

Long-term Financing

- Capital or Long-term Liability
- advantages of raising capital
 - capital stock is not paid back by the entity
 - dividends are distributed only if the entity has enough income and cash
- advantages of long-term liabilities :
 - Shareholder Control
 - Tax Effects: Interest payments on liabilities are tax deductible
 - Financial leverage: Financial leverage or trading on equity means using borrowed money to increase the rate of return to the shareholders

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Types of Long Term Liabilities

- Bank Loans
 - grace period
- Bonds Issued-
 - bond indenture
 - bond certificate
 - interest paid: quarterly, semi-annually or annually
- Consumer Loans
- Lease Obligations

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Types of Bonds

- Time or Serial Bonds
- Callable Bonds
- Registered or Bearer Bonds
- Convertible Bonds

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Bond terminology

- **Stated rate or coupon rate or nominal rate** = contractual rate written on the face of the bond
- **Face value or nominal value** = value written on the face of the note
- **Maturity date** = date when the bonds will be paid
- **Life of the bond** = duration of the bond
- **Maturity value** = nominal value
- **Market rate or effective rate of interest or yield** = prevalent rate on the market; usually the risk free rate or the next best investment or borrowing alternative rate

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Stated Interest and Market Interest Rate

Stated Interest Rate = Market Interest Rate

Bond is sold at Par

Stated Interest Rate < Market Interest Rate

Bond is sold at Discount

Stated interest Rate > Market Interest Rate

Bond is Sold at Premium

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Price Determination

Sumatek Corp. decided to issue TL100.000 bonds with a stated interest rate of 11% maturing in 5 years.

The interest is payable semiannually on 30 June and 31 December of each year. Interest paid every six months is $TL \frac{11.000}{2} = TL 5.500$.

If the market rate on 1 January 2007, was 12%

Present Value of the Maturity Value (Principal) ($100.000 \times 0,558$; $n=10$ $i=6\%$)(Table 1)	= TL 55.800
Present Value of Interest Payments ($5.500 \times 7,360$; $n=10$ $i=6\%$)(Table 2)	= <u>40.480</u>
Price of the Bond	TL 96.280

If the market rate on 1 January 2007, was 10%

Present Value of the Maturity Value (Principal) ($100.000 \times 0,614$; $n=10$ $i=5\%$)(Table 1)	= TL 61.400
Present Value of Interest Payments ($5.500 \times 7,722$; $n=10$ $i=5\%$)(Table 2)	= <u>42.471</u>
Price of the Bond	TL 103.871

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Bond Interest Expense

	Bonds Sold at Discount	Bonds Sold at Par	Bonds Sold at Premium
Principal Payment at Maturity	TL 100.000	TL 100.000	TL 100.000
Total Interest Paid in Cash ($TL 100.000 \times 11\% \text{ year} \times 5$ years)	55.000	55.000	55.000
Total Cash Payments until Maturity	TL 155.000	TL 155.000	TL 155.000
Total Cash Received at the Issue Date	96.280	100.000	103.871
Total Interest Expense of the Bond Issue	TL 58.720	TL 55.000	TL 51.129

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Bonds issued at par

- Sumatek Corp. , TL100.000 bonds, 11%, 5yrs

Date	Account Title and Description	Debit	Credit
1-Jan-07	Cash	100.000	
	Bonds Payable		100.000
	To record bonds issued at par		

30 June 2007 , the first interest payment date, the Company will pay TL5.500

Date	Account Title and Description	Debit	Credit
30-Jun-07	Interest Expense	5.500	
	Cash		5.500
	To record interest paid on bonds		

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Accounting for Discounts on Bonds Payable

The market interest rate on 1 January 2007 - 12% and the TL 100.000 bonds were issued at TL 96.280 or at 96.28

Date	Account Title and Description	Debit	Credit
1-Jan-07	Cash	96.280	
	Unamortized Bond Discount	3.720	
	Bonds Payable		100.000
To record bonds issued at market rate of			

partial balance sheet of Sumatek Corp. after the issue of the bonds will show

Partial Balance Sheet / Long-term Liabilities	
Bonds Payable	TL 100.000
Less: Unamortized Bond Discount	3.720
Net Bonds Payable (Outstanding Debt)	96.280

Accounting for Bonds- Discount

Principal Payment at Maturity	TL 100.000
Total Interest Paid in Cash (100.000*11%*5)	<u>55.000</u>
Total Cash Payments until Maturity	TL 155.000
Total Cash Received at the Issue Date	<u>96.280</u>
Total Interest Expense of the Bond Issue	TL 58.720

Effective Interest Method of Amortization of Bond Discounts

- acceptable method of amortizing the bond discounts
- interest expense of each period is computed using the market interest rate over the carrying value of the bonds

