Accounting I

Degrees in Management and Economics

Accounting

Middle term exam: 05/04 at 10:00 (30%)
Exercise in class: 26/05 (20%)

Final Exams

EN: 09/06 at 9:00 (50%)
ER: 05/07 at 9:00

Accounting I

GOALS AND MAIN CONCEPTS ON FINANCIAL ACCOUNTING

Accounting

Accounting: system of *collecting*, *processing* and *reporting* financial information for decision makers

1. **Balance sheet :** a statement of financial position at the end of the period
2. **Net Income statement:** statement of comprehensive income for the period
3. **Changes in equity statement**: a statement of changes in equity for the period
4. **Cash flow statement**: a statement of cash flows for the period
5. **Notes**: comprising a summary of accounting policies and other explanatory notes

Accounting

Accounting

Financial Accounting

External users

Investors and Creditors
Customers and Suppliers
Workers…

Management Accounting

Internal Users

CEOs
Board of Directors…

Accounting

Financial Accounting	Management Accounting
Mandatory	
It is imposed by law and supports the accountability process	Not mandatory by law; it is the management process and managers that justifies its existence
Periodicity	
The financial statements are published annually. In some situations, e.g., for listed firms, the report can be trimestral or other.	Internal reports. The frequency and periodicity is defined by the managements.
Standards	
It is subject to national standards (SNC) and international standards (IAS/IFRS)	It is not subject to any national or international standards.
Nature of data	
The data shown is usually objective and verifiable	The data shown is usually subjective

Goal

Goal of the Financial statements

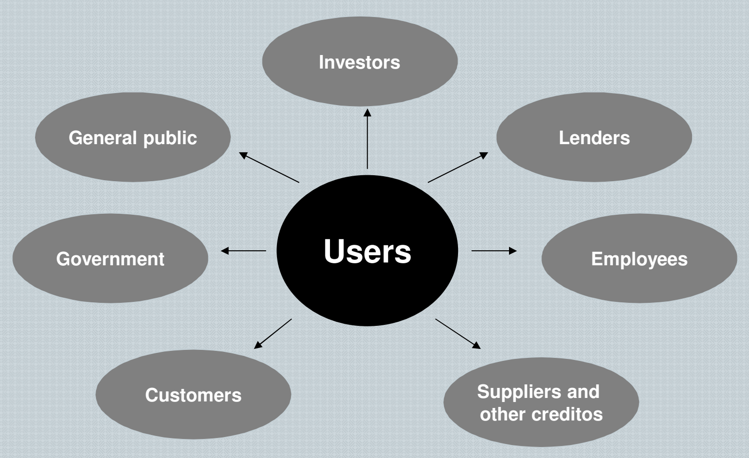
- Provide information about the financial position, financial performance and changes in financial position to assist the decision process

Balance sheet

Income statement

Cash Flow statement

Users of financial information



Qualitative characteristics

- Qualitative characteristics of financial information:
  - Understandability
  - Relevance
  - Reliability
  - Comparability

Qualitative characteristics

Understandability

↓

The information must be readily understandable to the users of financial statements

Qualitative characteristics

Relevance → Materiality

The information must be relevant to the needs of the users, which is the case when it may influence the economic decision of its users

- *Reporting, omission or misstatement*

Qualitative characteristics

Reliability → Faithful representation
Substance over legal form
Neutrality
Prudence
Completeness

The information must be free of material errors and bias, and not misleading. It must faithfully represent the transactions and events that affect the firm.

Qualitative characteristics

Comparability

- Consistency in time (Longitudinal comparison)
- Consistency in space (Cross sectional comparison)

The information must be comparable to the financial information presented for other accounting periods, so that the users can identify trends in the performance and financial position of the firm.
Users must also be able to compare the financial reports of different entities in order to evaluate their relative financial position, financial performance and cash flows.

Qualitative characteristics

- **Constraints on Relevant and Reliable Information**
  - **Timeliness** - If there is undue delay in the reporting of information it may lose its relevance.
  - **Balance between Benefit and Cost** - The benefits derived from information should exceed the cost of providing it.
  - **Balance between Qualitative Characteristics** - the aim is to achieve an appropriate balance among the characteristics in order to meet the objective of financial reports
  - **True and Fair View/Fair Presentation** - the application (…) of appropriate accounting standards normally results in financial reports that convey what is generally understood as a true and fair view of, or as presenting fairly such information.

