Accounting I

OPERATING ACTIVITIES

ACCOUNTS RECEIVABLE AND PAYABLE

Accounts Receivable and Payable

- Trade Accounts Receivable
  - Clients
- Trade Accounts Payable
  - Suppliers
- Staff
- Public Entities
- Loans (Obtained)
- Other Accounts Receivable and Payable

Trade Accounts Receivable - Clients

•Rule: Value to receive;

•In some clients have financial troubles and may not pay the debt, the company should evaluate the possibility to receive all the money and if it is necessary to recognize a loss called impairment:

Impairments = Book value in clients - Best estimate regarding the time and amount to receive

Staff

It includes all related to

- Salaries to pay
- Advanced payments to staff
- Other operations;
- Losses by impairments in rights from accounts receivable from staff

Staff

1st Step	• Processing of wages, salaries and other elements for the month
2nd Step	• Processing the social charges (employer's to pay) for the month;
3rd Step	• Payment to staff and other entities

Staff

Salaries to pay:

Stage	Item	Debit	Credit
1st Stage	Gross Value	Staff Expenses - Salaries	
	Retained Tax- Income Tax (IRS)		State and Other Public Entities - Retained Income Tax
	Retained Tax - Social Security (TSU)		State and Other Public Entities - Social Security
	Other discounts		Other Accounts To Receive and To Pay - Other debtors and creditors
	Net Value		Staff - Salaries to Pay - Board/Staff
2nd Stage	Taxes paid by the employer (SS)	Staff Expenses - Taxes supported by The employer	State and Other Public Entities - Social Security
3rd Stage	Payment	Staff - Salaries to pay - Board/Satff	
		State and Other Public Entities - Retained Income Tax	
		State and Other Public Entities - Social Security (employee and employer taxes)	
		Other Accounts To Receive and To Pay - Other debtors and creditors	
			Banks/Checking Account - Bank X

Accruals

&

Deferrals (Pre-paid)

Of Revenues and Expenses

Accrual Basis

The **accrual basis** recognizes the impact of transactions in the financial statements for the time periods when revenues and expenses occur

Accountants record revenue as a company earns it, and they record expenses as the company incurs them

Accrual Basis

- **Accrue** means to accumulate a receivable (asset) or payable (liability) during a given period even though no explicit transaction occurs
  - Accrual of unrecorded expenses
  - Accrual of unrecorded revenues

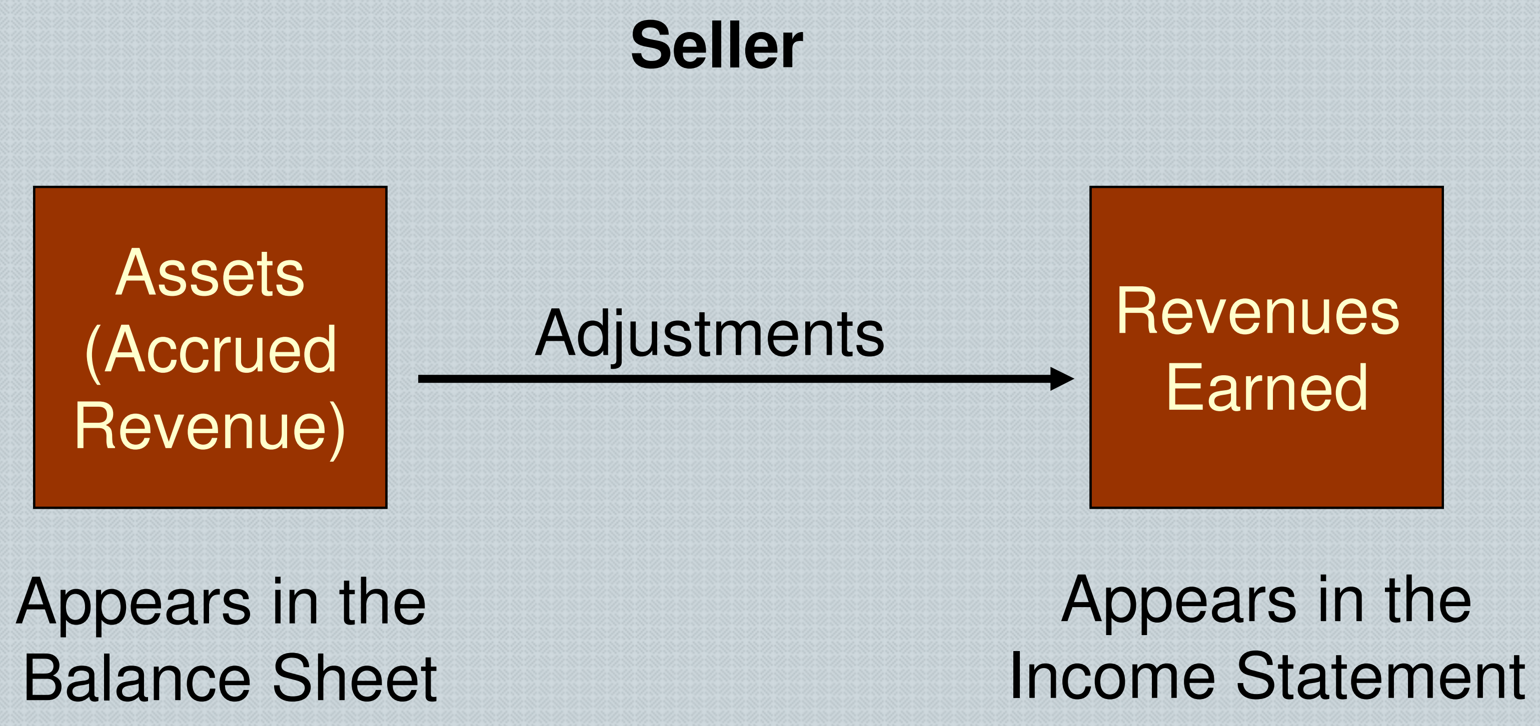
Accrual of Unrecorded Expenses and Revenues

