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# **A P P U N T I**

**STUDENTE: Pieretto Letizia**

**MATERIA: Accounting and corporate finance - Prof. Ughetto**

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ATTENZIONE: QUESTI APPUNTI SONO FATTI DA STUDENTI E NON SONO STATI VISIONATI DAL DOCENTE.  
IL NOME DEL PROFESSORE, SERVE SOLO PER IDENTIFICARE IL CORSO.

**CHAPTER 1**

reported at the historical cost

→ **balance sheet** : reports the amount of **asset, liabilities and stockholders' equity** of an accounting entity **at a point in time** (reports financial position)

**A = L + SE**

- Assets**
- Cash
  - Short-Term Investment
  - Accounts Receivable
  - Notes Receivable
  - Inventory (to be sold)
  - Supplies
  - Prepaid Expenses
  - Long-Term Investments
  - Equipment
  - Buildings
  - Land
  - Intangibles

- Liabilities**
- Accounts Payable
  - Accrued Expenses
  - Notes Payable
  - Taxes Payable
  - Unearned Revenue
  - Bonds Payable

- Stockholders' Equity**
- Common Stock
  - Retained Earnings

not closed at the end of the year

**ASSET** : RECEIVABLE + pre-paid exp + investment  
**LIABILITY** : payable + accrued exp + unearned REV.  
**SE** : CS + RE + additional paid-in capital

→ **INCOME STATEMENT** : reports the revenues less the expense of the **accounting period**

expenses will be recorded in the same period than revenues are realized → **independent when cash is paid or received**

**R** : when goods are sold

**E** : CGS + expenses : when goods are used

- Revenues**
- Sales Revenue
  - Fee Revenue
  - Interest Revenue
  - Rent Revenue

- Expenses**
- Cost of Goods Sold
  - Wages Expense
  - Rent Expense
  - Interest Expense
  - Depreciation Expense
  - Advertising Expense
  - Insurance Expense
  - Repair Expense
  - Income Tax Expense

balance with IJ inventory

**R - E = NET INCOME**

earnings from the sale of goods or services

**REVENUE** is recognized in the period in which goods are sold, not necessarily the period in which cash is received

**EXPENSE** is recognized in the period in which goods and services are used, not necessarily the period in which cash is paid → dollar amount of resources used by entity to earned revenues

**net income** = operating REV + gain - operating exp - int exp - income tax exp

net income - div = ending balance

Income Statement		Statement of Stockholders' Equity		
Revenues	\$275.1	Common Stock	Retained Earnings	
- Expenses	252.2	Beginning	\$55.7	\$43.1
Net Income	\$ 22.9	+ Net Income		22.9
		- Dividends		(2.0)
		Ending	\$55.7	\$64.0

Statement of Cash Flows		Balance Sheet	
+/- Cash Flows from Operating Activities	\$ 875	Cash	\$ 10.6
+/- Cash Flows from Investing Activities	(125.5)	Other Assets	518.8
+/- Cash Flows from Financing Activities	470	Total Assets	\$527.4
Change in Cash	9.0	Liabilities	\$407.7
+ Cash at Beginning of Period	1.6	Common Stock	55.7
Cash at End of Period	\$ 10.6	Retained Earnings	64.0
		Total Liabilities & Stockholders' Equity	\$527.4

Financial Statement	Purpose	Structure	Examples of Content
<b>Balance Sheet</b> (Statement of Financial Position)	Reports the financial position (economic resources and sources of financing) of an accounting entity at a point in time.		Cash, accounts receivable, plant and equipment, long-term debt, common stock
<b>Income Statement</b> (Statement of Income, Statement of Earnings, Statement of Operations)	Reports the accountant's primary measure of economic performance during the accounting period.		Sales revenue, cost of goods sold, selling expense, interest expense
<b>Statement of Stockholders' Equity</b>	Reports changes in the company's common stock and retained earnings during that period		Beginning and ending stockholders' equity balances, stock issuances, net income, dividends
<b>Statement of Cash Flows</b> (Cash Flow Statement)	Reports inflows (receipts) and outflows (payments) of cash during the accounting period in the categories: operating, investing, and financing.		Cash collected from customers, cash paid to suppliers, cash paid to purchase equipment, cash borrowed from banks

## CHAPTER 2

### Transaction Analysis Model

**T-Account**  
(Any account)

debit

credit

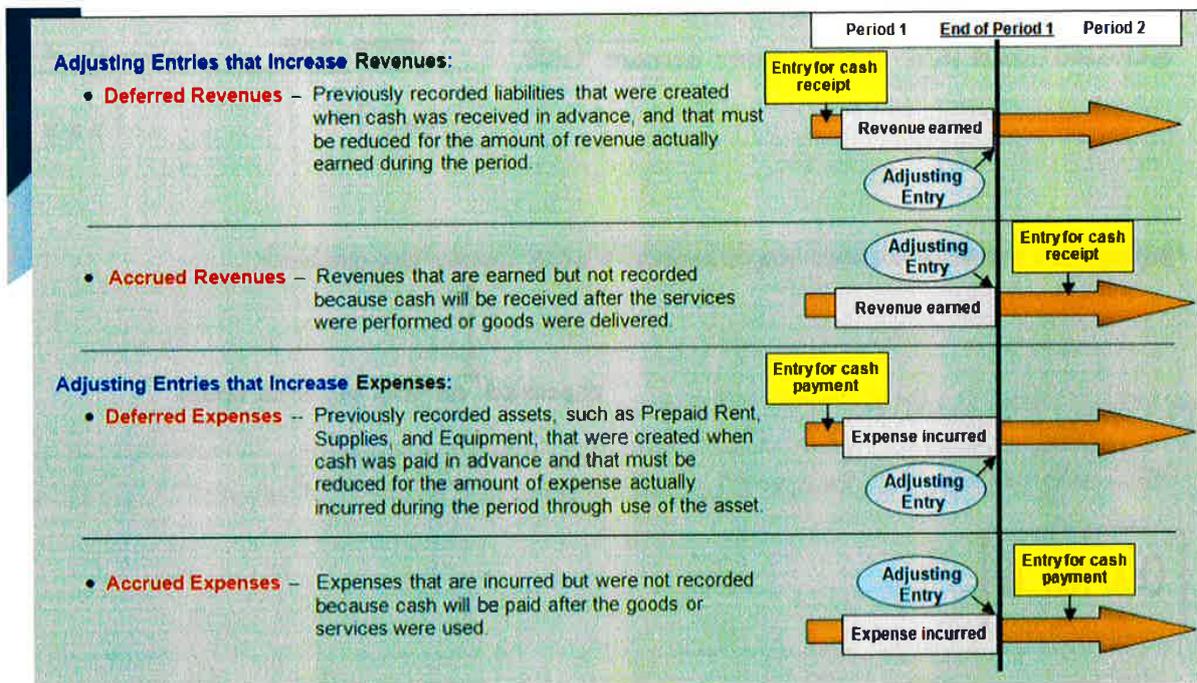
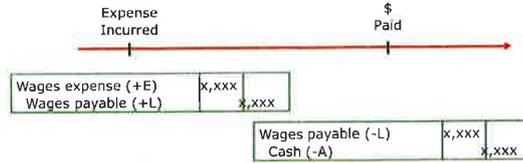
"T-account" is merely a shorthand term for the entire ledger account. The T-account has a left side, called the debit side, and a right side, called the credit side.

