

## Zero Coupon Bond Investments

March 8, 2001

Most investments in treasury securities are reflected at par value with a separate line for unrealized discount on the FMS 2108 as prescribed in the Treasury Financial Manual (TFM) volume 1, part 2, chapter 4200, appendix 1. The exception is investment in treasury zero coupon bonds which are reported at par and adjusted to market value on the FMS 2108. The market value adjustment is necessary to meet the Department of Treasury policy for scoring zero coupon bond investments against the debt subject to limit, the statutory ceiling of the amount of U.S. debt outstanding. It was agreed that the market value basis was preferable to the par value basis for scoring zero coupon bonds against the debt subject to limit because scoring these securities at par would adversely affect the debt subject to limit.

Each month the Department of Treasury provides the market value adjustment to the agencies. The agencies are to report the adjustment on their SF 224 Statement of Transactions. If the market value increases, the agency reports the following on the SF 224:

<u>Column 1 - TAFS</u>	<u>Column 2- Receipts</u>
(72) 89X5227	1,000 Credit
89X5227.2	1,000

If the market value decreases, the agency reports the following on the SF 224:

<u>Column 1 - TAFS</u>	<u>Column 2- Receipts</u>
(72) 89X5227	1,000
89X5227.2	1,000 Credit

The subclass (72) represents discount on treasury zero coupon bonds. Subclass (72) activity corresponds to .931 on the FMS 2108. The point .2 account is a receipt account for earnings on investments.

On the FMS 2108, the par value of the zero is reflected as investments in Treasury securities as 971 activity. The discount and the market value adjustments are reflected as unamortized discount designated as .931 activity.

**Five SGL accounts are proposed to capture the activity for investment in zero coupon bonds.**

**Account Title:** Investments in U.S. Zero Coupon Bonds Issued by Public Debt  
**Account Number:** 1630  
**Normal Balance:** Debit

**Definition:** The par value of U.S. Treasury zero coupon bonds issued by the Bureau of Public Debt.

**Account Title:** Discount on U.S. Zero Coupon Bonds Issued by Public Debt  
**Account Number:** 1631  
**Normal Balance:** Credit

**Definition:** The full discount of U. S. treasury zero coupon bonds issued by the Bureau of Public Debt and held by an agency.

**Account Title:** Amortization of Discount U.S. Zero Coupon Bonds Issued by Public Debt  
**Account Number:** 1633  
**Normal Balance:** Either

**Definition:** The amortization amount of discounts on U.S. zero coupon bonds issued by the Bureau of Public Debt and held by an agency. In the FACTS II database, the normal balance assigned to this account is “debit”.

**Account Title:** Market Adjustment – Investments in Zero Coupon Bonds  
**Account Number:** 1638  
**Normal Balance:** Either

**Definition:** The accumulated unrealized holding gains and losses for zero coupon bond investments due to adjustments to market value. In the FACTS II database, the normal balance assigned to this account is “debit”

**Account Title:** Contra Market Adjustment – Investments in Zero Coupon Bonds  
**Account Number:** 1639  
**Normal Balance:** Either

**Definition:** The offset to market adjustments for investments in zero coupon bonds. The account provides a mechanism for zero coupon bonds to be reported on a basis other than market value on the balance sheet.

## Zero Coupon Bond Investments

The following scenario reflects investment activity for a special or trust fund. The fund collects receipts that are available for investment but not obligation. If funds are available for obligation, use the appropriate SGL account in place of SGL 4394.

<p>1. Trial balance prior to investment.</p> <p>Revenue is classified as exchange</p>	<p><u>Budgetary</u></p> <p>4114 Appropriated Trust or Special Fund Receipts \$60,000,000</p> <p>4394 Receipts Not Available for Obligation Upon Collection \$60,000,000</p> <p><u>Proprietary</u></p> <p>1010 Fund Balance with Treasury \$60,000,000</p> <p>5900 Other Revenue \$60,000,000</p>
<p>2. Invests in a Treasury zero coupon bond (non-marketable, market based). The par value is \$200,000,000 and the discount is \$180,000,000.</p> <p>TC B128</p>	<p><u>Budgetary</u></p> <p>None</p> <p><u>Proprietary</u></p> <p><b>1630 Investments in U.S. Zero Coupon Bonds Issued by Public Debt \$ 200,000,000</b></p> <p><b>1631 Discount on U.S. Zero Coupon Bonds Issued by Public Debt \$ 180,000,000</b></p> <p>1010 Fund Balance with Treasury \$ 20,000,000</p>

