Strengthening Treasury Direct

by

William J. Coffey, Ph.D., CPA
Professor Emeritus in Residence of Accounting
Lubin School of Business
Pace University
STRENGTHENING TREASURY DIRECT

By

William J. Coffey, Ph.D., CPA

William J. Coffey is Professor Emeritus in Residence of Accounting at the Lubin School of Business, Pace University.
Abstract

Wise investors in Treasury securities can deal directly with the Bureau of the Public Debt by opening a Treasury Direct account with a Federal Reserve Bank, thus avoiding charges imposed by banks and brokerage firms that frequently act as intermediaries for Treasury securities investors. Although there are several advantages to investing in Treasury securities, certain practices followed by the Federal Reserve Bank reduce interest rightfully due investors.

This paper cites examples of how the Federal Reserve Bank takes unfair advantage of its investors by avoiding full payment of interest. Investor record-keeping problems also arise when the Federal Reserve Bank reopens a previously issued security.

Recommendations are made for strengthening the Treasury Direct system, with specific suggestions for how to achieve fair treatment of investors.
THE TREASURY DIRECT SYSTEM

For several decades, investors have been permitted and encouraged to purchase Treasury bills, notes, and bonds from the United States Treasury (Bureau of the Public Debt) by establishing a Treasury Direct account with a regional Federal Reserve Bank that administers and services such accounts. These accounts have several advantages. Among them are the following: The U.S. Government guarantees Treasury issues and interest is exempt from state and local taxation; the Federal Reserve Bank charges no fees for opening a Treasury Direct account or for the purchase of bills, notes, and bonds; securities are held in book entry form and the purchase price is charged electronically to an investor’s bank account; interest payments are credited similarly; on request, the Federal Reserve will liquidate partially or fully an investor’s holdings in the secondary treasury market for a nominal fee of $34 per security; Treasury Direct holdings also may be transferred without charge to other financial institutions such as brokerage firms or banks if an investor requires trust account or other services; and conversely, investors may transfer Treasury securities held elsewhere into Treasury Direct accounts. There is an annual maintenance fee of only $25 on Treasury Direct accounts of $100,000 or more.

Treasury Direct Electronic Services has a toll-free telephone number (800-722-2678) for all Treasury Direct business. Callers can get information about their accounts or request a variety of Treasury forms, from opening an account to updating personal information. Standard recorded information on future and select past Treasury issues is also provided. Existing account holders can purchase new Treasury offerings or reinvest maturing securities. Treasury Direct also has a web site offering parallel services at www.treasurydirect.gov.

To encourage small investors, the Federal Reserve recently reduced its minimum investment requirement from $10,000 to $1,000 for the purchase of bills; previously only notes or bonds had such a minimum. On a weekly basis, the Federal Reserve issues thirteen- and twenty-six-week bills. Fifty-two-week bills once offered monthly and then reduced to quarterly are no longer offered, with March 1, 2001 being the last issue date. The Federal Reserve also issues cash management bills (CMBs) on an irregular schedule for varying periods to dealers and institutional investors. Two-year notes are offered monthly with five- and ten-year notes offered quarterly in February, May, August, and November. Ten-year inflation-indexed notes are offered semiannually in January and July. Bonds have maturities in excess of ten years with 30-year bonds scheduled each year on February 15 and August 15. Currently October 15 is the annual issue date for 30-year inflation-indexed bonds.

Bills are discounted, which permits an investor to pay less than face value, with interest (discount) received on the issue date and the face value paid at maturity; interest is taxed at maturity rather than when the bill is issued. Notes (two-, five- and ten-year) and thirty-year bonds pay interest semi-annually. With inflation-indexed notes and bonds, the interest rate remains fixed from the date of issue but the principal amount is adjusted periodically for inflation and paid at maturity. Interest payments are based on the inflation-adjusted principal at the time of semi-annual payments.
The Federal Reserve sometimes reopens a previously issued security. A note offering first issued on November 15, 1999, and due on November 15, 2004, was reopened on February 15, 2000, giving the reissued notes an outstanding period of four years, nine months, rather than five years.