- Some liabilities (and expenses) grow moment to moment with the passage of time. Examples include: Wages, Interest, Income taxes, Rents.
- Adjustments are made to bring each accrued expense (and corresponding liability) account up to date at the end of the period before preparation of the financial statements
- Adjustments are necessary to accurately match the expense to the period
- Similar examples can be given for revenues with a symmetric booking (accrued revenues)

Accrued Revenue

- The revenue is recognized (earned) when the owner makes the adjusting entry (a) at time 0
- The asset Accrued Revenue is increased (debited), the stockholders' equity account Revenue –Rent is increased (credited)
- Failure to record the adjusting entry understates revenues and assets

Accrued Revenue



Accrued Expenses

- The expense is recognized (use of the warehouse) when the owner makes the adjusting entry (a) at time 0
- The liabilities Accrued Expenses is increased (credited), the stockholders' equity account Expenses – Rent is increased (debited)
- Failure to record the adjusting entry understates expenses and liabilities

Accrued Expenses

Buyer

Liabilities (Accrued Expenses) → Adjustments → Expenses "Used"

Appears in the Balance Sheet

Appears in the Income Statement

Deferrals (Pre-paid)

Deferrals (Pre-paid)

- Receipt/Payment of the fact sheet occurs but the revenue/expense refers to the following accounting period(s)

Earning of Revenues Received in Advance

Seller

Liabilities (Deferred Revenue) $\xrightarrow{\text{Adjustments}}$ Revenues Earned

Appears in the Balance Sheet

Appears in the Income Statement

Earning of Revenues Received in Advance

- The revenue is recognized (earned) only when the owner makes the adjusting entries in transaction (b)
- The liability Deferred Revenue (pre-paid) is decreased (debited), the stockholders' equity account Revenue –Rent is increased (credited)
- Failure to record the adjusting entry overstates liabilities and understates revenues

Expensing of Rent Paid in Advance

- The expense is recognized only when the adjusting entry is made
- The asset Deferred Expense (pre-paid) is decreased (credited), while the stockholders' equity account Expense –Rent is increased (debited)
- Failure to record the adjusting entry overstates assets and understates expenses

Expensing of Rent Paid in Advance

Buyer

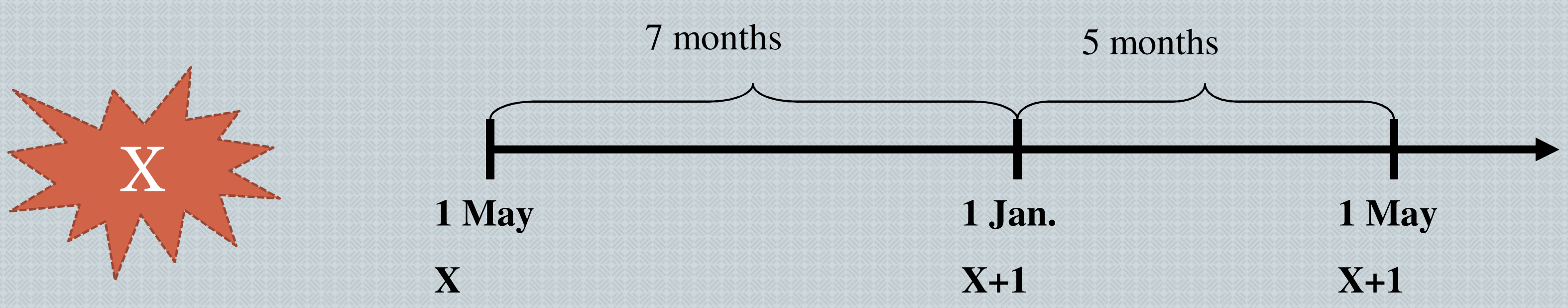
Assets (Deferred Expenses) → Adjustments → Expenses "Used"

Appears in the Balance Sheet

Appears in the Income Statement

Examples

Annual payment of car insurance, referent to the period of May of year X to May of year X+1, 360 €;