<p>3. A Treasury note (non-marketable, market based) is purchased. The par value is \$9,000,000 and the discount is \$1,500,000.</p> <p>TC B128</p>	<p><u>Budgetary</u> None</p> <p><u>Proprietary</u> 1610 Investments in U.S. Securities Issued by Public Debt \$ 9,000,000 1611Discount on U.S. Securities Issued by Public Debt \$ 1,500,000 1010 Fund Balance with Treasury \$ 7,500,000</p>
<p>4. The Treasury zero coupon bond is adjusted to \$25,000,000, the current market value based on information provided monthly from the Department of Treasury.</p> <p>New TC is needed</p> <p>Note: The budgetary entry in transaction #4 is being discussed with OMB and Treasury. Based on the outcome of those discussions, the budgetary entry may change or be eliminated.</p>	<p><u>Budgetary</u> 4114 Appropriated Trust or Special Fund Receipts \$ 5,000,000 4394 Receipts Not Available for Obligation Upon Collection \$ 5,000,000</p> <p><u>Proprietary</u> <b>1638 Market Adjustment – Investments in Zero Coupon Bonds \$ 5,000,000</b> <b>1639<sup>1</sup> Contra Market Adjustment - Investments in Zero Coupon Bonds \$5,000,000</b></p>
<p>5. At year end the discount on the zero coupon bond is amortized. SFFAS No. 1 requires agencies to use the interest method (paragraph 71).</p> <p>TC 510</p>	<p><u>Budgetary</u> None</p> <p><u>Proprietary</u> <b>1633 Amortization of Discount U.S. Zero Coupon Bonds Issued by Public Debt \$ 9,000,000</b> 5310 Interest Revenue \$ 9,000,000</p>

<sup>1</sup> If the zero coupon bond is reported at market value on the balance sheet, SGL account 7180 Unrealized Gains – Investments may be used in place of SGL 1639 in transaction #4. If the market value decreases, use SGL 7280 Unrealized Losses – Investments.



7. Pre closing adjusted trial balance	<p><u>Budgetary</u></p> <p>4114 Appropriated Trust or Special Fund Receipts \$65,000,000</p> <p>4394 Receipts Not Available for Obligation Upon Collection \$65,000,000</p> <p><u>Proprietary</u></p> <p>1010 Fund Balance with Treasury \$ 32,500,000</p> <p>1610 Investments in U.S. Securities Issued by Public Debt \$ 9,000,000</p> <p>1611 Discount in U.S. Securities Issued by Public Debt \$ 1,500,000</p> <p>1613 Amortization of Discount and Premium on U.S. Treasury Securities Issued by Public Debt \$ 150,000</p> <p><b>1630 Investments in U.S. Zero Coupon Bonds Issued by Public Debt \$200,000,000</b></p> <p><b>1631 Discount in U.S. Zero Coupon Bonds Issued by Public Debt \$180,000,000</b></p> <p><b>1633 Amortization of Discount on U.S. Zero Coupon Bonds Issued by Public Debt \$ 9,000,000</b></p> <p><b>1638 Market Adjustment - Investments in Zero Coupon Bonds \$ 5,000,000</b></p> <p><b>1639 Contra Market Adjustment - Investments in Zero Coupon Bonds \$ 5,000,000</b></p> <p>5310 Interest Revenue \$ 9,150,000</p> <p>5900 Other Revenue <u>\$ 60,000,000</u></p> <p>\$255,650,000 \$255,650,000</p>
8. Closing entries	<p><u>Budgetary</u></p> <p>4201 Total Actual Resources Collected \$65,000,000</p> <p>4114 Appropriated Trust or Special Fund Receipts \$65,000,000</p> <p><u>Proprietary</u></p> <p>5310 Interest Revenue \$ 9,150,000</p> <p>5900 Other Revenue \$60,000,000</p> <p>3310 Cumulative Results of Operations \$69,150,000</p>





