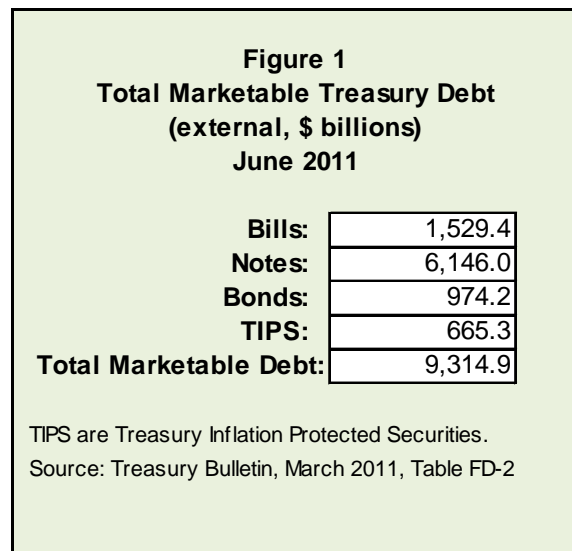


**Chapter 7**  
**The Market for U.S. Treasury Securities**  
 Edition October, 2011

As of June 2011, the *Marketable debt* of the U.S. Treasury stood at nearly \$9.315 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),<sup>1</sup> 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.<sup>2</sup> At maturity, the financial asset is redeemed, or "paid off" by the Treasury.



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

<sup>1</sup> A yield-bearing financial asset having a maturity of 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).

<sup>2</sup> 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.

quoted daily in the nation's larger newspapers.

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 2011, comparing percentage ownership to December 2005. As can be seen, the debt is spread around, with more than 50% 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 2011	
	Billions \$	% total	Billions \$	% total
Deposit institutions	315.4	9.5%	328.7	4.0%
US Savings Bonds	155.0	4.7%	186.7	2.2%
Private pension funds	142.9	4.3%	637.7	7.7%
S&L govt pension funds	208.2	6.3%	187.9	2.3%
Insurance companies	241.5	7.3%	248.8	3.0%
Mutual funds	225.1	6.8%	643.4	7.7%
State & local governments	289.8	8.8%	506.1	6.1%
Foreign holdings	835.2	25.3%	4,479.2	53.9%
Other (mostly individuals)	864.6	26.1%	1,092.5	13.1%
Total privately held	3,307.7	100.0%	8,311.1	100.0%
Memo:				
Total Debt:			14,270.0	
Held by FRS & IG accounts:			5,958.9	41.8%

Source: *U.S. Treasury Bulletin*, September 2011, Table OFS-2

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*.<sup>3</sup> 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
<b>Bills:</b>	Less than one year	4,13,26 and 52 weeks
<b>Notes:</b>	More than one to ten years	2,3,5,7,9 and 10*
<b>Bonds:</b>	20 to 30 years	30 years*
<b>Inflation Indexed:</b>	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.

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

“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

<sup>3</sup> (<http://www.treasurydirect.gov>).

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.

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

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 were extremely popular in the chaotic and uncertain summer and fall of 2011.

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 2011, the iShares **TLT** 20+ year Treasury Bond fund has average daily volume of over 15 million shares. The SPDR competitor **TLO** averaged around 20,000 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 \$9.31 trillion, was an increase from the previous year of \$1.24 trillion, 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!<sup>4</sup> 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.

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

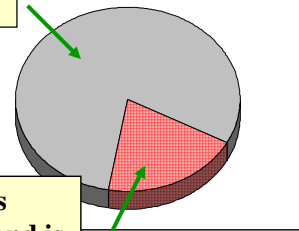
Mudd Finance

## 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.

80% is competitive bid



The other \$2 billion is non-competitive bid and is awarded at high bid.

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

<sup>4</sup> This admittedly confusing scenario will be explained mathematically in the next chapter.