<b>ASSETS</b> (many accounts) +     - <b>Debit   Credit</b>  <b>REVENUES</b> + <b>gain</b> +	=	<b>LIABILITIES</b> (many accounts) -     + <b>Debit   Credit</b>  <b>EXPENSES</b> + <b>LOSSES</b> +	+	<b>STOCKHOLDERS' EQUITY</b> <b>Contributed Capital</b> (2 accounts) <b>Earned Capital</b> (1 account) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Common Stock and Additional Paid-in Capital</td> <td style="width: 50%; text-align: center;">Retained Earnings</td> </tr> <tr> <td style="text-align: center;">+ <b>Credit</b> Investment by owners</td> <td style="text-align: center;">- <b>Debit</b> Dividends declared</td> </tr> <tr> <td></td> <td style="text-align: center;">+ <b>Credit</b> Net income <i>(expanded in Ch. 3)</i></td> </tr> </table>	Common Stock and Additional Paid-in Capital	Retained Earnings	+ <b>Credit</b> Investment by owners	- <b>Debit</b> Dividends declared		+ <b>Credit</b> Net income <i>(expanded in Ch. 3)</i>
Common Stock and Additional Paid-in Capital	Retained Earnings									
+ <b>Credit</b> Investment by owners	- <b>Debit</b> Dividends declared									
	+ <b>Credit</b> Net income <i>(expanded in Ch. 3)</i>									

REVENUES → increase in ASSETS or SETTLEMENT of LIABILITIES from ongoing operations  
 EXPENSES → decreases in A or increases in L from ongoing operations  
 gains → increase in A or SETTLEMENT of L from peripheral transactions  
 losses → decrease in A or increase in L from peripheral transactions

→ **accounts payable** = if cash is paid after the company receives good

(L) ACCRUAL



When revenue is earned, the adjusting entry is:

**DEFERRED REVENUE**  
If cash was received and previously recorded

Unearned Revenue (-L) .....	XX
Revenue (+R, +SE) .....	XX

OR

**ACCRUED REVENUE**  
If cash will be received

Receivable (+A) .....	XX
Revenue (+R, +SE) .....	XX

When expense is incurred, the adjusting entry is:

Expense (+E, -SE) .....	XX
Prepaid Expense (-A) .....	XX

↑

**DEFERRED EXPENSE**  
If cash was paid and previously recorded

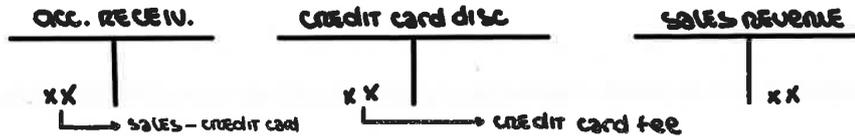
OR

Expense (+E, -SE) .....	XX
Payable (+L) .....	XX

↑

**ACCRUED EXPENSE**  
If cash will be paid

• **credit card discounts** → reported as a contra revenue account (XX)

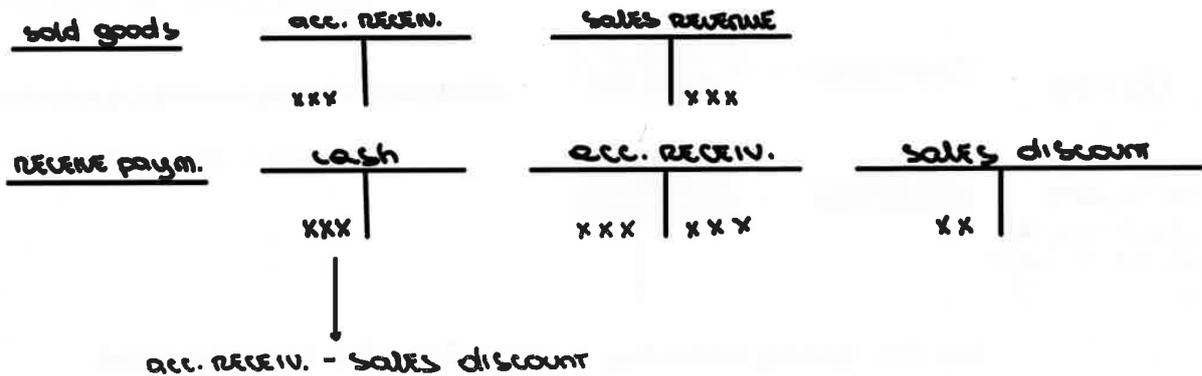


• **sales discount** to encourage early payment

when a customer purchase an open account



2% discount for early payment is available within 10 days of the date of sale



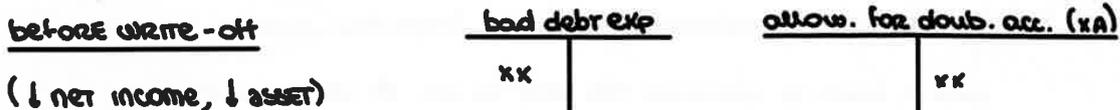
• **bad debts** = result from credit customers who will not pay the amount they owe,