10. Balance Sheet	<table> <tr> <td colspan="3">Assets</td> </tr> <tr> <td>1010</td> <td></td> <td>\$ 32,500,000</td> </tr> <tr> <td colspan="3">Investments</td> </tr> <tr> <td>1610</td> <td>\$ 9,000,000</td> <td></td> </tr> <tr> <td>1611</td> <td>\$ 1,500,000)</td> <td></td> </tr> <tr> <td>1613</td> <td>\$ 150,000</td> <td></td> </tr> <tr> <td><b>1630</b></td> <td><b>\$200,000,000</b></td> <td></td> </tr> <tr> <td><b>1631</b></td> <td><b>\$(180,000,000)</b></td> <td></td> </tr> <tr> <td><b>1633</b></td> <td><b>\$ 9,000,000</b></td> <td></td> </tr> <tr> <td><b>1638</b></td> <td><b>\$ 5,000,000</b></td> <td></td> </tr> <tr> <td><b>1639</b></td> <td><b>\$ (5,000,000)</b></td> <td></td> </tr> <tr> <td></td> <td></td> <td><u>\$ 36,650,000</u></td> </tr> <tr> <td>Total assets</td> <td></td> <td><u>\$ 69,150,000</u></td> </tr> <tr> <td colspan="3">Net position</td> </tr> <tr> <td><u>3310</u></td> <td></td> <td><u>\$69,150,000</u></td> </tr> <tr> <td></td> <td></td> <td><u>\$69,150,000</u></td> </tr> </table>	Assets			1010		\$ 32,500,000	Investments			1610	\$ 9,000,000		1611	\$ 1,500,000)		1613	\$ 150,000		<b>1630</b>	<b>\$200,000,000</b>		<b>1631</b>	<b>\$(180,000,000)</b>		<b>1633</b>	<b>\$ 9,000,000</b>		<b>1638</b>	<b>\$ 5,000,000</b>		<b>1639</b>	<b>\$ (5,000,000)</b>				<u>\$ 36,650,000</u>	Total assets		<u>\$ 69,150,000</u>	Net position			<u>3310</u>		<u>\$69,150,000</u>			<u>\$69,150,000</u>
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12. Statement of Changes in Net Position	1. Net cost 2. financing Sources 3. Net results of operations (Calc 2-1) 4. Prior period adjustments 5. Net change in cum. Results of operations (Calc 3+/-4) 6. Increase (decrease) in unexpended appro- priations 7. Change in net position (Calc 5+/-6) 8. Net position, beginning of period 9. Net position, end of period (Calc 7+8)		\$(69,150,000) NA \$ 69,150,000 <u>NA</u> \$ 69,150,000 NA \$ 69,150,000 <u>NA</u> \$ 69,150,000																																
13. FMS 2108	<table border="1"> <thead> <tr> <th data-bbox="781 613 1045 636"><u>Col. 1</u></th> <th data-bbox="1054 613 1255 636"><u>Col. 2</u></th> <th data-bbox="1264 613 1528 636"><u>Col. 5</u></th> <th data-bbox="1537 613 1738 636"><u>Col. 6</u></th> <th data-bbox="1747 613 1917 636"><u>Col. 11</u></th> </tr> </thead> <tbody> <tr> <td data-bbox="781 643 1045 701">89X5227</td> <td data-bbox="1054 643 1255 701">\$32,500,000</td> <td data-bbox="1264 643 1528 701">\$32,500,000 SGL 1010</td> <td data-bbox="1537 643 1738 701"></td> <td data-bbox="1747 643 1917 701">\$65,000,000 SGL 4394</td> </tr> <tr> <td data-bbox="781 766 1045 889">89X5227.971</td> <td data-bbox="1054 766 1255 889">\$209,000,000</td> <td data-bbox="1264 766 1528 889"></td> <td data-bbox="1537 766 1738 889">\$ 9,000,000 SGL 1610 <b>\$200,000,000</b> <b>SGL 1631</b></td> <td data-bbox="1747 766 1917 889"></td> </tr> <tr> <td data-bbox="781 954 1045 1013">89X5227.911</td> <td data-bbox="1054 954 1255 1013">\$(1,500,000)</td> <td data-bbox="1264 954 1528 1013"></td> <td data-bbox="1537 954 1738 1013">\$(1,500,000) SGL 1611</td> <td data-bbox="1747 954 1917 1013"></td> </tr> <tr> <td data-bbox="781 1078 1045 1185">89X5227.931</td> <td data-bbox="1054 1078 1255 1185">\$(175,000,000)</td> <td data-bbox="1264 1078 1528 1185"></td> <td data-bbox="1537 1078 1738 1185"><b>\$(180,000,000)</b> <b>SGL 1631</b> <b>\$ 5,000,000</b> <b>SGL 1638</b></td> <td data-bbox="1747 1078 1917 1185"></td> </tr> <tr> <td data-bbox="781 1286 1045 1334">TOTALS</td> <td data-bbox="1054 1286 1255 1334"></td> <td