Accounting Assumptions

Accrual assumption

- Transactions are recorded using the accrual basis of accounting, where the recognition of revenues and expenses arises when earned or used, respectively. If this assumption is not true, a business should instead use the cash basis of accounting to develop financial statements that are based on cash flows.

Going concern

- A business will continue to operate for the foreseeable future. If this assumption is not true (such as when bankruptcy appears probable), deferred expenses should be recognized at once.

Accounting I

GOALS AND MAIN CONCEPTS OF FINANCIAL ACCOUNTING

FINANCIAL STATEMENTS

Enterprise value

Set of elements (assets and liabilities) subject to management and assigned to a particular purpose.

Composition: nature of the elements: Assets, Liabilities and Shareholder's Equity	**Value**: Value of the Assets minus value od the Liabilities

Patrimony

When looking at the patrimony we should consider:

(a) Composition = nature of elements
Constitutive (Assets and Liabilities)

(b) Value (Assets – Liabilities)

Transactions

All the events that changes the value and/or composition of the enterprise value.

Permutations (Qualitative) ⇒ It changes the composition of the elements of the firm, but not the value of the enterprise	Alterations (Quantitative) ⇒ It changes the composition of the elements of the firm, and also the value of the enterprise

Transactions

Alterations

Positives (it increases the value of the enterprise)

Negatives (it decreases the value of the enterprise)

Patrimony – fact sheet

- It is a fact sheet any occurrence involving changes in the firm composition and/or value
- Qualitative or permutation fact sheets ⇒ variation in the composition of the patrimony, but not in its value.
- Quantitative or modifying fact sheets ⇒ variation in the composition and value of the patrimony.

Financial Statements

The objective of financial reports is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions

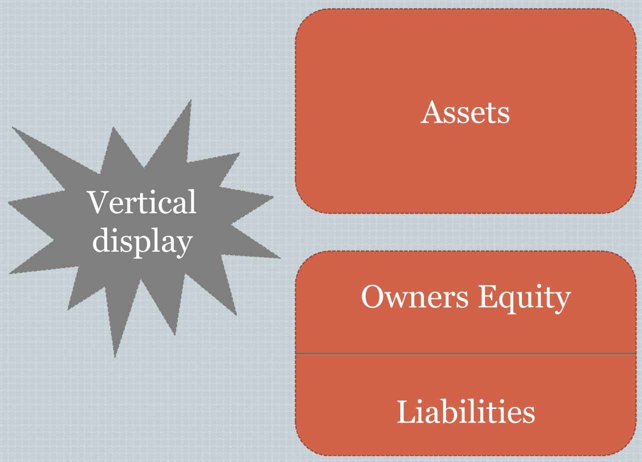
Financial Statements

1. Statement of financial position (***balance sheet***) at the end of the period
2. ***Statement*** of comprehensive ***income*** for the period (or an income statement and a statement of comprehensive income)
3. ***Statement*** of ***changes*** in ***equity*** for the period
4. **Statement** of ***cash flows*** for the period
5. **Notes**

Balance sheet

- The balance sheet (also called the statement of financial position) shows the financial status of a company at a particular instant in time (usually December 31st) and compares with the previous period.
- The left side lists the resources of the firm (investment)
- The right side lists the claims against those resources (funding)

Balance Sheet



Financial Statements

- **Recognition of the elements of the financial statements:**
  - **Asset** is recognised in the balance sheet when it is probable that the future economic benefits will flow to the entity and the asset has a cost or value that can be measured reliably.
  - **Liability** is recognised in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably.