regardless of collection efforts

normally classified as a selling expense and closed at year end

if % → based on historical percentage of credit sales

$$\text{bad debt exp} = [\text{ending allow} - \text{b. allow}] + \text{acc. rec. write off}^*$$



$$\text{bad debt exp} = \text{credit sales} \times \text{bad debt rate}$$

↓  
CONTRA-ASSET ACCOUNT  
↓  
bad debt losses  
↓  
TOT CREDIT SALES

	FIFO	LIFO
Cost of goods sold	<	>
Net income	>	<
Income taxes	>	<
Inventory	>	<

UNIT COSTS  
INCREASE

	FIFO	LIFO
Cost of goods sold	>	<
Net income	<	>
Income taxes	<	>
Inventory	<	>

UNIT COSTS  
DECREASE

REVENUES -	
CGS =	
_____	
gross profit -	
expenses =	
_____	
pretax income	

The lower CGS → the higher gross profit

pretax income<sub>FIFO</sub> - pretax income<sub>LIFO</sub> = E.I. FIFO - E.I. LIFO

### ③ AVERAGE COST METHOD

$$WACU = \frac{\text{cost of goods available for sale}}{\text{n° of units available for sale}}$$

ADVANTAGE: smoothes our effects  
of price changes

WACU x units for ending inventory

WACU x units for cost of goods sold

### ④ VALUATION AT LOWER OF COST OR MARKET

LCM = ending inventory is reported at the lower of cost or market

replacement cost = the current purchase price for identical goods

$$CGS = \text{n° of units} \times (\text{cost} - \text{LCM})$$

↑ CGS and ↓ inventory

• **REVENUE EXPENDITURES** = TO MAINTAIN THE PRODUCTIVE CAPACITY OF THE ASSET (spese che non creano profitti)  
 ↓  
 recorded as expenses  
 ↓  
 income statement (↓ net income)

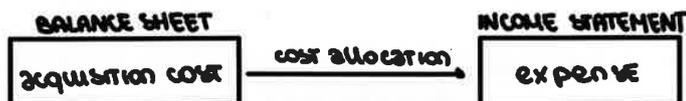
• **CAPITAL EXPENDITURES** = TO INCREASE THE PRODUCTIVE LIFE, OPERATING EFFICIENCY OR CAPACITY OF THE ASSET  
 ↓  
 capitalised  
 ↓  
 balance sheet (↑ net income)

Type of Expenditure	Capital or Revenue	Identifying Characteristics
Ordinary repairs and maintenance	Revenue	1. Maintains normal operating condition 2. Does not increase productivity 3. Does not extend life beyond original estimate
Extraordinary repairs	Capital	1. Major overhauls or partial replacements 2. Extends life beyond original estimate
Additions	Capital	1. Increases productivity 2. May extend useful life 3. Improvements or expansions

**DEPRECIATION**

• **depreciation concepts** : process of allocating the costs of buildings and equipment over their productive lives using systematic and rational method

**equipment - accumulated depreciation = book values**



depr. exp → income statm.  
 acc. depr. → balance sheet

If Cash > BV, record a gain (credit).  
 If Cash < BV, record a loss (debit).  
 If Cash = BV, no gain or loss.

DISPOSAL : when I sold goods

**ASSET IMPAIRMENT**

If net book value > estimated future cash flow → impaired

Loss of a significant portion of the utility of an asset through causality, obsolescence, lack of demand of the market  
 impairment loss = net book value - fair value



**NATURAL RESOURCES**

if natural resources extracted are sold



if natural resources extracted are kept in inventory



unit depletion rate =

Acquisition and Development Cost	-	Residual Value
-----		
Estimated Recoverable Units		

total depletion cost = unit depletion rate x n' units extracted in period



book value = acquisition + development - total depletion cost

↓  
 n' of units extracted, not n' of units sold

**WORKING CAPITAL** = CURRENT ASSETS - CURRENT LIABILITIES

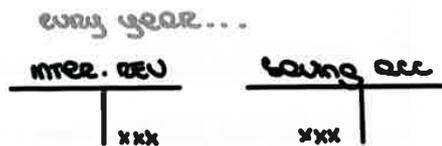
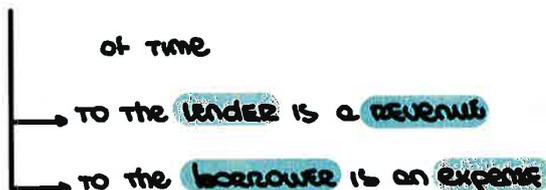
**CURRENT LIABILITIES**

Account Name	Also Called	Definition
Accounts Payable	Trade Accounts Payable	Obligations to pay for goods and services used in the basic operating activities of the business.
Accrued Liabilities	Accrued Expenses	Obligations related to expenses that have been incurred, but will not be paid until the subsequent period.
Deferred Revenues	Unearned Revenues	Obligations arising when cash is received prior to the related revenue being earned.
Note Payable	N/A	Portions of debt that are due within the next year or operating cycle.

**ACCOUNTS PAYABLE TURNOVER RATIO** = CBS / average acc. payable

used to evaluate how effective is management in meeting obligations to suppliers

**INTEREST**: is the compensation to the lender for giving up the use of money for a period



**INTEREST** = principal · INTEREST RATE · TIME

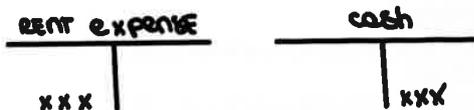


**COMPOUND INTEREST**: if the INTEREST R paid on the account is compounded yearly

**FUTURE VALUE**:  $A(1+r)^n$

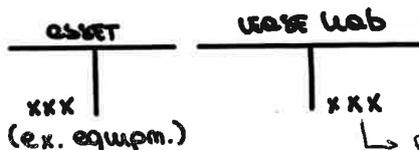
A = initial amount

**operating leases**



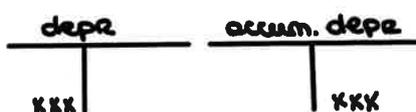
**capital leases**

①

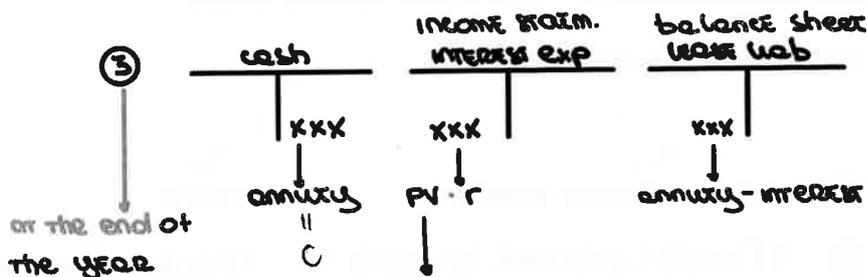


$$PV = C \left[ \frac{1}{r} - \frac{1}{r(1+r)^T} \right]$$

②



③



or the end of the year

$$PV = \sum \text{LEASE LIAB (end of } y)$$

**CHAPTER 9.2**

- preparation of financial statement → **GAAPs**
- preparation of tax returns → **IRC**