data-bbox="1264 1286 1528 1334">\$32,500,000 +</td> <td data-bbox="1537 1286 1738 1334">\$32,500,000 =</td> <td data-bbox="1747 1286 1917 1334">\$65,000,000</td> </tr> </tbody> </table>					<u>Col. 1</u>	<u>Col. 2</u>	<u>Col. 5</u>	<u>Col. 6</u>	<u>Col. 11</u>	89X5227	\$32,500,000	\$32,500,000 SGL 1010		\$65,000,000 SGL 4394	89X5227.971	\$209,000,000		\$ 9,000,000 SGL 1610 <b>\$200,000,000</b> <b>SGL 1631</b>		89X5227.911	\$(1,500,000)		\$(1,500,000) SGL 1611		89X5227.931	\$(175,000,000)		<b>\$(180,000,000)</b> <b>SGL 1631</b> <b>\$ 5,000,000</b> <b>SGL 1638</b>		TOTALS		\$32,500,000 +	\$32,500,000 =	\$65,000,000
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16. Schedule P Program and Financing	<table> <tr> <td>1000 Total new obligations</td> <td>4801E-B + 4902E</td> <td>\$0</td> </tr> <tr> <td colspan="3">Budgetary resources available for obligation</td> </tr> <tr> <td>2200 new budget authority</td> <td></td> <td>\$0</td> </tr> <tr> <td>2395 Total new obligations (-)</td> <td></td> <td>\$0</td> </tr> <tr> <td>2440 Unobligated balance available, end of year</td> <td></td> <td>\$0</td> </tr> <tr> <td colspan="3"><u>New budgetary authority (gross) detail</u></td> </tr> <tr> <td colspan="3">Discretionary:</td> </tr> <tr> <td>4020 Appropriation</td> <td>4114E</td> <td>\$65,000,000</td> </tr> <tr> <td></td> <td>- 4394 E-B</td> <td>\$(65,000,000)</td> </tr> <tr> <td colspan="3"><u>Change in unpaid obligations</u></td> </tr> <tr> <td>7240 Obligated balance, start of year</td> <td></td> <td>\$0</td> </tr> <tr> <td>7299 Total unpaid obligations, start of year</td> <td></td> <td>\$0</td> </tr> <tr> <td>7310 Total new obligations</td> <td></td> <td>\$0</td> </tr> <tr> <td>7320 Total outlays (gross) (-)</td> <td></td> <td>\$0</td> </tr> <tr> <td>7440 Obligated balance, end of year</td> <td></td> <td>\$0</td> </tr> <tr> <td colspan="3"><u>Outlays (gross), detail</u></td> </tr> <tr> <td>8690 Outlays from new discretionary authority</td> <td></td> <td>\$0</td> </tr> <tr> <td>8693 Outlays from discretionary balances</td> <td></td> <td>\$0</td> </tr> <tr> <td>8700 Total outlays (gross)</td> <td></td> <td>\$0</td> </tr> <tr> <td colspan="3"><u>Memorandum</u></td> </tr> <tr> <td>9201 Total investments, start of year</td> <td></td> <td>\$0</td> </tr> <tr> <td>9202 Total investments, end of year</td> <td></td> <td>\$ 209,000,000</td> </tr> </table>	1000 Total new obligations	4801E-B + 4902E	\$0	Budgetary resources available for obligation			2200 new budget authority		\$0	2395 Total new obligations (-)		\$0	2440 Unobligated balance available, end of year		\$0	<u>New budgetary authority (gross) detail</u>			Discretionary:			4020 Appropriation	4114E	\$65,000,000		- 4394 E-B	\$(65,000,000)	<u>Change in unpaid obligations</u>			7240 Obligated balance, start of year		\$0	7299 Total unpaid obligations, start of year		\$0	7310 Total new obligations		\$0	7320 Total outlays (gross) (-)		\$0	7440 Obligated balance, end of year		\$0	<u>Outlays (gross), detail</u>			8690 Outlays from new discretionary authority		\$0	8693 Outlays from discretionary balances		\$0	8700 Total outlays (gross)		\$0	<u>Memorandum</u>			9201 Total investments, start of year		\$0	9202 Total investments, end of year		\$ 209,000,000
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18. Statement of Financing	1F. Exchange revenue not in budget 5900E	\$(60,000,000)
	3A. Depreciation and amortization 1613 subtract net debit balance	\$ (150,000)
	<b>1633 subtract net debit balance</b>	<b><u>\$(9,000,000)</u></b>
	5. Net cost	\$(69,150,000)