See Conceptual Framework

Balance sheet

Accounting Equation:

Assets = Liabilities + Owners Equity

Assets> Liabilities⇨ Owners equity> 0

Assets< Liabilities⇨ Owners equity < 0

Assets= Liabilities⇨ Owners equity = 0

Balance sheet

Equation of accounting

Assets = Liabilities ± Owners equity

Assets - Liabilities = ± Owners Equity

Determinant Determinant Resultant

Expanded Balance Sheet Equation

(1) Assets = Liabilities + Stockholders' Equity

(2) Assets = Liabilities + Paid-in Capital + Retained Earnings

(3) Assets = Liabilities + Paid-in Capital + Revenues - Expenses

Classified Balance Sheet

- A **classified balance sheet** further groups asset, liability, and owners' equity accounts into subcategories
- Assets are classified into two groups:
  - **Noncurrent** (or long-term) assets
  - **Current assets**
- Liabilities are classified into
  - **Noncurrent** (or long-term) liabilities
  - **Current** liabilities

Classified Balance Sheet

- **Current assets** are cash and other assets that a company expects to convert to cash, sell, or consume during the next 12 months (or within the normal operating cycle if longer)
- Current assets are listed in the order in which they are likely to be converted to cash during the coming year
- In Portugal, with SNC: Assets presented in order of liquidity (less liquid to more liquid).
- **Noncurrent** are assets owned over 12 months

Classification of assets

- Fixed tangible assets
- Intangible assets
- Investment Properties
- Financial investments
- Inventories
- Biological Assets
- Accounts receivable
- Bank deposits

Liabilities

- **Current liabilities** are those that come due within the next year (or within the operating cycle if longer)
- **Non-current liabilities** are those that come due not earlier than 12 months after the balance sheet reporting.

Classification of Liabilities

- Provisions
- Loans obtained
- Deferred taxes
- Accounts payable
- State and other public entities

In Portugal, with SNC: Liabilities are presented in order of decreasing maturity (from the largest maturity to the smallest).

Owners Equity

- Represents the position of the owners of the firm
- The values are ordered according to the historical formation
  - Paid in capital
  - Legal Reserves
  - Other reserves
  - Retained earnings
  - Net income of the period

  - *Difference between book value and market value.*

Accounting I

INCOME STATEMENT

Financial Flow

1 – Related with the Financial position (Balance Sheet)

- **Obligation to pay**: acquisition of goods and services regardless of their payment or use (recognition in the Balance Sheet as a liability);
- **Right to receive**: sales of goods and services regardless of their receipt or production (recognition in the Balance Sheet as an Asset).

Economic Flow

2 – Related with Performance (Income Statement)

- **Expenses**: consumption and use of goods and services regardless of their acquisition and payment (recognition in the Income Statement as expenses)
- **Revenues**: production of goods and services regardless of their sale and receipt (recognition in the Income Statement as revenues)

Economic Flow

- **Definition of the elements of financial statements:**
  - **Related with performance**
    - **Income** is increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants

      => *Revenue and gains*
    - **Expenses** are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

      => *Expenses and losses*

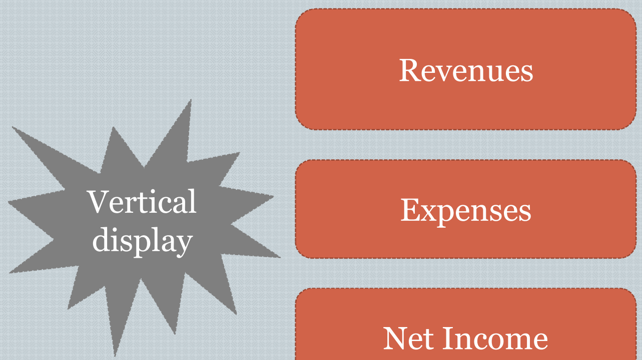
See Conceptual Framework

Monetary Flow

3 – Related with cash flows (Cash Flow Statement)

- **Cash out flow:** corresponds to exits of cash in the company regardless of the period of acquisition and use of goods and services
- **Cash in flow:** corresponds to entries of cash in the company regardless of the period of the sale and production

The Income Statement



The Income Statement

- An **income statement** is a report of all revenues and expenses pertaining to a specific time period
- It shows the economic performance of the company
- **Net income** = revenues minus all expenses
- A **net loss** occurs if expenses exceed revenues

The Income Statement

- Income Statement by Nature:
  - Expenses are grouped according to its nature, independently of the department or function that supported them

Compulsory

- Income Statement by functions:
  - The results are grouped having into account the department or function that had them