(shareholders)  
book pre-tax income  
×  
taxable income (IRS)

(income statement)  
income tax expense  
×  
income tax liabilities (IRS)

→ **DEFERRED TAX**

det. tax lab	income tax payable	income tax exp.
200	3600	3900

ex. 2

In 2009, Baxter reports \$300,000 of pretax income. Included in this amount is \$100,000 resulting from revenue earned from an installment sale for which no cash was collected. The revenue will be taxed as the cash is collected in 2010 and 2011. Baxter expects to collect \$70,000 in 2010 and the remaining \$30,000 in 2011. In 2010 and 2011, Baxter reports \$200,000 of pretax income. The company is subject to a 32% tax rate.

Taxed applied when cash collected

There are no other temporary differences.

	Temporary Difference			Total
	Originates	Reverses		
	2009	2010	2011	
Accounting income	\$ 300,000	\$ 200,000	\$ 200,000	\$ 700,000
Installment sale income on the income statement	(100,000)			(100,000)
Installment sale income on the tax return		70,000	30,000	100,000
<b>Taxable income</b>	<b>\$ 200,000</b>	<b>\$ 270,000</b>	<b>\$ 230,000</b>	<b>\$ 700,000</b>

2009      det. tax lab = 100000 × 0,32 = 32000  
 income tax pay = 200000 × 0,32 = 64000

det. tax lab	income tax payable	income tax exp.
32000	64000	96000

2010      det. tax lab = 200000 × 0,32 = 64000  
 income tax pay = 200000 × 0,32 = 64000

det. tax lab	income tax payable	income tax exp.
64000	64000	64000

2009 det. TAX ASSET = 180000 x 0,3 = 66000

income tax pay = taxable income x 0,3 = 650000 x 0,3 = 195000

det. TAX ASSET	income tax pay.	income tax exp
66000	195000	150000

2010 det. TAX ASSET = 80000 x 0,3 = 16000

income tax pay = taxable income x 0,3 = 600000 x 0,3 = 180000

det. TAX ASSET	income tax pay.	income tax exp
16000	180000	165000

2011 det. TAX ASSET = 80000 x 0,3 = 16000

income tax pay = taxable income x 0,3 = 600000 x 0,3 = 180000

det. TAX ASSET	income tax pay.	income tax exp
16000	180000	165000

## CHAPTER 10

- **bond** → debt security that corporations, credit institution or governmental bodies issue when they borrow large amount of money
  - ↳ provide the borrower with external funds to finance long-term investments

## BOND CLASSIFICATION

### Secured bonds

Secured with the pledge of a specific asset.

### Debenture bonds

Not secured with the pledge of a specific asset.

### Callable bonds

May be retired and repaid (called) at any time prior to the maturity date at the option of the issuer.

It happens when the issuer is paying a too high coupon rate than the current market interest

They may be reissued at a lower interest

Called protection covenant: states the period in which the bond cannot be called

### Term bonds

The principal is payable in full at a single specific date in the future

### Serial bonds

The principal is payable in installments on a series of specific maturity dates

### Convertible bonds

May be exchanged for other securities of the issuer (usually shares of common stock) at the option of the bondholder.

• **bond indenture** → bond contract that specifies the legal provisions of bonds

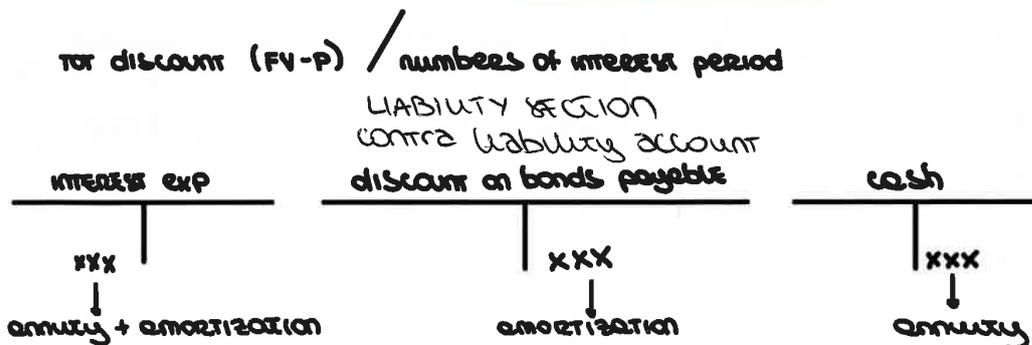
• **stated rate** is only used to compute the **coupon payments** → periodic interest payment  
(coupon rate)

$$\text{INTEREST} = \text{PRINCIPAL} \times \text{STATED RATE} \times \text{TIME}$$

r

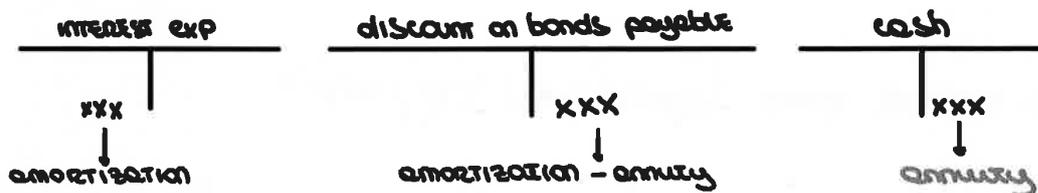
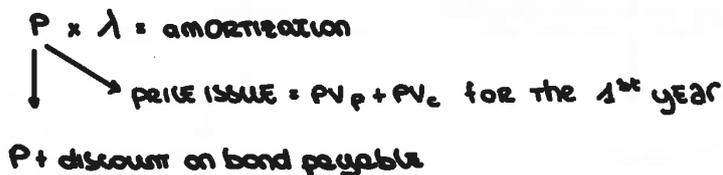
→ **SL AMORTIZATION METHOD**

The amortization of the bond discount increases the bond book value!