PROBLEMS IDENTIFIED

All of the foregoing appears to be satisfactory for investors. However, for years the Federal Reserve has been underpaying its interest obligation by millions of dollars and in certain transactions over-reporting interest actually paid to investors. These practices occur in a variety of transactions:

1. Assume, for example, an investor purchased a two-year Treasury note, issued March 31, 1999, a Wednesday, with semi-annual interest payments due on Thursday, September 30, 1999; Friday, March 31, 2000; and Saturday, September 30, 2000; with the final payment of principal and interest due on March 31, 2001, a Saturday. Because the final maturity date falls on a Saturday, the Federal Reserve pays principal and interest on the next business day, April 2, 2001, without paying two days of additional interest rightly due to the investor. Although not usually consequential, the Federal Reserve also defers the interest payment due on Saturday, September 30, 2000, to Monday, October 2. This policy sharply contrasts with the Social Security Administration; if a payment date falls on a weekend or holiday, recipients are paid in advance if a delay of more than a day would result.

2. To continue this illustration, if this investor chooses to renew the Treasury note due on March 31, 2001, for an additional two years, the Federal Reserve correctly would add to the purchase price two days of interest (accrued interest) from March 31 to April 2, the settlement date. The first interest payment, due on September 30, 2001, a Sunday, and paid on Monday, October 1, would include repayment of accrued interest. But, as noted in the above example, accrued interest only works in favor of the Federal Reserve, not the investor.

3. Accounting for interest payments following the renewal of the two-year note creates further complications. The Treasury issues interest Form 1099 to report the entire amount of semi-annual interest paid in the calendar year 2001 without excluding accrued interest, a practice also followed by others. Unless the investor keeps sophisticated records and makes an accrued interest adjustment on his/her tax return, an overpayment of tax results.

4. Further complicating investor tax reporting is a reopening of a previously issued security. Cited above was a five-year note reopened for a period of four years, nine months. The first problem for the investor is accrued interest collected by the Federal Reserve from November 15, 1999, to February 15, 2000, the date of the reopening. The investor must pay three months accrued interest with the purchase of the note on February 15, 2000, and this amount is not excluded from interest Form 1099 that reports the May 15 and November 15 interest payments for the year 2000. As noted, an investor can make an adjustment on his/her tax return but additional record keeping adds to the tax preparation burden.
5. The price paid for a reopened security is based on current market rates, presenting another problem for the investor. Again using the four year, nine month example, the coupon rate on the original five-year issue of November 15, 1999, was 5 7/8 percent. On February 15, 2000, market rates had increased so the yield to investors was approximately 6 3/4 percent. This difference resulted in a purchase price below the note’s face value of about 3 1/2 percent and is referred to as Original Issue Discount (OID). Federal income tax rules allow this discount to be recognized (amortized) as income over a four-year, nine-month period or in the year of maturity. A sale before maturity complicates the investment further.

Table I (see Appendix), using straight line amortization, shows how interest would be recognized on a $100,000, 5/8 percent note, dated November 15, 1999, and reopened on February 15, 2000, with an original issue discount (OID) of $3,495 deducted from the $100,000 face value with three months accrued interest totaling $1,484.89 added to the price of the note. The net cost is $97,989.89 ($100,000 less $3,495 plus $1,489.89). Another choice available would be to report the entire $3,495 OID in 2004, the year of maturity, instead of ratably over four years, nine months.

Table II (see Appendix), in contrast, shows a four-year, nine-month newly issued note where coupon and market rates coincide. There is no accrued interest or original interest discount to complicate the transaction.