Optional

Net Income statement – by nature

- Expenses are grouped according to its nature, independently of the department or function that supported them
  - Cost of good sold (cost of sales);
  - External Services;
  - Wages
  - Impairments;
  - Amortizations and Depreciations;
  - etc

Goal: Net income (= Balance sheet)

Net Income statement – by functions

The results are grouped having into account the department or function that had them

- Cost of sales and services;
- Distribution costs
- Administrative costs
- R&D costs
- Financing costs;

Net income (= Balance sheet)

Net Income statement – by nature

Sales and service revenues
Cost of sales and services
External Supplies and Services Expenses
Staff expenses
Impairments
Provisions
Other revenues
Other expenses

EBITDA – ***Earnings Before Interest, Taxes, Depreciation & Amortization***

Net Income statement – by nature

Depreciation and amortization expenses

Operational Result

Interest revenues

Interest expenses

Result before taxes

Income Tax

Net Income (of the period)

Accounting I

FINANCIAL STATEMENTS
CASH FLOW STATEMENT
CHANGE IN EQUITY STATEMENT

Cash Flow statement

- Shows where the cash comes from and where it was used
- Shows payments and receipts
- It is presented in vertical format, showing the values for years N and N-1.

Cash Flow Statement

Vertical display

- Cash flow from Operational activities
- Cash flow from Investment activities
- Cash flow from Financing activities
- Variation in cash and equivalents
  Effects to consider from differences in exchange rates and variation in fair value
- Variation in cash and equivalents in end of period

Balance sheet

Financial Statements

Statement of Cash Flows

1 Cash Flows from Operations

Collections, Payments, Wages

2 Cash Flows from Investing

Purchase & Sales of PP&E, Long Term Securities, Making Loans

3 Cash Flows from Financing

Borrowing, Repaying

Issuing and Redeeming Debt & Equity

Dividends

Cash Flow statement

- Firms can have revenues but, because there is the possibility to pay/received other way that not in cash (payment/receipts for credit), these may happened in several different moments of time=> hence, a revenue does not mean a receipt of money
- It helps to determine the capacity to receive and pay in cash.
  - Liquidity
    - May be a sign of the continuity of the firm!

Variation in OE statement

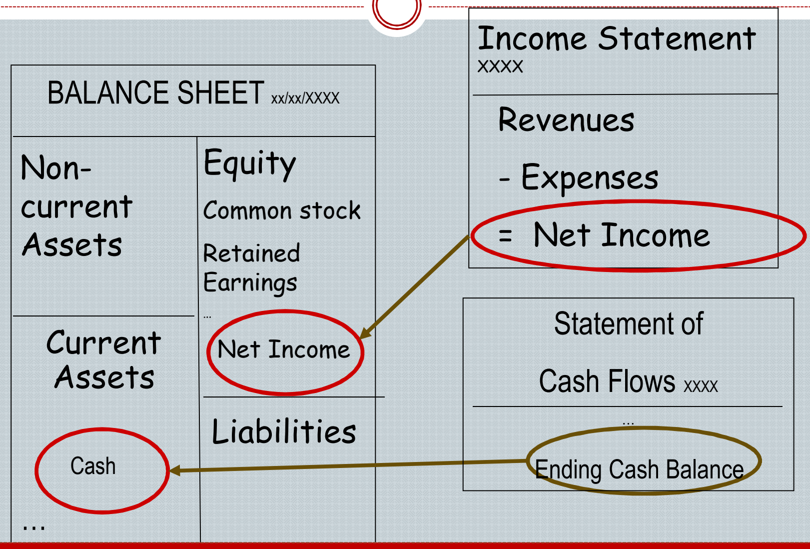
- Aims to show the facts that changed owners equity, during a period of time.
- It is presented in vertical format, showing the values for years N and N-1.