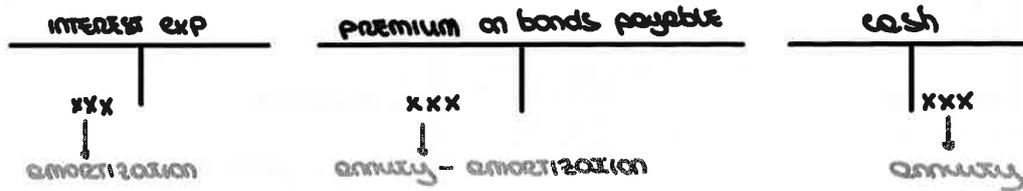
TOT L-T liabilities = P + discount on bond payable → increases every year

→ **EFFECTIVE-INTEREST METHOD**



book value = P + discount on bond payable

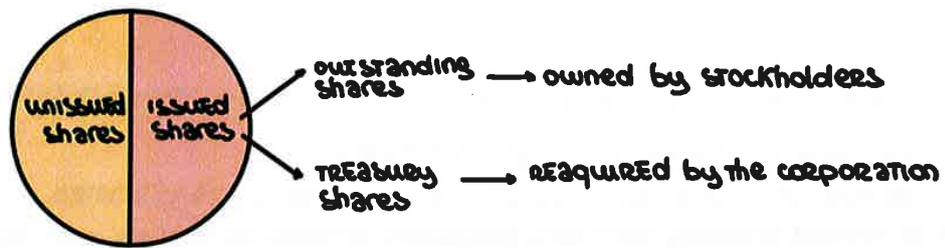
The amount of the premium that has been amortized is the difference between the cash paid and the interest expense



BOOK VALUE = P - premium on bond

# CHAPTER 11

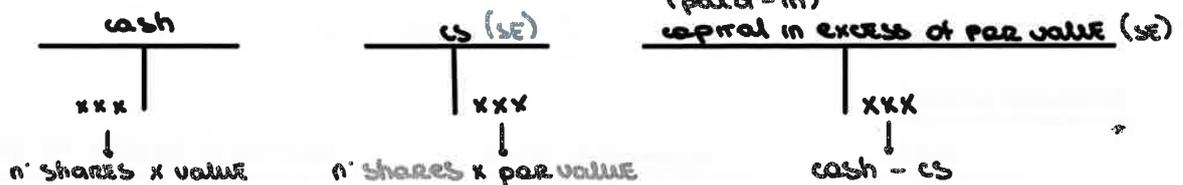
**authorized shares**: max n° of shares of capital stock that can be sold to the public



**COMMON STOCK** it's a voting stock, it ranks after preferred stock

**issuance of shares**

returns on CS: dividends, stock price appreciation



• **capital gain** are taxed less than dividend income

stock dividends → distribution of additional shares of stock to owners

- small (< 25%): record at CMV → RE, CS, capital in excess
- large (> 25%): record at PAR → RE, CS

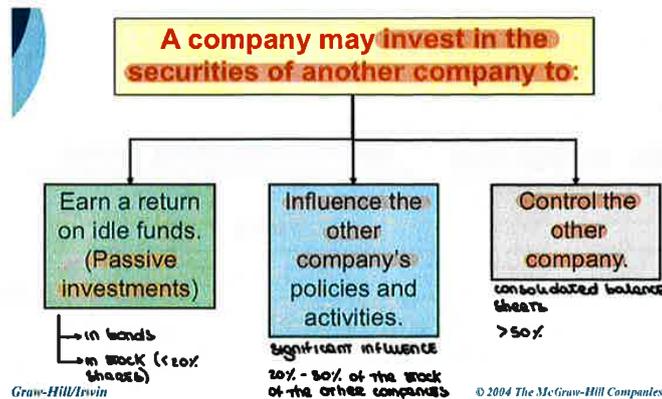
did not change T or SE.  
 it changed only the balances of accounts within SE

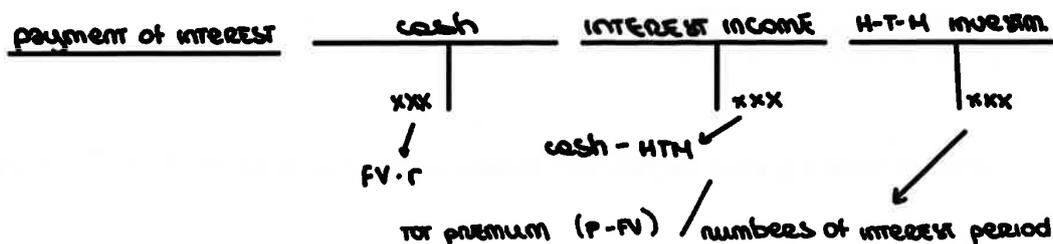
PS (n. shares x par value)	+	
CS (n. shares x par value)	+	
paid-in PS (n. shares x cost - PS)	+	
paid-in CS (n. shares x cost - CS)	=	
TOT CE	-	+
RE (net income - dividends)	=	
SE		XXX

deficit/loss RE

## CHAPTER 12

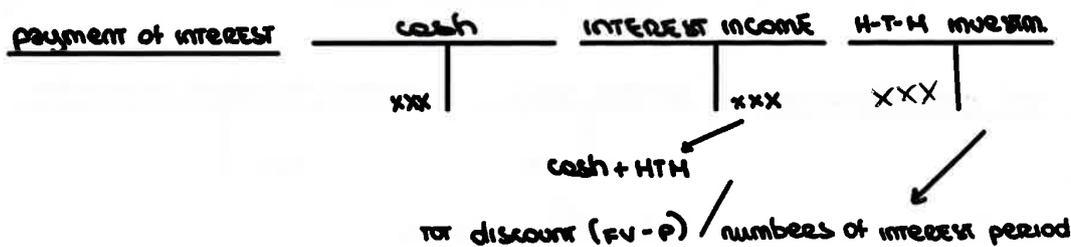
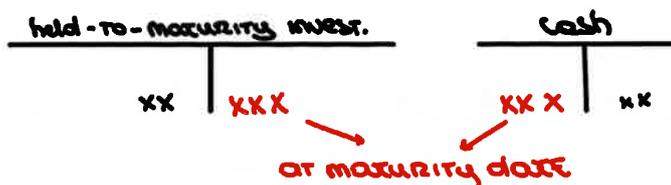
### INVESTMENTS IN OTHER CORPORATIONS