Issuing Bonds Between Interest Payment Dates

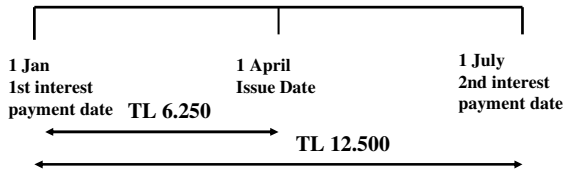
- when a bond is issued and sold at a date between the interest payment dates
 - the issuer gets cash equal to price plus the interest that is accrued from the last interest payment date to the issue date
- at the next interest payment date, the interest for the whole interest period is paid to the bondholders

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Issuing Bonds Between Interest Payment Dates



Date	Account Title and Description	Debit	Credit
1-Apr-07	Cash	256.250	
	Interest Expense		6.250
	Bonds Payable		250.000
	To record issue of bonds		

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Issuing between Interest dates- con't

1 July 2008, the date of the first interest payment after the issuance

Date	Account Title and Description	Debit	Credit
1-Jul-08	Interest Expense	12.500	
	Cash		12.500
	To record interest expense of bonds at the first interest payment date		

interest expense of the company for three months:

Interest Expense			
1-Jul	12.500	1-Apr	6.250
Balance	6.250		

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Callable Bonds

- **callable bonds** can be retired before the maturity at the option of the issuer
- fact that a bond is callable and the procedures to determine the call price should be documented in the bond indenture
- interest rates in the market may decrease
- cash flow position of the entity may have improved
- When bonds are retired before maturity, the accounting entry to record the transaction should eliminate the carrying value of the bonds, and record the gain or loss from the transaction as well

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Callable Bonds – example

Suppose Sumatek Corp. called the bonds issued on 1 January 2007 at a premium on 30 June 2007 (right after the 7th interest payment) for TL102,000.

The carrying value of the bonds as of the 7th interest payment date was, TL101,376

to record the early retirement of the bonds

Date	Account Title and Description	Debit	Credit
30-Jun-10	Bonds Payable	100,000	
	Unamortized Premium on Bonds	1,376	
	Loss on Retirement of Bonds	624	
	Cash		102,000
	To record early retirement of bonds payable		

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Consumer Loans

Determination of Periodic Installments

$$\text{Period Installment} = \frac{\text{Principal of the Loan}}{\text{Present Value Factor}}$$

Principal Loan amount: TL 30,000

Loan period: 2 years

Monthly installments

Present value Factor: $n=24$; $i=60\%/12$ (monthly interest rate)

Present value Factor $n=24$; $i=5\%$ Table 2 = 13,799

$$\text{Monthly installment: } 30,000 / 13,799 = \text{TL } 2,174$$

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Repayment Schedule of Consumer Loan

$$30.000 * .05 = \text{TL } 1.500$$

Period	Installment	Outstanding Balance at the Beginning	Interest Expense	Principal Payment	Outstanding Balance After Payment of the Installment
0	-	-	-	-	30.000
1	2.174	30.000	1.500	674	29.326
2	2.174	29.326	1.466	708	28.618
3	2.174	28.618	1.431	743	27.875
4	2.174	27.875	1.394	780	27.095
5	2.174	27.095	1.355	819	26.276
22	2.174	5.925	296	1.878	4.047
23	2.174	4.047	202	1.972	2.076
24	2.174	2.076	104	2.076	(0)

$$29.326 * .05 = \text{TL } 1.466$$

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Journal Entries-consumer loan

Date	Account Title and Description	Debit	Credit
Initial Purchase	Motor Vehicles Consumer Loans	30.000	30.000
To record the purchase of motor vehicles through consumer loan			
1 st installment	Consumer Loans Interest Expense Cash	674 1.500	2.174
To record the first installment on the consumer loan			
2 nd installment	Consumer Loans Interest Expense Cash	708 1.466	2.174
To record the second installment on the consumer loan			

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Lease Obligations

- **operating** or a **capital lease**
- Present Value of Lease Payments
- Present Value Factor * Lease Payment

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Deferred Taxation

- **timing differences**, between tax legislation and the accounting standards
- deferred tax liability or deferred tax asset

	Statutory Income Statement	Income Statement in Accordance with International Accounting Standards
Net Income before		
Depreciation	75.000	75.000
Depreciation Expense	4.000	2.000
Net Income before Tax	71.000	73.000
Income Tax Expense	28.400	29.200
Net Income	42.600	43.800

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Derivative Instruments

- Derivative instruments are defined in International Accounting Standard No 39 as:
 - Whose value changes in response to the change in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, a credit rating or a credit index, or similar variable;
 - That requires no initial net investment or little net investment relative to other types of contracts that have a similar response to changes in market conditions; and
 - That is settled at a future date
- forward contracts, futures, options and swap agreements
- **a financial asset or liability should be reported in the balance sheet when the entity becomes a party to the contractual provisions of the instrument.** Therefore the rights and obligations arising from the derivative instruments should be reported as assets or liabilities in the balance sheet, at the fair value of the instrument

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