6. Unlike Treasury bills whose discount rate reflects the market rate, Treasury notes and bonds create additional problems for investors because these securities are issued in increments of $1,000 and carry coupon rates with 1/8 percent intervals although the effective rates of interest may differ. To adjust for the difference between these two rates, the Federal Reserve assigns a coupon rate at a 1/8 interval that is slightly below the effective rate, coupled with a reduction in the purchase price. As an example, a two-year Treasury note issued on June 30, 2000, that matures on June 30, 2002, was assigned a coupon rate of 6 3/8 but was issued with a market rate (effective rate) of 6.483 percent along with a .002 percent discount from face value. The investor paid 99.8 percent of face value to adjust for the difference between coupon and market interest rates. The reduction below par was .002 percent. According to tax regulations, if the discount on such a purchase is less than $25, then payment of the tax may be deferred until the year the note matures. Alternately, if the discount is $25 or more, then tax is paid in the year of purchase. In the above example, an investor who purchased a $10,000 two-year note would receive a discount of $20 and could postpone the payment of tax until 2002, the year of maturity. Alternately, a $20,000 investor in this same issue would receive a discount of $40 but would be required to pay the tax in 2000, the year of issue.

7. Treasury Direct issues selected 1099 forms. Interest Form 1099-INT reports discounts on Treasury bills and interest payments on notes and bonds. Proceeds from redemptions of notes and bonds are reported on Form 1099B. The Internal Revenue Service requires Form 1099-OID for reporting an original issue discount on notes and bonds. However, Treasury Direct only issues this form for inflation-indexed notes.
For the four-year, nine-month, $100,000 note shown in Table I, an investor would receive Form 1099-INT for the year 2000 showing interest of $5,677 (May 15 and November 15 payments of $2,837.50). There is no provision of Form 1099-INT to show accrued interest of $1,484.89. And, since this security is not an index-inflation note, Treasury Direct ignores Internal Revenue Service regulations and follows its own policy; the investor receives no Form 1099-OID showing an original issue discount of $3,495.

CONCLUSIONS AND RECOMMENDATIONS

In fairness to investors, the Bureau of the Public Debt could take steps to strengthen its performance by eliminating the current policy of underpaying interest and over-reporting interest on Form 1099. To pay exact interest for the full number of days the Federal Reserve Bank holds investor funds, issue and maturity dates should be adjusted to reflect both the actual issue date and actual due date of the note or bond. The Federal Reserve needs no crystal ball to determine whether issue dates and due dates fall on bank business days. In the example cited above, the two-year note issued on March 31, 1999, a Wednesday, and due on March 31, 2001, a Saturday, could have a due date of April 2, 2001, a Monday, the actual payment date, with interest computed and paid to that date. Since a renewal of this note does not settle until April 2, the date of issue could be the same, thus eliminating accrued interest on the issue date and paying interest for the exact number of days. Alternately, all issue and maturity dates could be set to fall on bank business days. At one time the Federal Reserve had a different policy when newly issued securities were scheduled for a weekend or holiday. The first semi-annual interest payment was reduced by the amount that is now collected as accrued interest; in these cases, there was no over-reporting of interest on Form 1099 and no need to make tax return adjustments for accrued interest, but this practice was abandoned and replaced with the current policy of collecting accrued interest on the settlement date. Establishing a policy where Treasury bills, notes, and bonds are issued and become due on bank business days would provide equitable treatment for all investors with either a maturing or a newly issued security.

The Treasury also should eliminate completely the 1/8 percent interval between coupon rates on Treasury notes and bonds and assign the effective rate as the coupon rate. This would eliminate all discounts and premiums that are collected when coupon rates differ from market rates. Face values in increments of $1,000 need not change.

In the current technological environment it is possible to depart from the arcane historical methods adopted by the Federal Reserve when computers were not available and adopt contemporary standards. If the NYSE can calibrate security prices using the decimal system, the Federal Reserve Bank could follow the example set by the private sector to enhance investor protection and equitable treatment.