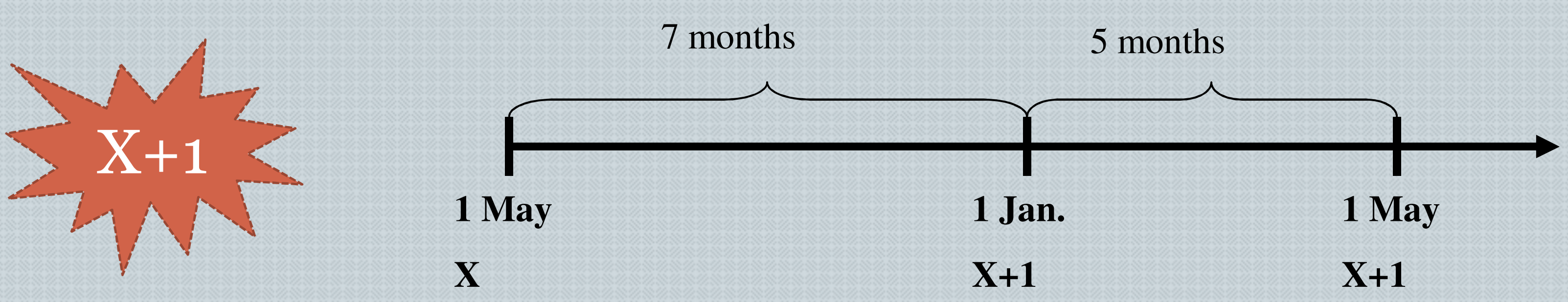


Pre-paid Expenses Insurance		External Services and Supplies Expenses Insurance		Banks	
150		210			360

$$\text{Value} = \frac{360\ €}{12\ \text{months}} = 30\ €\ \text{per month}$$

Examples

Annual payment of car insurance, referent to the period of May of year X to May of year X+1, 360 €;



Pre-paid Expenses

Insurance

Debit	Credit
	150

External Services and Supplies Expenses

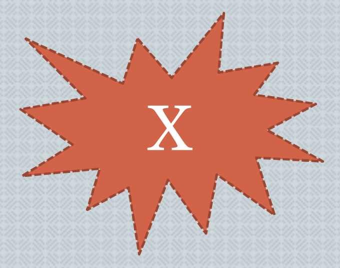
Insurance

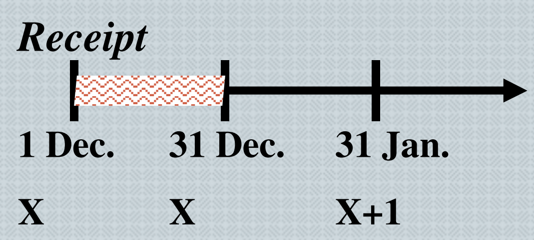
Debit	Credit
150	

$$\text{Value} = \frac{360\ €}{12\ \text{months}} = 30\ €\ \text{per month}$$

Examples

Receipt of December's shop Rent, 500 €





Pre-received Revenues
Rent

	500

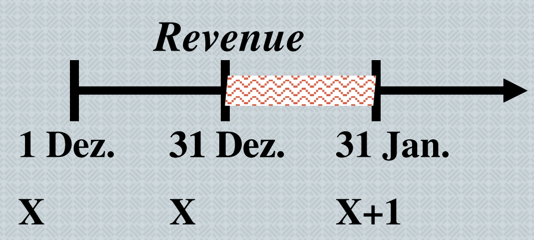
Banks

500	

Examples

Receipt of December's shop Rent, 500 €

X+1



Pre-received Revenues

Rent

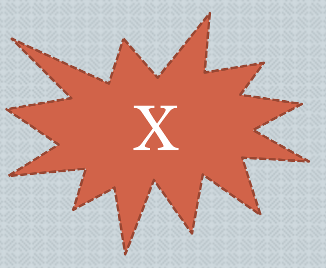
500	

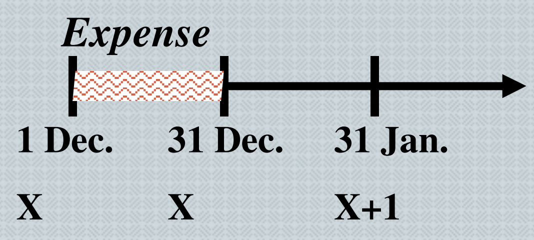
Other revenues

	500

Examples

Estimate of December's electricity bill for year X, 100 €.





Other accounts receivable and payable
Creditors for accruals of expenses

	100

External Services and Supplies Expenses

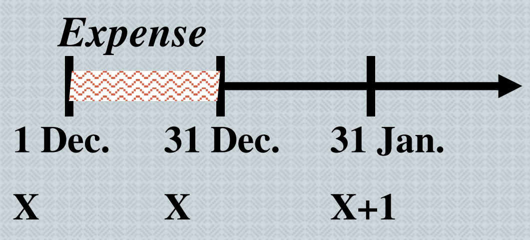
Electricity

100	

Examples

Estimate of December's electricity bill for year X, 100 €.

X+1



Other accounts receivable and payable
Creditors for accruals of expenses

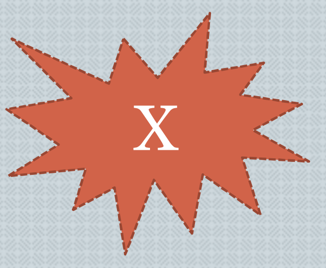
100	

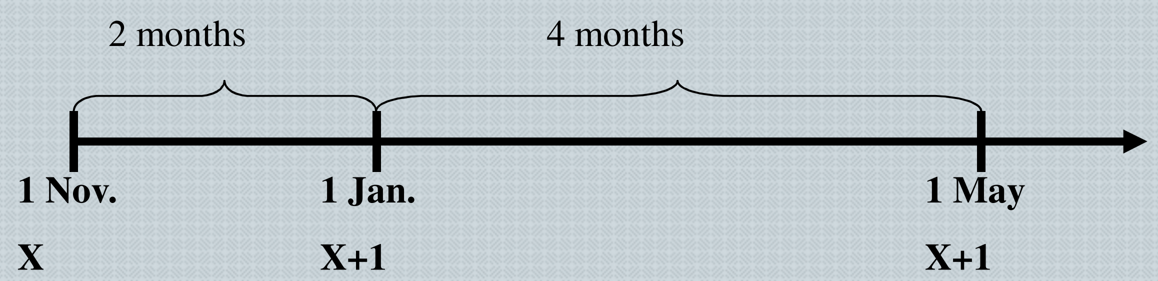
Banks

	100

Examples

Interests from term deposit, 60 €, from the period of November of year X to April of year X+1.