$\text{INT. INCOME} = (\text{VALUE AT MATURITY} + 2 \text{INT}) - \text{INITIAL COST PAID}$

BONDS PURCHASED AT DISCOUNT

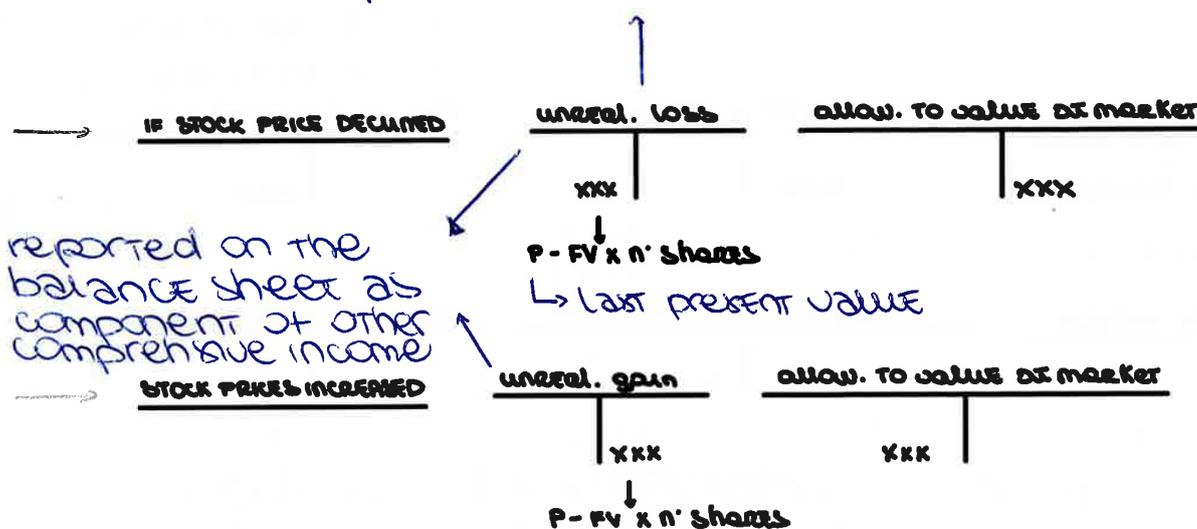


$\text{INT. INCOME} = (\text{VALUE AT MATURITY} + 2 \text{INT}) - \text{INITIAL COST PAID}$

**passive investment in equity: MVH**

- Passive stock investments:
- **TRADING SECURITIES:** securities held primarily for resale for short-term profits CURRENT ASSETS
    - the investment asset account is reflected at fair value
    - the changes in value are recorded under **operating income** (income statement) → "unrealized gain/loss"; if sold gain loss
  - **SECURITIES AVAILABLE FOR SALE:** not held primarily for resale CURRENT / NON CURRENT ASSETS
    - the investment asset account is reflected at fair value
    - the changes in value go into a special **SE account: Unrealized Gain/Loss- part "Other Comprehensive Income."**

reported in accumulated SE

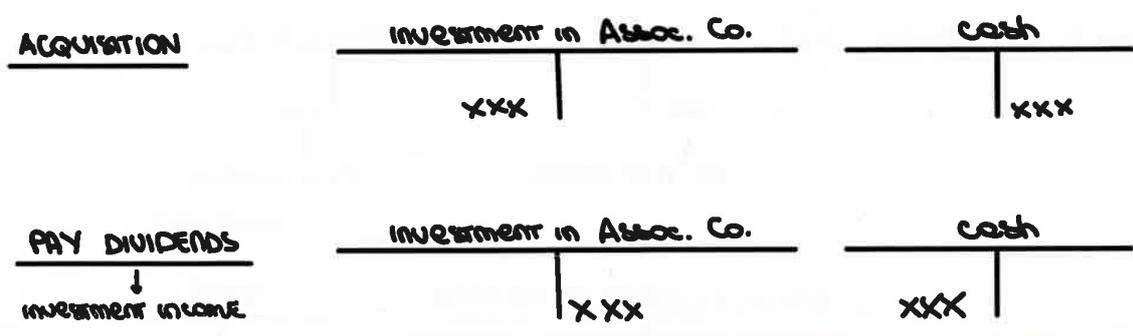


**EQUITY METHOD**

- With the **equity method** the accounting for an investment is set to track the "equity" of the investee.
- That is, when the investee makes money (and experiences a corresponding increase in equity), the investor will similarly record its share of that profit (and vice-versa for a loss).
- The investment is initially recorded at cost.
- Unrealized holding gains and losses are **not** recognized.
- Investment carrying amount is adjusted for dividends received and a percentage share of the investee's income.
- On the balance sheet classified as long-term investments "Investments in associated Companies"

Investee	Effects on the investment account of the investor
Dividend payments	Reduction in the investment account. Increase in cash when it receives its share of dividends.
Positive net income	Increase in the investment account by proportionate share
Net Loss	Decrease in the investment account by proportionate share