There appears to be no logical reason to reopen an issue of securities, although this policy is being adopted more frequently. Two-, five- and ten-year notes along with thirty-year bonds could continue to be the norm unless economic conditions dictate otherwise. However, if the Treasury needs the flexibility of a four-year, nine-month note, or some other period, then it should adopt its practice of varying issue dates and durations for all its securities that now apply only to cash management bills. Newly issued notes and bonds should be issued at par value with the market rate as the coupon rate. Previously issued notes and bonds should not be reopened;
this would eliminate tax reporting problems associated with accrued interest and original issue discount identified in Table I. As shown in Table II, the semi-annual interest would need no accrued interest adjustment for proper tax reporting. Issuing new notes or bonds with interest rates congruent with market rates would significantly enhance record keeping and simplify tax return preparation. Treasury Direct account reporting information would be greatly improved.

The U.S. Treasury has encouraged small investors by reducing to $1,000 the minimum required for Treasury Direct investments. Providing toll-free telephone access and a web site further stimulates small investors. By changing a few of its traditional practices, a Treasury Direct account would become more fair and user friendly; investors, the Internal Revenue Service, and the Federal Reserve Bank would all benefit. Fair treatment for investors is a mandate of the Securities and Exchange Commission (SEC); Treasury Direct should follow suit.
TABLES I AND II

These tables contrast the differences between the currently complicated record-keeping required when the Treasury reopens a previously issued security that requires the investor to account for both an original issue discount and the payment of accrued interest and a simplified security issue without original issue discount or accrued interest. The simplified method achieves the same objective without record-keeping complications.

**TABLE I**

Table I shows amortization of original issue discount, semi-annual interest received, accrued interest, and reportable interest income for a five-year note reissued for a four year, nine month period. The note has a coupon rate of 5 7/8 percent. Because the market rate increased to 6.741 percent, the investor received a discount of $3495.00 but was also required to pay $1,484.89 for accrued interest from the November 15, 1999, original issue date to the February 15 reopening date.

<table>
<thead>
<tr>
<th>Face or Par Value</th>
<th>Original Issue Discount</th>
<th>Accrued interest (11/15/99-02/15/00)</th>
<th>Net Cost</th>
<th>Coupon (stated) interest rate</th>
<th>Semi-annual interest (5/15 &amp; 11/15)</th>
<th>Years outstanding</th>
</tr>
</thead>
</table>

- Original Issue Discount
- Accrued interest (11/15/99-02/15/00)
- Net Cost
- Coupon (stated) interest rate
- Semi-annual interest (5/15 & 11/15)
- Years outstanding
<table>
<thead>
<tr>
<th>OID</th>
<th>Interest</th>
<th>Accumulated Interest</th>
<th>Date</th>
<th>Book Value</th>
<th>Amortization</th>
<th>Payment</th>
<th>Interest Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>183.95</td>
<td>1,536.56</td>
<td>367.90</td>
<td>3,205.40</td>
<td>367.90</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
367.85

3,205.35

Totals
3495.00

30,385.11*
TABLE II

The following table shows a newly issued $97,000 bond with a coupon and effective rate of 6.741 percent. There are no OID, accrued interest, or income tax reporting problems. Both the issue date (February 15, 2000) and the maturity date (November 15, 2004) are bank business days. Two of the interest payments fall on Saturdays, November 15, 2003 and May 15, 2004. To follow Social Security Administration practice, interest could be paid the previous Friday to prevent a two-day delay.

<table>
<thead>
<tr>
<th>Date</th>
<th>Face Value</th>
<th>Interest Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-Feb-00</td>
<td>96,000</td>
<td></td>
</tr>
<tr>
<td>15-May-00</td>
<td>96,000</td>
<td>1,617.84</td>
</tr>
<tr>
<td>15-Nov-00</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-May-01</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-Nov-01</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-May-02</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-Nov-02</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-May-03</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-Nov-03</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-May-04</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>15-Nov-04</td>
<td>96,000</td>
<td>3,235.68</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>30,738.96*</td>
</tr>
</tbody>
</table>

* The difference between the total interest in Table I and Table II results from using a rounded $96,000 face value. There are also slight computational differences when OID and accrued interest are factored in.