Financial Revenues

Obtained interests

Debit	Credit
	20

Other accounts receivable and payable

Debtors for accruals of revenues

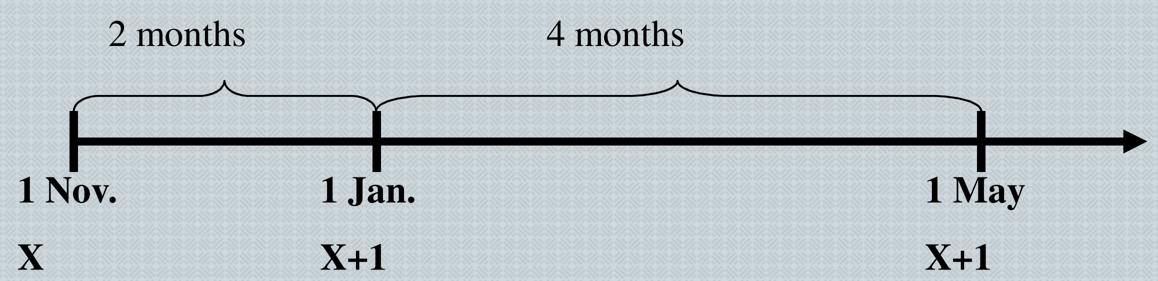
Debit	Credit
20	

Value $= \dfrac{60\text{ €}}{6\text{ months}} =$ *10 € per month*

Examples

Interests from term deposit, 60 €, from the period of November of year X to April of year X+1.

X+1



Financial Revenues

Earned interests

Debit	Credit
	40

Banks

Debit	Credit
60	

Other accounts receivable and payable
Debtors for accruals of revenues

Debit	Credit
	20

$$\textit{Value} = \frac{60\ €}{6\ \textit{month}} = 10\ €\ \textit{per month}$$

Accounting I

INVESTMENT ACTIVITIES
FIXED TANGIBLE ASSETS
INTANGIBLE ASSETS

Investments

Assets controlled by the company that are not aimed to be sold or transformed during the operating cycle of the entitity. These assets can be owned by the company or used through a lease.

Investments

- Fixed Tangible Assets
- Intangible Assets
- Property Investments
- Investments in financials instruments
- Non-current assets held for sale

Fixed Tangible Assets

- Long-lived assets are divided into tangible and intangible categories
- **Tangible assets** are physical items that you can see and touch
- Used to <u>support</u> the <u>activity</u> of the firm
  - Land
  - Natural resources
  - Buildings
  - Equipment
- It does **<u>not include</u>** financial investments

Fixed Tangible Assets
Measurement and Recognition

Acquisition Cost

Directly costs attributable to bringing the asset to the location and desired condition

Initial estimation of dismantling and removing costs

Fixed Tangible Assets
Measurement and Recognition

Cost Model	• Acquisition cost - Accumulated depreciation – accumulated impairments
Revaluation Model	• Fair value (the changes are recognized in Owners' Equity)

Fixed Tangible Assets – 1st recognition

- The acquisition cost of long-lived assets is the cash-equivalent purchase price
  - Includes incidental costs to complete the purchase, transport the asset, and prepare it for use
- The acquisition cost of land includes
  - The purchase price
  - The cost of land surveys
  - Legal fees
  - Title fees and transfer taxes
  - Demolition costs of old structures

Acquisition Cost of Tangible Assets

- Under historical-cost accounting, companies report land in the balance sheet at its original cost
- The acquisition cost of buildings, plant, and equipment includes all costs of acquisition and preparation for use
  - Sales tax
  - Transportation
  - Installation
  - Repair cost prior to use

Intangible Assets

- **Intangible assets** are not physical in nature, consisting of contractual or legal rights or economic benefits
  - Patents
  - Trademarks
  - Copyrights

- Land is reported at its historical cost in the financial records and is not depreciated

Examples of Intangible Assets

- **Patents** are grants by the federal government to the inventor of a product or process, bestowing the exclusive right to produce and sell a given product , or use a process for up to 20 years
- **Copyrights** are exclusive rights to reproduce and sell a book, musical composition, film, or similar creative item for the life of the creator plus 70 years
- **Trademarks** are distinctive identifications of a manufactured product or a service, taking the form of a name, sign, slogan, logo, or emblem

Examples of Intangible Assets

- **Franchises and licenses** are legal contracts that grant the buyer the right to sell a product or service in accordance with specified conditions
- A **leasehold** is the right to use a fixed asset for a specified period of time beyond one year
- **Leasehold improvements** occur when a lessee spends money to improve leased property
  - Improvements become a part of the leased property
  - Leasehold improvements are classified as fixed assets

Non-current Assets

- Long-lived assets wear out or become obsolete
- The costs of these assets are allocated over their useful life
  - **Depreciation** is the allocation of the cost of buildings, machinery, and equipment
  - **Amortization** is the allocation of the cost of intangible assets
  - **(Depletion** is the allocation of the cost of natural resources) – Not used in Portugal!!