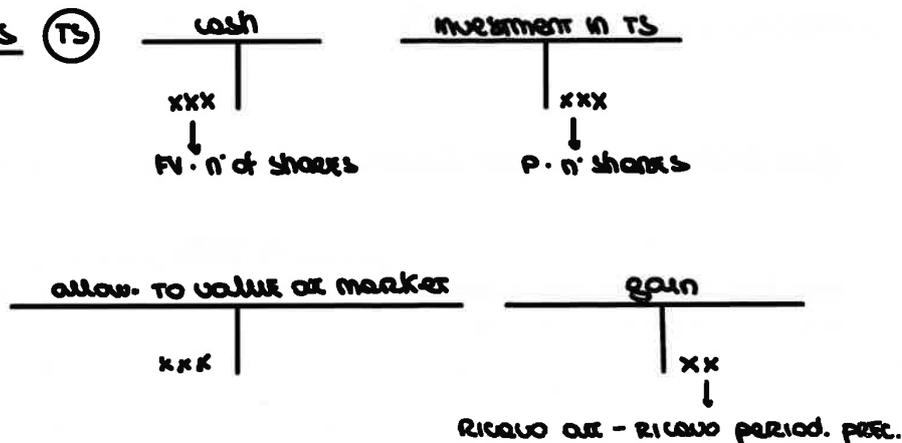
Initial cost +  
net income % -  
dividend %



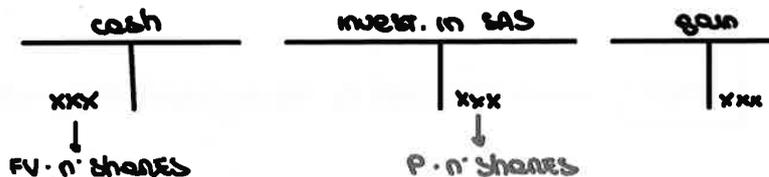
(l'azienda su cui ho investito paga i dividendi)

Dividends are **not** revenue under the equity method. They are treated as a reduction of the investment account.

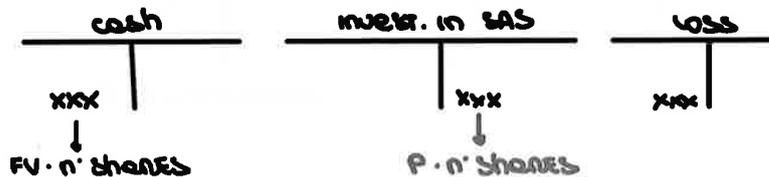
when I sold shares (TS)



when I sold shares (IAS)



when I sold shares (IAS)



when selling IAS, you have to consider the difference between the cash proceeds from sale and the original cost

when selling TS, you have to consider the difference between the cash proceeds from sale and the book value (last value)

# CHAPTER 13

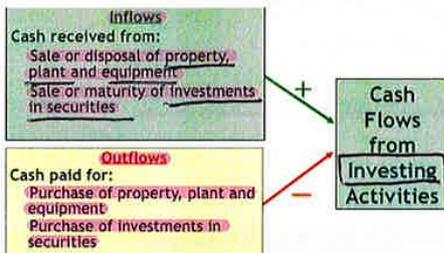
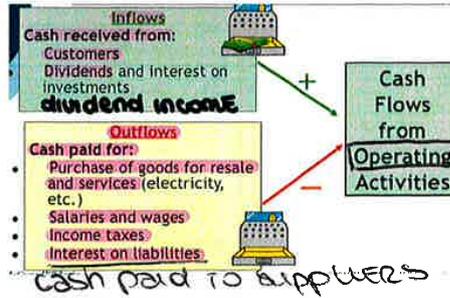
$$\Delta \text{cash} = \Delta \text{liabilities} + \Delta \text{SE} - \Delta \text{noncash assets}$$

## STATEMENT OF CASH FLOWS

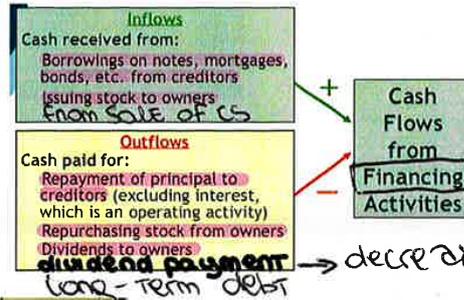
- reconciles net income with CF from operations
- info regarding liquidity
- explain ↑ or ↓ in cash
- NET INCOME ≠ AMOUNT OF CASH

The SCF must include the following three sections, as defined in FASB Statement 95:

- Operating Activities:** cash flows related to selling/purchase goods and services; that is, to earning income.
- Investing Activities:** cash flows related to the acquisition or sale of non current assets.
- Financing Activities:** long term and short term cash flows related to liabilities and owners' equity; dividends are a financing cash outflow.



purchase of a short-term investment



decrease NE + NET INC.

Cash flows from operating activities:		
Cash collected from customers	\$ 33,563	
Cash paid to suppliers and employees	(30,854)	
Cash paid for interest	(450)	
Cash paid for taxes	(1,190)	
<b>Net cash flow from operating activities</b>		\$ 1,069
Cash flow from investing activities:		
Cash paid to purchase equipment	\$ (1,625)	
<b>Net cash flow from investing activities</b>		(1,625)
Cash flow from financing activities:		
Cash received from bank loan	\$ 1,400	
Cash paid for dividends	(1,000)	
<b>Net cash flow from financing activities</b>		400
<b>Net decrease in cash during the year</b>		\$ (156)
Cash at beginning of the year		5,051
<b>Cash at end of the year</b>		\$ 4,895

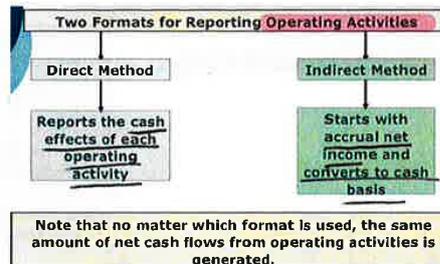
non-cash items → separate section in the SCF

exchange CS  
→ conversion of bonds to stock  
→ acquire a building for a note payable

SCF

= cash on balance sheet

## DIRECT METHOD VS INDIRECT METHOD



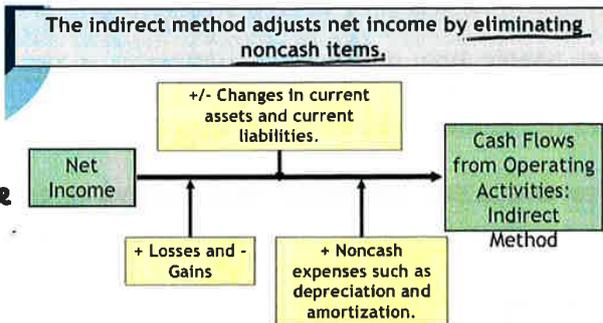
⑤ **Cash for pre-paid exp**

**PRE-PAID EXPENSES=** paid before they are recognized as expenses  
**PRE-PAID EXPENSES ASSET ACCOUNT** is created  
**Cash paid for pre-paid expenses=EXPENSES - DECREASE IN PRE-PAID EXPENSE**  
**Cash paid for pre-paid expenses=EXPENSES + INCREASE IN PRE-PAID EXPENSE**

- decrease  
 + increase

**INDIRECT METHOD**

Starts with accrual net income and converts to cash basis



① **NET INCOME**

② **+ non cash items (depr., amort...)**

③ **+/- current asset and current liabilities**  
 (USARE IL Δ DEL ↑ OR ↓)

NO SHORT-TERM, PROPERTY...

