Discount and premium scenarios

Sometimes underwriters sells bonds at price little below the face value of bond, if bonds are being sold below the face value of bond we say that bonds are selling at discount.

When bonds are issued, the borrower records a liability equal to the *amount received.*

Note:

If bonds are selling at discount or premium, these bonds always redeem at their face

But if bonds are issued at discount

1. Means company is receiving amount less than face value.
2. And at the time of maturity company will pay back the amount equal to face value.

Let take a simple example to understand the scenario:

For example company is issuing bonds which have face value of Rs. 100. But company is issuing bonds at discount of 5 percent means issuing for Rs. 95

It means at the time of issuing the liability of company is Rs. 95 but at the time of redemption because company has to pay full amount 100 rupees back, so the liability at the time of redemption will be Rs. 100.

So what is happening in this case?

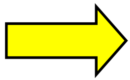
At the beginning liability is Rs. 95 but at the maturity liability to pay back is Rs. 100

Conclusion: when a company issues bonds at discount it liability gradually increases up to the face value of bonds.

Now we shall look into the matter, how in accounting we increase this liability over time:

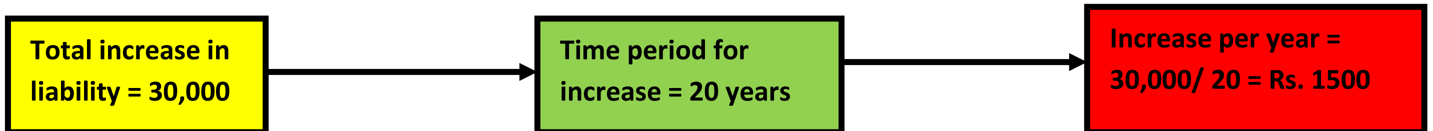
Illustration:

Suppose on March 1, 2011 Waleed limited company sells Rs. 1 million of 12 percent, 20-year bonds payable to an underwriter at a price of *97* (meaning that the bonds were sold to the underwriter at 97 percent of their face value).



On March 1, 2011, Waleed limited receives $970,000 cash from the underwriter and records a *net* liability of this amount. Because liability is always recorded for the amount company actually receives.

When these bonds mature in 20 years, however, Waleed limited will owe its bondholders the *full* Rs. 1 million face value of the bond issue. Thus, the company's liability must somehow be *increased* by Rs. 30,000 over the 20 years that the bonds are outstanding.



Accounting for Bonds issued at discount:

At the time of issuance of Bonds: Journal Entry

Date	Details	Debit	Credit
1st March 2011	Cash Discount on bonds payable Bonds payable	970,000 30,000	 1,000,000

At the date of issuance this liability will appear in balance sheet in the following way.

Long Term liabilities:
Bonds payable ……………………………….1,000,000
Less: Discount on Bonds payable ……….30,000
Net carrying value of Bonds payable ….. 970,000

So the net carrying value 970,000 of bonds payable is the actual liability of company at the time of issuance of Bonds

As we have learned that now the liability is 970,000 but at the time of maturity it will be 1,000,000 means 30,000 more than it is today. So these 30,000 are the cost for company which will gradually increase over the life of bonds payable. So companies put this cost into interest expense and pass an adjusting entry with each interest payment to convert this discount into interest expense.

Keep in mind that the portion of discount being converted into interest expense with each interest payment will actually not paid by the company, but it is just an accounting treatment to decrease discount and increase bonds payable liability over time.

Journal entry on 1st September at interest payment

Before passing this journal entry we need to do this working

Semi annually interest payment 60,000

[1,000,000 x 0.12 x 6/12]

Add: semi-annual amortization of bonds discount..... 750

[30,000 / 20 = 1500 → 1500x 6/12= 750]

Semi-annual interest expense 60750

Date	Details	Debit	Credit
1st Sep 2011	Bonds interest expense	60750	
	Cash		60,000
	Discount on bonds payable		750

T- Account of Discount on bonds payable

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30,000	750
Balance: 29250	

What if we show the liability here?

Long Term liabilities:
Bonds payable 1,000,000
Less: Discount on Bonds payable 29250
Net carrying value of Bonds payable 970,750

So the net carrying value 970,750 of bonds payable is the actual liability of company after 1st interest payment and this liability will gradually this way with each interest payment

Now after 4 months from 1st September at year closing we shall make an adjustment in following way:

First of all we need to calculate accrued interest for four months and than we shall add amortization of bond discount for four months.

Before passing this journal entry we need to do this working

4 month accrued interest payable 40,000

[1,000,000 x 0.12 x 4/12]

Add: 4 month amortization of bonds discount........... 500

[30,000 / 20 = 1500 → 1500x 4/12= 750]

4 Month accrued expense 40500

Date	Details	Debit	Credit
31st Dec 2011	Bonds interest expense	40,500	
	Bonds Interest payable		40,000
	Discount on bonds payable		500

Now after 2 months on 1st March we shall pass following journal entry

Before passing this journal entry we need to do this working

2 months interest payment 20,000

[1,000,000 x 0.12 x 2/12]

Add: 2 months amortization of bonds discount....... 250

[30,000 / 20 = 1500 → 1500x 2/12= 250]

2 month interest expense 20250

Date	Details	Debit	Credit
31st Dec 2011	Bonds interest expense	20250	
	Bonds interest payable	40,000	
	Cash [1,000,000 x 0.12 x 6/12]		60,000
	Discount on bonds payable		250

After 20 year we shall pass the following journal entry after the entry of 1st March

Date	Details	Debit	Credit
1st March 2031	Bonds Payable Cash	1,000,000	 1,000,000

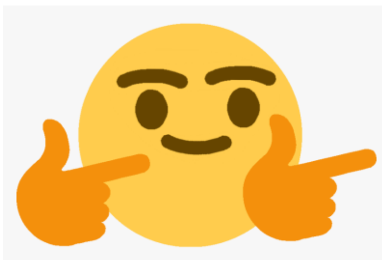
After going through detailed discussion of how to increase liability over time when a company issues bonds at discount:

Now we shall look into the details what happen if company issues bonds at premium. It is very easy to understand now because the matter with premium is exactly opposite to the matter with discount. So following changes will be made when we solve for premium.

- In discount at issuance liability is less and we increase it over time but in premium liability is more in beginning and we decrease liability over time.
- In discount we increase liability and add the amount in the head of interest expense but in premium because we need to reduce liability se we subtract into interest expense.
- All places where discount was being added premium will be subtracted.
- All places where discount was debit premium will be credit
- All places where discount was credit premium will be debit.

Home Assignment: Suppose on April 1, 2011 Waleed limited company sells Rs. 1 million of 18 percent, 20-year bonds payable to an underwriter:

a) Pass all necessary journal entries and do working if bonds are selling at discount of 4 percent
b) Pass all necessary journal entries and do working if bonds are selling at premium of 5 percent



We shall take a mere look into the case of premium from book, you will find it very easy after learning the case of discount because it is just opposite to discount