Intangible Assets
Measurement and Recognition

Purchase price

Directly costs attributable to bringing the asset to the location and desired condition

Intangible Assets
Measurement and Recognition

Cost Model

- Acquisition cost - Accumulated amortizations (if the useful life is limited)- accumulated impairments

Revaluation Model

- Fair value (the changes are recognized in Owners' Equity)

Only if there is an active market

Contrasting Long-lived Asset Expenditures with Expenses

- All purchases of goods or services are called **expenditures**
- Companies **capitalize** expenditures for assets that benefit more than the current accounting year
- The purchase price is added to an asset account rather than expensing it immediately
- The cost of repairs and parts are charged to expense rather than to an asset account
- Decisions about whether to expense or capitalize expenditures require judgment
- This is an area that management may inappropriately influence to increase reported net income

Accounting I

INVESTMENT ACTIVITIES

DEPRECIATIONS AND AMORTIZATIONS

FINANCIAL INVESTMENTS

FINANCIAL INSTRUMENTS

DEPRECIATIONS AND AMORTIZATIONS

Depreciation/Amortization of an asset – tangible or intangible – is the recognition of its depreciation due to the use of the asset

DEPRECIATIONS AND AMORTIZATIONS

The depreciation value can be calculated as a function of:

- The estimated time of it useful life; or
- The activity/usage planned for the asset (measured in total units that it is planned that the asset produces during all of its useful life – kms, hours of usage or other any variable).

DEPRECIATIONS AND AMORTIZATIONS

Useful Life

- of an asset is the shorter of the physical life of the asset (before it wears out) or the economic life of the asset (before it becomes obsolete).

DEPRECIATIONS AND AMORTIZATIONS

Useful Life

- Finite → To be depreciated/ amortized
- Undefined → Not to be depreciated/ amortized

Depreciable value

- It is the amount of the acquisition cost to be depreciated or allocated over the total useful life of the asset

DEPRECIATIONS AND AMORTIZATIONS

Residual value

- is the amount a company expects to receive from sale or disposal of a long-lived asset at the end of its useful life.

DEPRECIATIONS AND AMORTIZATIONS

Book value

- **Value that appears in the balance sheet (after deducting the depreciations/amortizations and impairments)**

Acquisition cost – accumulated depreciation/amortization – accumulated impairments

DEPRECIATIONS AND AMORTIZATIONS

- **Straight-line depreciation**
  - Spreads the depreciable value evenly over the useful life of an asset
  - Is by far the most popular method for financial reporting purposes
- **Depreciation Based on Units**
  - When physical wear and tear determines the useful life of the asset, depreciation may be based on units of service or units of production instead of units of time (years)

DEPRECIATIONS AND AMORTIZATIONS

Straight Line Method

- The A depreciation/amortization is calculated as follows:

$$Q_t = \frac{V_o - R}{n} = \frac{A}{n}$$

V_o – Acquistion value
R – Residual value
A – Value to depreciate/amortize: $A = V_o\text{-}R$
Q_t – Depreciation/Amortization at period t
n – Number of years of useful life

Depreciation and Cash Flow

- Depreciation
  - Does not generate cash
  - Allocates the original cost of an asset to the periods of use
  - Is a deductible noncash expense for income tax purposes

- Higher tax depreciation results in lower taxable income and lower taxes, keeping more cash in the business

Expenditures After Acquisition

- Repairs and maintenance are treated as expenses of the current period
  - **Repairs** include the costs of breakdowns, accidents, or damage
  - **Maintenance** includes the routine costs of oiling, polishing, painting, and adjusting
- Improvements are capitalized as assets
  - **Improvements** are expenditures that increase the future benefits provided by a fixed asset

Gains and Losses on Sales of Tangible Assets

- When a tangible asset is sold, a gain or loss occurs when there is a difference between the cash received and the net book value of the asset
  - Cash received > book value = gain
  - Cash received < book value = loss

- The disposal requires the removal of the asset's book value, which appears to two accounts:
  - Equipment
  - Accumulated Depreciation

Impairment of Tangible Assets

- An asset is considered to be **impaired** when it ceases to have economic value as large as the book value
- Impairment of assets held for use:
  - Step 1: Recoverability test—if undiscounted expected cash flow < book value, impairment exists
  - Step 2: Impairment loss = book value – fair value
- The entry to record the impairment loss is:

Loss on impairment	xxx	
Accumulated impairments		xxx

Financial Investments

Includes all financial assets that are not measured at the fair value and are not part of Class 1.

- **Measurement criteria: cost or amortized cost method;**
- **Parts in other companies should be measured by the equity method (patrimonial equivalence method) if participation is equal or above 20%**
- **Joint venture can be measured by the equity method or proportional consolidation**

Financial Investments

It is divided into:

- *Investments in branches*
- ***investments in associates***
- ***investments in joint ventures***
- ***investments in other firms***
- ***other financial investments***
- ***accumulated impairments***

Fair value

Changes in fair value

Increases in fair value

Decreases on fair value

Accounting I

FINANCING ACTIVITIES
OBTAINED FINANCING
EQUITY

Financing Activities

Firms can be financed through:

- Debt → Liability (financing)
- Equity Instruments → Equity

Debt

a) Obligation that comes from a contract to:

- (i) pay money or other financial instrument to another entity; or
- (ii) trade financial assets or liabilities with another entity in terms that are unfavorable to the entity; or

b) Contract that can be liquidated with equity instruments (e.g. stocks) from the company and that has the characteristics of financing liabilities.