Matrix display

Annex or Notes

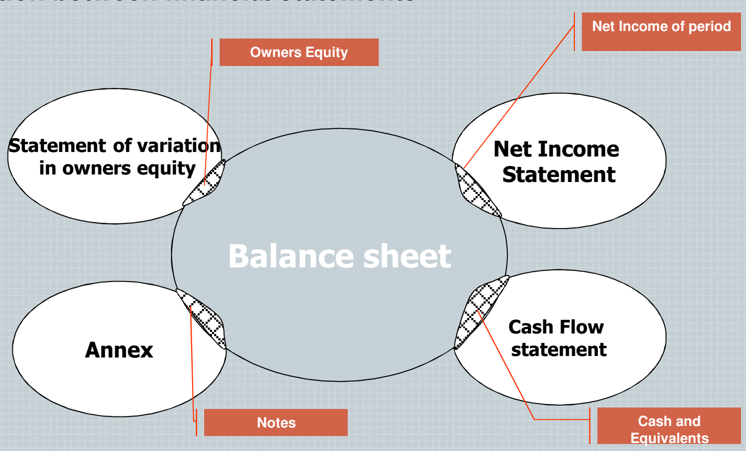
- The other financial statements are quantitative statements
- In the Annex the predominant information is qualitative (or narrative) and it is connected with all other financial statements

Financial Statements



Financial Statements

- Articulation between financial statements



In summary…

- Transactions can have an effect on financial statements:
  - Financial position
  - Performance
  - Cash flow
  - Variation of owners' equity
- Transactions can be disclosed on the notes

Accounting I

ACCOUNTING METHOD

Accounts

- An account is a summary record of the changes in a particular asset, liability, or owners' equity item
- The double-entry accounting system records each transaction in at least two accounts
- A compound entry affects more than two accounts

Accounts

- The elements of transactions are organized into **accounts** that group similar items together
- In a double-entry system, a **ledger** contains the records for a group of related accounts
- A **general ledger** is the collection of accounts that accumulate the amounts reported in the financial statements

Accounts

Account

Debit | Credit

Debit (abbreviated Dr.) denotes an entry to the left side of any account

000,00 €

Debit an Account

Credit (abbreviated Cr.) denotes na entry to the right side of any account

000,00 €

Credit na Account

Some accountants use the word "charge" instead of debit

Accounts

Account

Debit | Credit

000,00 € | **000,00 €**

Balance of an account: difference between the total of debits (D) and the total of credits (C).

Debtor Balance	**D>C**
Creditor Balance	**D<C**
Null Balance (settled)	**D=C**

Accounts

Account

Debit	Credit
1 920,00 €	3 220,00 €
700,00 €	675,55 €
1 020,00 €	
CreditorBalance 255,55 €	
3 895,55 €	3 895,55 €

To settle an account: is to calculate the balance of the account and write that difference where it is the gap in order to obtain the same value in both sides of the account.

Debits= Credits

Accounts

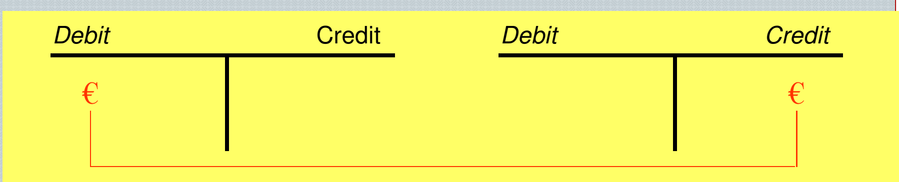
Chart of Accounts
SNC

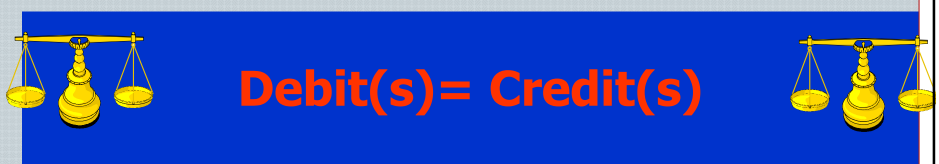
- Class 1: Money and Equivalents
- Classe 2: Accounts Receivable and Payable
- Classe 3: Inventories
- Classe 4: Investments
- Classe 5: Owners Equity
- Classe 6: Expenses
- Classe 7: Revenues
- Classe 8: Results

Double Entry booking

- Each transaction affects at least two accounts
- For each transaction debit(s) are equal to credit(s)
- The process of creating a new T-account in preparation for recording a transaction is called opening the account
- An account balance is the difference between the total left-side and right-side amounts, or vice versa, according to the type of account, at any particular time

