday, January 12, 2012
52-Week BILL			Thursday, January 05, 2012	Tuesday, January 10, 2012	Thursday, January 12, 2012
3-Year NOTE			**Thursday, January 05, 2012**	**Tuesday, January 10, 2012**	**Tuesday, January 17, 2012**
10-Year NOTE	**R**		**Thursday, January 05, 2012**	**Wednesday, January 11, 2012**	**Tuesday, January 17, 2012**
30-Year BOND	**R**		**Thursday, January 05, 2012**	**Thursday, January 12, 2012**	**Tuesday, January 17, 2012**
4-Week BILL			Monday, January 09, 2012	Tuesday, January 10, 2012	Thursday, January 12, 2012
13-Week BILL			Thursday, January 12, 2012	Tuesday, January 17, 2012	Thursday, January 19, 2012
26-Week BILL			Thursday, January 12, 2012	Tuesday, January 17, 2012	Thursday, January 19, 2012
10-Year TIPS		**T**	**Thursday, January 12, 2012**	**Thursday, January 19, 2012**	**Tuesday, January 31, 2012**
Holiday - Monday, January 16, 2012 - Birthday of Martin Luther King, Jr.					
4-Week BILL			Tuesday, January 17, 2012	Wednesday, January 18, 2012	Thursday, January 19, 2012
13-Week BILL			Thursday, January 19, 2012	Monday, January 23, 2012	Thursday, January 26, 2012
26-Week BILL			Thursday, January 19, 2012	Monday, January 23, 2012	Thursday, January 26, 2012
2-Year NOTE			**Thursday, January 19, 2012**	**Tuesday, January 24, 2012**	**Tuesday, January 31, 2012**
5-Year NOTE			**Thursday, January 19, 2012**	**Wednesday, January 25, 2012**	**Tuesday, January 31, 2012**
7-Year NOTE			**Thursday, January 19, 2012**	**Thursday, January 26, 2012**	**Tuesday, January 31, 2012**
4-Week BILL			Monday, January 23, 2012	Tuesday, January 24, 2012	Thursday, January 26, 2012
13-Week BILL			Thursday, January 26, 2012	Monday, January 30, 2012	Thursday, February 02, 2012
26-Week BILL			Thursday, January 26, 2012	Monday, January 30, 2012	Thursday, February 02, 2012
4-Week BILL			Monday, January 30, 2012	Tuesday, January 31, 2012	Thursday, February 02, 2012

T --denotes TIPS

R --denotes reopening

For additional information regarding Treasury auction announcements and results please see web address below:

http://www.treasurydirect.gov/instit/annceresult/press/press.htm

Appendix 2 - Treasury Auction Announcement for 10-year notes

PUBLIC DEBT NEWS

Department of the Treasury • Bureau of the Public Debt • Washington, DC 20239

Embargoed Until 11:00 A.M.
October 06, 2011

CONTACT: Office of Financing
202-504-3550

TREASURY OFFERING ANNOUNCEMENT [1]

Term and Type of Security	9-Year 10-Month 2-1/8% Note (Reopening)
Offering Amount	$21,000,000,000
Currently Outstanding	$45,735,000,000
CUSIP Number	912828RC6
Auction Date	October 12, 2011
Original Issue Date	August 15, 2011
Issue Date	October 17, 2011
Maturity Date	August 15, 2021
Dated Date	August 15, 2011
Series	E-2021
Yield	Determined at Auction
Interest Rate	2-1/8%
Interest Payment Dates	February 15 and August 15
Accrued Interest from 08/15/2011 to 10/17/2011	$3.63791 Per $1,000
Premium or Discount	Determined at Auction
Minimum Amount Required for STRIPS	$100
Corpus CUSIP Number	912820YT8
Additional TINT(s) Due Date(s) and CUSIP Number(s)	None
Maximum Award	$7,350,000,000
Maximum Recognized Bid at a Single Yield	$7,350,000,000
NLP Reporting Threshold	$7,350,000,000
NLP Exclusion Amount	$15,800,000,000
Scheduled Purchases in Treasury Direct	$0
Minimum Bid Amount and Multiples	$100
Competitive Bid Yield Increments [2]	0.001%
Maximum Noncompetitive Award	$5,000,000
Eligible for Holding in Treasury Direct Systems	Yes
Eligible for Holding in Legacy Treasury Direct	No
Estimated Amount of Maturing Coupon Securities Held by the Public	$0
Maturing Date	October 15, 2011
SOMA Holdings Maturing	$0
SOMA Amounts Included in Offering Amount	No
FIMA Amounts Included in Offering Amount [3]	Yes
Noncompetitive Closing Time	12:00 Noon ET
Competitive Closing Time	1:00 p.m. ET

[1]Governed by the Terms and Conditions set forth in The Uniform Offering Circular for the Sale and Issue of Marketable Book-Entry Treasury Bills, Notes, and Bonds (31 CFR Part 356, as amended), and this offering announcement.

[2]Must be expressed as a yield with three decimals e.g., 7.123%.

[3]FIMA up to $1,000 million in noncompetitive bids from Foreign and International Monetary Authority not to exceed $100 million per account.

Appendix 3 - Auction results for the U.S. Treasury 10-year note

PUBLIC DEBT NEWS

Department of the Treasury • Bureau of the Public Debt • Washington, DC 20239

For Immediate Release
October 12, 2011

CONTACT: Office of Financing
202-504-3550

TREASURY AUCTION RESULTS

Term and Type of Security	9-Year 10-Month Note
CUSIP Number	912828RC6
Series	E-2021
Interest Rate	2-1/8%
High Yield[1]	2.271%
Allotted at High	32.58%
Price	98.717572
Accrued Interest per $1,000	$3.63791
Median Yield[2]	2.190%
Low Yield[3]	2.097%
Issue Date	October 17, 2011
Maturity Date	August 15, 2021
Original Issue Date	August 15, 2011
Dated Date	August 15, 2011

	Tendered	Accepted
Competitive	$60,073,505,000	$20,988,665,000
Noncompetitive	$11,352,200	$11,352,200
FIMA (Noncompetitive)	$0	$0
Subtotal[4]	**$60,084,857,200**	**$21,000,017,200[5]**
SOMA	$0	$0
Total	**$60,084,857,200**	**$21,000,017,200**

	Tendered	Accepted
Primary Dealer[6]	$46,645,000,000	$12,285,160,000
Direct Bidder[7]	$4,325,005,000	$1,350,005,000
Indirect Bidder[8]	$9,103,500,000	$7,353,500,000
Total Competitive	**$60,073,505,000**	**$20,988,665,000**

[1] All tenders at lower yields were accepted in full.

[2] 50% of the amount of accepted competitive tenders was tendered at or below that yield.

[3] 5% of the amount of accepted competitive tenders was tendered at or below that yield.

[4] Bid-to-Cover Ratio: $60,084,857,200/$21,000,017,200 = 2.86

[5] Awards to combined Treasury Direct systems = $2,884,200.

[6] Primary dealers as submitters bidding for their own house accounts.

[7] Non-Primary dealer submitters bidding for their own house accounts.

[8] Customers placing competitive bids through a direct submitter, including Foreign and International Monetary Authorities placing bids through the Federal Reserve Bank of New York.