	Change in Account Balance During Year	
	Increase	Decrease
Current Assets	Subtract from net income.	Add to net income.
Current Liabilities	Add to net income.	Subtract from net income.

Sales Revenue	+	Decrease ACCOUNT RECEIVABLE	Collection from Customers
	-	Increase ACCOUNT RECEIVABLE	Collection from Customers
Interest/Dividend Revenue	+	Decrease INTEREST/DIVIDEND RECEIVABLE	Collection of interest/dividends on investment
	-	Increase INTEREST/DIVIDEND RECEIVABLE	Collection of interest/dividends on investment
Cost of goods sold	+	Increase INVENTORY	Cash paid for the inventory
	-	Decrease INVENTORY	Cash paid for the inventory
	-	Increase ACCOUNTS PAYABLE	Cash paid for the inventory
	+	Decrease ACCOUNTS PAYABLE	Cash paid for the inventory
Other expenses	+	Increase PRE-PAID EXPENSES	Payments to suppliers
	-	Decrease PRE-PAID EXPENSES	Payments to suppliers
	+	Decrease ACCRUED EXPENSE	Payments to suppliers
	-	Increase ACCRUED EXPENSE	Payments to suppliers
Income tax expenses	+	Increase PRE-PAID INCOME TAX	Payments of income taxes
	-	Decrease PRE-PAID INCOME TAX	Payments of income taxes
	+	Decrease INCOME TAX PAYABLE	Payments of income taxes
	-	Increase INCOME TAX PAYABLE	Payments of income taxes

depreciation exp → is in the income statement, but it is not an operating cash flow → non cash exp. entry

gain on sale → is in the income statement, does not appear in the operating cash flow → investing activities section

$ROA = \text{net profit margin} \times \text{TOT ASSETS TURNOVER}$   
↳  $\text{net income} / \text{net sales}$

•  $\text{gross margin} = \text{gross profit} / \text{net sales}$   
↳  $\text{net sales} - \text{COGS}$

•  $\text{profit margin} = \text{net profit income} / \text{net sales}$

•  $ROS = \text{operating income} / \text{net sales}$   
↳ OR EBIT

→ •  $ROE = \text{net income} / \text{average SE}$  → measure how much income was earned for every dollar invested by owners  
↓  
A-L

•  $ROE = \text{net profit margin} \times \text{asset turnover} \times \text{financial leverage}$   
↓  
TOT ASSET / SE equity

•  $ROCE = \text{net income} - \text{preferred dividend} / \text{average common SE}$

•  $\text{financial leverage} = ROE - ROA$

•  $EPS = \text{net income} / \text{average n' of shares of CS outstanding}$

•  $\text{quality of income} = \text{cash flow from op. activities} / \text{net income}$  → if > 1 high-quality

→ •  $\text{fixed asset turnover} = \text{net sales revenue} / \text{average net fixed assets}$   
↳ used to analyze capital-intensive companies

## SOLVENCY RATIOS

- **TIMES INTEREST EARNED** =  $(\text{NET INCOME} + \text{INT EXP} + \text{INCOME TAX EXP}) / \text{INT EXP}$   
↳ indicates a margin of protection for creditors in case of deterioration of profit.
- **CASH COVERAGE** =  $\text{CF FROM OP ACTIVITIES BEFORE INT \& TAX} / \text{INTEREST PAID}$
- **D/E RATIO** =  $\text{TOT LIABILITIES} / \text{OWNERS' EQUITY}$
- **D/TOT ASSET** =  $\text{TOT DEBT} / \text{TOT ASSETS}$   
↳ % of assets financed by LT and ST debt
- **P/E RATIO** =  $\text{CURRENT MARKET PRICE PER SHARE} / \text{EPS}$  → FUTURE OPPORTUNITIES HAS A GREAT IMPACT
- **DIVIDEND YIELD** =  $\text{DPS} / \text{MARKET PRICE PER SHARE}$
- **QUALITY OF INCOME RATIO** =  $\text{CASH FLOW FROM OP. ACT} / \text{NET INCOME}$

**CONTINUOUS COMPOUNDING**

$$V_m(m) = Ae^r$$

$r = \text{INTEREST RATE} \times \text{TIME}$

high value  $V_m$

if the compounding becomes more and more frequent

**NOMINAL RATE** is the basic annual rate  $r$

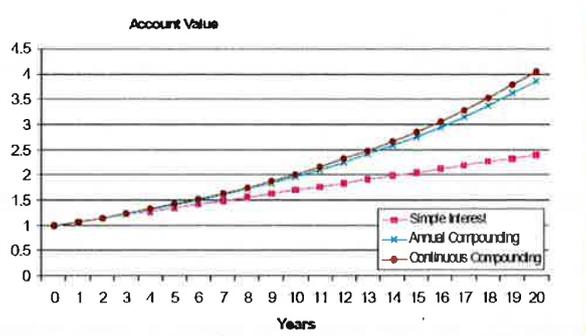
**EFFECTIVE RATE**

$$r' = (1 + r/m)^m - 1$$

for discrete compounding

$$r' = e^r - 1$$

for continuous compounding



**PRESENT VALUE**

$$PV = A / (1+r)$$

if the amount  $A$  is to be received in 1 year

$$PV = A / [1 + (r/m)]^k$$

- if the interest is compounded at the end of each  $m$  periods
- if the amount  $A$  is to be received at the end of  $k^{\text{th}}$  period