Amortization of Bond Premium: Effective Interest Method

The amortization of bond premium is best achieved through the effective interest method. (If the amount of bond premium is not significant, the simpler straight-line method of amortization is acceptable. See **Form D8**.) With either method of amortization, a bond's book value is always moving to the bond's face or maturity amount. The reason is that the balance in the account Bond Premium is being reduced to zero over the life of the bond.

The advantage of the effective interest method is that the amount of each accounting period's interest expense is directly related to the bond's book value at the start of each accounting period.

Our form assumes that the bond's interest expense and amortization of the bond discount will be recorded on the dates of the interest payments.

The example below assumes that a bond with a stated interest rate of 9% and a face value of $100,000 is issued on January 1, 2023. The bond pays interest on each June 30 and December 31 and matures in 5 years. The market interest rate at the time of issuance was 8%, which resulted in the bond selling for $104,055.45 on its issue date.

A	B	C	D	E	F	G
Date	**Interest Payment**	**Interest Expense**	**Amortization of Premium**	Balance in *Bond Premium*	Balance in *Bonds Payable*	**Book Value of Bonds**
Amounts at Issue Date:						
Jan 1, 2023				*$ 4,055.45*	*$ 100,000.00*	*$ 104,055.45*
Amounts at Semiannual Interest Dates:						
Jun 30, 2023	*$ 4,500.00*	*$ 4,162.22*	*$ 337.78*	*$ 3,717.67*	*$ 100,000.00*	*$ 103,717.67*
Dec 31, 2023	*4,500.00*	*4,148.71*	*351.29*	*3,366.37*	*100,000.00*	*103,366.37*
Jun 30, 2024	*4,500.00*	*4,134.65*	*365.35*	*3,001.03*	*100,000.00*	*103,001.03*
Dec 31, 2024	*4,500.00*	*4,120.04*	*379.96*	*2,621.07*	*100,000.00*	*102,621.07*
Jun 30, 2025	*4,500.00*	*4,104.84*	*395.16*	*2,225.91*	*100,000.00*	*102,225.91*
Dec 31, 2025	*4,500.00*	*4,089.04*	*410.96*	*1,814.95*	*100,000.00*	*101,814.95*
Jun 30, 2026	*4,500.00*	*4,072.60*	*427.40*	*1,387.55*	*100,000.00*	*101,387.55*
Dec 31, 2026	*4,500.00*	*4,055.50*	*444.50*	*943.05*	*100,000.00*	*100,943.05*
Jun 30, 2027	*4,500.00*	*4,037.72*	*462.28*	*480.77*	*100,000.00*	*100,480.77*
Dec 31, 2027	*4,500.00*	*4,019.23*	*480.77*	*-*	*100,000.00*	*100,000.00*
Totals	*$ 45,000.00*	*$ 40,944.55*	*$ 4,055.45*			

Calculation of Amounts at Semiannual Interest Dates:

	Bond's stated interest rate x face amount x 1/2 year	Effective/market interest rate x book value of bonds at the beginning of the period x 1/2 year	Column B minus Column C	Previous credit balance in *Bond Premium* in Column E minus the debit amount in Column D	The credit balance in Column F plus the credit balance in Column E
Jun 30, 2023	9%x100000x1/2	8%x104055.45x1/2	4500.00-4162.22	4055.45-337.78	100000.00+3717.67
Dec 31, 2023	9%x100000x1/2	8%x103717.67x1/2	4500.00-4148.71	3717.67-351.29	100000.00+3366.37
Jun 30, 2024	9%x100000x1/2	8%x103366.37x1/2	4500.00-4134.65	3366.37-365.35	100000.00+3001.03

Journal entry at June 30, 2023:

Interest expense	*4,162.22*	
Bond Premium	*337.78*	
Cash		*4,500.00*

For a blank form see **Form D7**.

Learn more about bonds payable at www.AccountingCoach.com.