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 than 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	Thursday, August 11, 2011	Monday, August 15, 2011	Thursday, August 18, 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	
<b>Holiday - Monday, September 05, 2011 - Labor Day</b>				
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	Thursday, September 08, 2011	Tuesday, September 13, 2011	Thursday, September 15, 2011	
30-Year BOND	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	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	Thursday, October 06, 2011	Wednesday, October 12, 2011	Monday, October 17, 2011	
30-Year BOND	Thursday, October 06, 2011	Thursday, October 13, 2011	Monday, October 17, 2011	
<b>Holiday - Monday, October 10, 2011 - Columbus Day</b>				
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	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	

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

# 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 <sup>1</sup>

<b>Term and Type of Security</b>	<b>9-Year 10-Month 2-1/8% Note</b> (Reopening)
<b>Offering Amount</b>	<b>\$21,000,000,000</b>
Currently Outstanding	\$45,735,000,000
<b>CUSIP Number</b>	<b>912828RC6</b>
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
<b>Yield</b>	<b>Determined at Auction</b>
<b>Interest Rate</b>	<b>2-1/8%</b>
<b>Interest Payment Dates</b>	<b>February 15 and August 15</b>
Accrued Interest from 08/15/2011 to 10/17/2011	\$3.63791 Per \$1,000
<b>Premium or Discount</b>	<b>Determined at Auction</b>
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 <sup>2</sup>	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 <sup>3</sup>	Yes
Noncompetitive Closing Time	12:00 Noon ET
Competitive Closing Time	1:00 p.m. ET

<sup>1</sup>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.

<sup>2</sup>Must be expressed as a yield with three decimals e.g., 7.123%.

<sup>3</sup>FIMA up to \$1,000 million in noncompetitive bids from Foreign and International Monetary Authority not to exceed \$100 million per account.



# 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  
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## TREASURY AUCTION RESULTS

Term and Type of Security	9-Year 10-Month Note	
CUSIP Number	912828RC6	
Series	E-2021	
<b>Interest Rate</b>	<b>2-1/8%</b>	
<b>High Yield<sup>1</sup></b>	<b>2.271%</b>	
Allotted at High	32.58%	
<b>Price</b>	<b>98.717572</b>	
Accrued Interest per \$1,000	\$3.63791	
Median Yield <sup>2</sup>	2.190%	
Low Yield <sup>3</sup>	2.097%	
Issue Date	October 17, 2011	
Maturity Date	August 15, 2021	
Original Issue Date	August 15, 2011	
Dated Date	August 15, 2011	
	<b>Tendered</b>	<b>Accepted</b>
Competitive	\$60,073,505,000	\$20,988,665,000
Noncompetitive	\$11,352,200	\$11,352,200
FIMA (Noncompetitive)	\$0	\$0
<b>Subtotal<sup>4</sup></b>	<b>\$60,084,857,200</b>	<b>\$21,000,017,200<sup>5</sup></b>
SOMA	\$0	\$0
<b>Total</b>	<b>\$60,084,857,200</b>	<b>\$21,000,017,200</b>
	<b>Tendered</b>	<b>Accepted</b>
Primary Dealer <sup>6</sup>	\$46,645,000,000	\$12,285,160,000
Direct Bidder <sup>7</sup>	\$4,325,005,000	\$1,350,005,000
Indirect Bidder <sup>8</sup>	\$9,103,500,000	\$7,353,500,000
<b>Total Competitive</b>	<b>\$60,073,505,000</b>	<b>\$20,988,665,000</b>

<sup>1</sup> All tenders at lower yields were accepted in full.

<sup>2</sup> 50% of the amount of accepted competitive tenders was tendered at or below that yield.

<sup>3</sup> 5% of the amount of accepted competitive tenders was tendered at or below that yield.

<sup>4</sup> Bid-to-Cover Ratio: \$60,084,857,200/\$21,000,017,200 = 2.86

<sup>5</sup> Awards to combined Treasury Direct systems = \$2,884,200.

<sup>6</sup> Primary dealers as submitters bidding for their own house accounts.

<sup>7</sup> Non-Primary dealer submitters bidding for their own house accounts.

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