Equity Instrument

- Any contract that gives a residual claim in the assets of a company after liquidating all the liabilities.

Loans obtained

This account does not include purchases, or any other operational transaction, on credit (Accounts Payables) nor taxes due (State and Other Public Entities).

The origin of the loan can come from:

- Banks and other financial institutions;
- Financial market (bonds);
- Shareholders;
- Participated companies – associate companies, joint ventures;
- Others.

CAPITAL

- Increases of capital should only be recognized when and only when the owners have contributed with the assets to realize their part in the company. The assets should be measured at fair value

- Capital issued but not realized should not be recognized in the balance sheet. Only after realized, can capital be recognized in the balance sheet.

- All the expeditures supported to increase capital should be directly deducted to equity.

CAPITAL

When capital is divided in stocks it's important to distinguish 3 different concepts for each stock:

- **Nominal value:** amount written in the stock (Capital/n. of stocks).

- **Book value:** equity value of the stock
  Equity/ n. of stocks

- **Market Value**: value for which each stock can be sold/purchased. This value can be found in the capital market for publicly traded companies.

Accounting I

END OF THE YEAR OPERATIONS

END of the YEAR OPERATIONS

It is the end of the accounting cycle.

Accountants book:

- Regularizations – Examples: Depreciation and Amortization Expenses, Accruals and Deferrals, Impairments,…

- Net Income - During the year the firm used accounts of expenses and revenues. When the year is ended it is necessary to determine the result of the period in order to evaluate the economic performance. To do so, we compare the revenues and expenses incurred.

END of the YEAR OPERATIONS

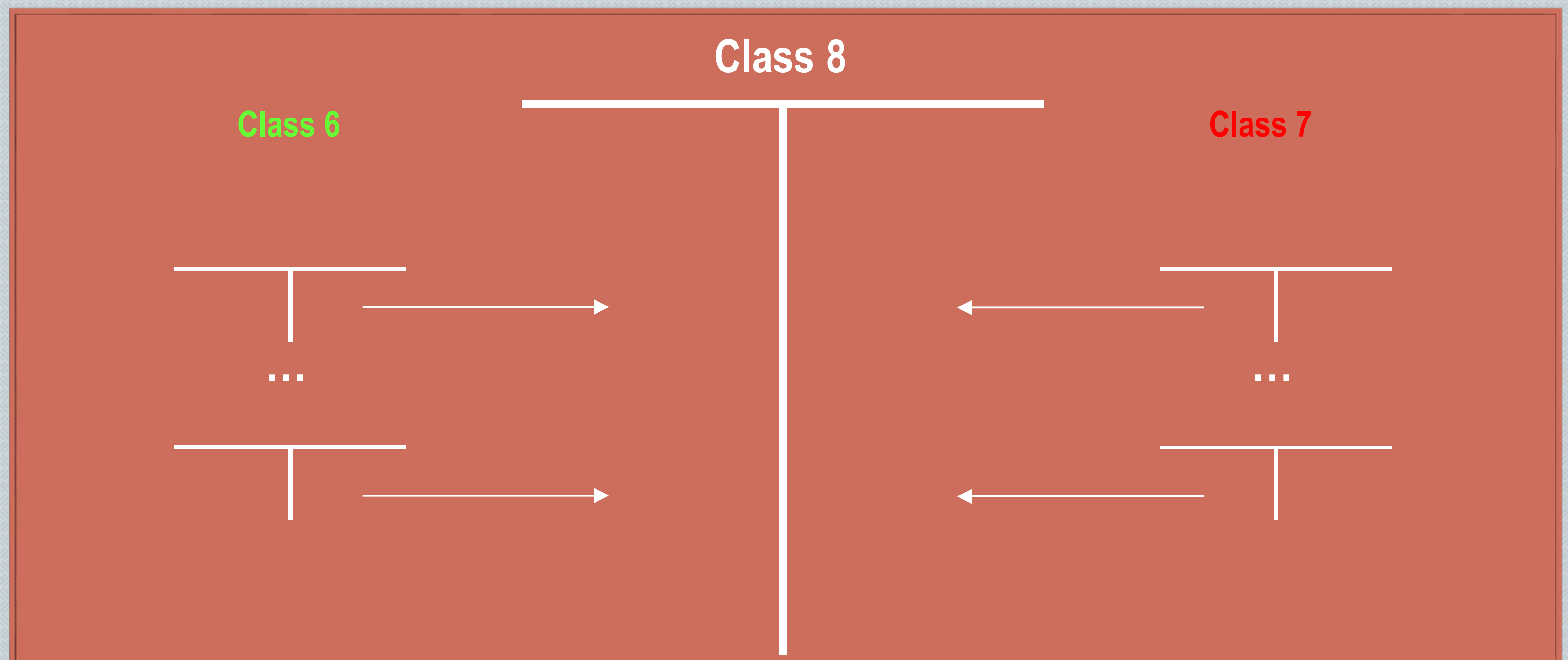
Classes 6, 7 e 8:

Class 6	Class 7	Class 8
GOGS	Sales	Net Income of the period
External S. and Services Expenses	Services	Interim dividends
Staff Expenses	Variation in inventories' production	
Depreciation and Amortization Expenses	Own Work Capitalized	
Impairment Losses	Operating Subsidies	
Fair value Losses	Reversals	
Provisions of the period	Fair value Gains	
Other expenses and losses	Other revenues and gains	
Financing expenses and losses	Interests, dividends and other similar revenues	

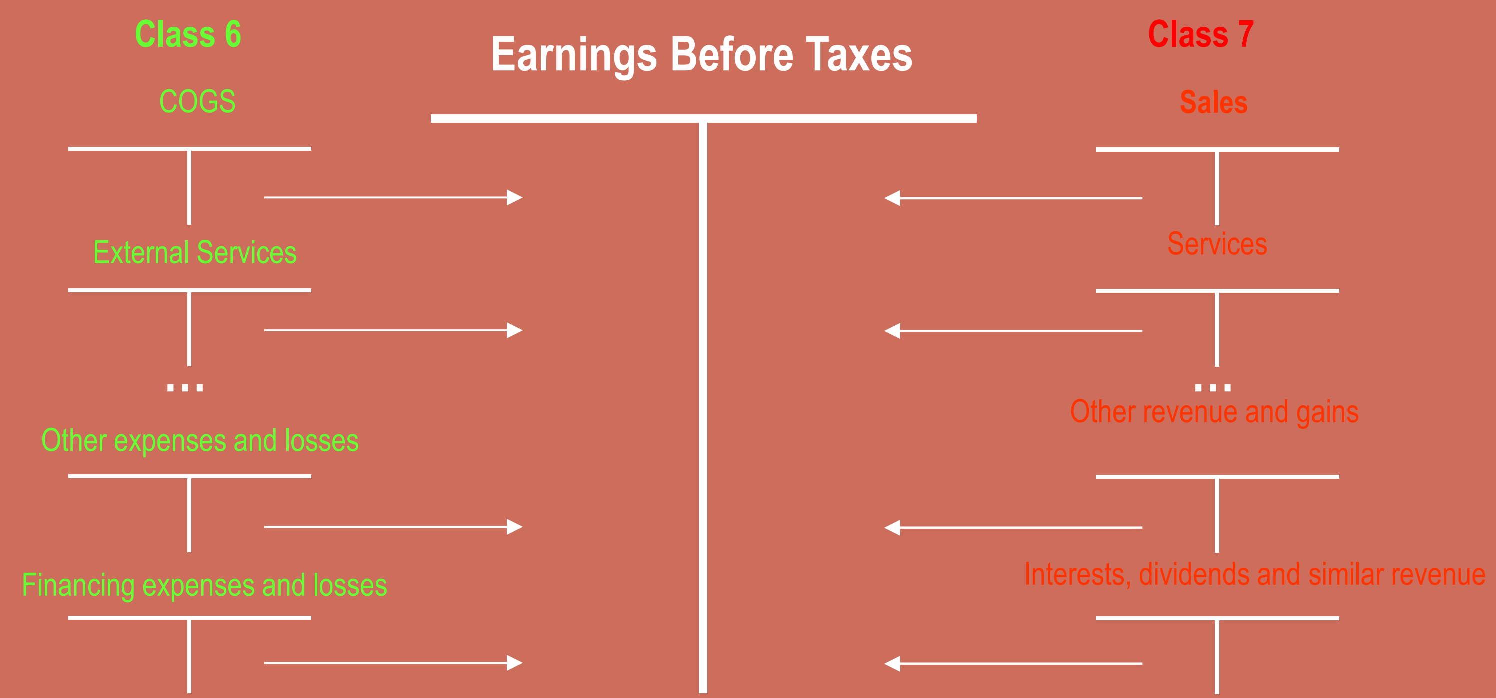
END of the YEAR OPERATIONS

How is it done?

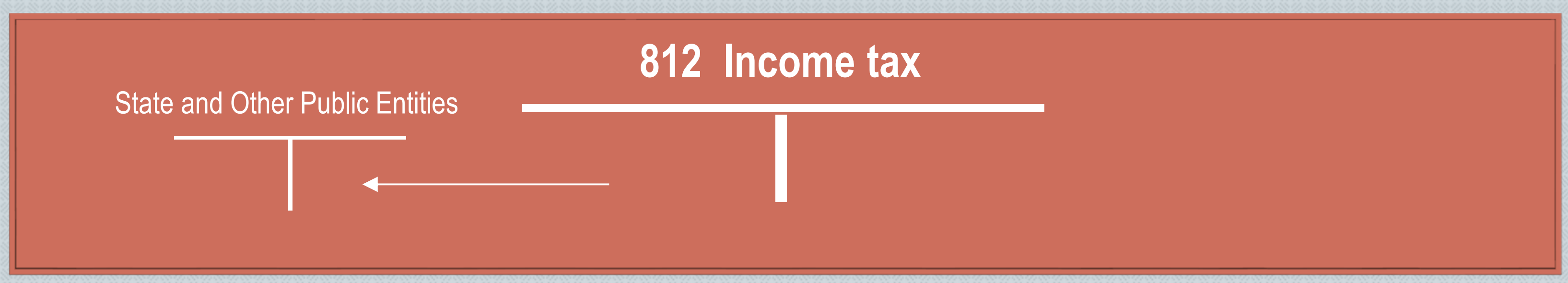
The accounts from class 6 and 7 are transferred to class 8:



END of the YEAR OPERATIONS



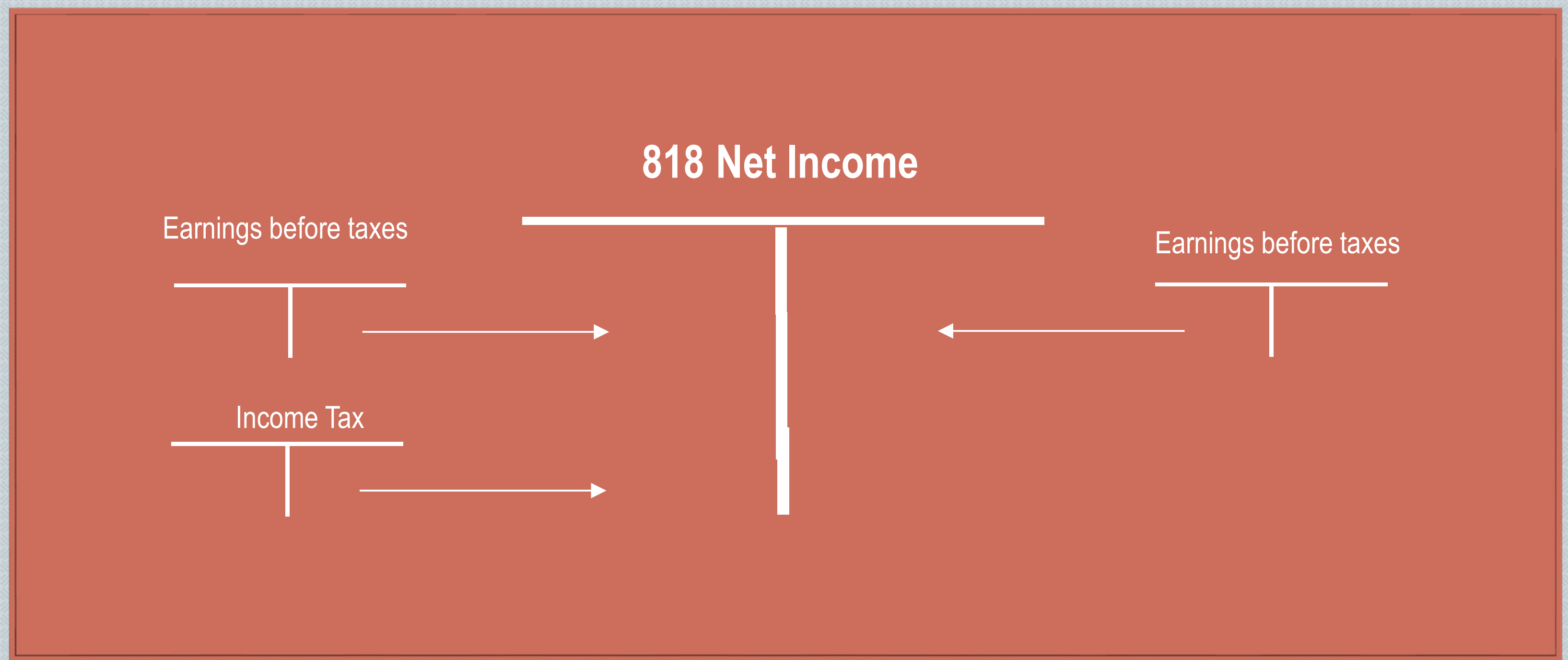
END of the YEAR OPERATIONS



The Income Tax account is debited for the estimated value of the tax (tax rate * income for tax purposes), while State and Other Public Entities- Income Tax is credited (Liabilities account).

END of the YEAR OPERATIONS

Finally, the account Net Income (#818) received all the balances from the previous accounts:



END of the YEAR OPERATIONS

•The balances of the accounts of classes 6 and 7 are determined and then transfered to class 8 - Income.

•Therefore, the balances of 6 and 7 are, after this, zero!!

•The balances of the accounts of these classes will appear on the income statement

Preparing the Trial Balance

- The trial balance is prepared with the accounts in the following order:
  - Asset accounts
  - Liability accounts
  - Stockholders' equity accounts
  - Revenue accounts
  - Expense accounts

- The trial balance is the springboard for preparing the balance sheet and the income statement

Deriving Financial Statements from the Trial Balance

	Debits	Credits
Cash	$ 336,700	
Accounts receivable	160,300	
Merchandise Inventory	59,200	
Prepaid Rent	4,000	
Store equipment	14,000	
Accumulated depreciation, store equipment		$ 100
Note payable		100,000
Accounts payable		16,200
Paid-in capital		400,000
Retained earnings		0
Sales revenues		160,000
Cost of goods sold	100,000	
Rent expense	2,000	
Depreciation expense	100	
Total	$ 676,300	$ 676,300

Balance Sheet

Income Statement

Closing the Accounts

- Closing the accounts has two purposes:
  - It transfers the balances of the “temporary” stockholders’ equity accounts (revenues and expenses) to the “permanent” stockholders’ equity account (retained earnings)
  - It makes the revenues and expense accounts have a zero balance, which readies them for the next period’s transactions