Double Entry booking





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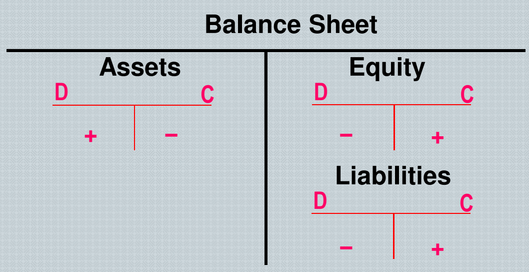
Double entry booking

- Asset accounts have left-side balances
  - Entries on the left side (debit) increase asset account balances
  - Entries on the right side (credit) decrease them
- Liabilities and owners' equity accounts have right-side balances
  - Entries on the right side (credit) increase their balances
  - Entries on the left side (debit) decrease them
- Revenue is written on the right side (credit) since they represent increases in net income
- Expenses are written on the left side (debit) since they represent decreases in net income

Double entry booking



Assets = Equity + Liabilities
Debits = Credits
Sum of Debit Account Balances = Sum of Credit Account Balances

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Recording Process

- The **general journal** is a formal chronological listing of each transaction and how it affects the balances in the accounts
- **Transactions** are entered into the ledger
- Each record has
  - Date
  - Title of the account;
  - Description
  - Value

Journalizing Transactions

- **Journalizing** is the process of entering transactions into the general journal
- A **journal entry** is an analysis of all the effects of a single transaction on the various accounts, usually accompanied by an explanation
- A compound entry means that a single transaction affects more than two accounts

Journalizing Transactions

- Classification of journal entries
  - Simple
  - Complex.

Documents

- Sales order
- Purchase order
- Shipping list
- Invoice
- Receipt
- Debit Note
- Credit Note
- Cheque

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The Recording Process

- The sequence of five steps in recording and reporting transactions is as follows:

Transactions Documentation → Journal → Ledger → Trial Balance → Financial Statements

- **Source documents** are the original records of any transaction

Preparing the Trial Balance

- A trial balance is a list of all the accounts with their balances
- The purpose of the trial balance is twofold:
  - Proving whether the total debits equal the total credits in the ledger
  - Summarizing the balances in the ledger accounts in preparation to construct the financial statements

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		Balance Sheet
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	Income Statement
Cost of goods sold	100,000		
Rent expense	2,000		
Depreciation expense	100		
Total	$ 676,300	$ 676,300	

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

Accounting I

OPERATING ACTIVITIES

INVENTORIES

Concept

For sale as the normal activity of the firm — Goods/stocks

In the production process for sale — Finished Goods

In the form of consumable materials to be used in the production process or to be used when services are provided — Raw materials

It also contains the biologic assets (animals and plants) that will be consumed in the normal activity of the firm.

Measuring Inventories

1st recognition

Acquired Inventories	Produced Inventories
Acquisition Cost	Production Cost
Acquisition price + all the expenses directly or indirectly related to make the good arrive to the warehouse	Raw materials + other materials consumed as wages, industrial costs (fixed and variables) and the ones related to make the product available in the warehouse.

Measuring Inventories – after initial recognition

The lowest of	
Cost (acquisition/ production	Net sales value (sales value – costs of finishing the good/costs of sale)

Estimated selling price- Estimated cost to finish production - Cost to sale products.

INVENTORIES

Inventory Valuation Methods

The acquisition price of inventories is not always the same;

It varies with time (prices are not stable and are depending on the law of demand and supply)

When there is inflation the prices rise.

Because of these reasons, there is the need to adopt some **criteria** to value the stocks in the firm that are sold and the ones that are on the warehouse at the end of the year.

Inventories

Specific Identification	• Inventories measured by its real price or effective price
FIFO	• Inventories measured by the oldest prices. In the warehouse the inventories that remain are valued by the most recent prices
Weighted average	• Inventories measured at a unit cost that result from the weighted average price of all the inventories in the warehouse

Specific Identification

- The **specific identification method** concentrates on physically linking the particular items sold with the cost of goods sold that is reported
- This method is relatively easy to use for expensive low-volume merchandise
- The use of bar codes and scanning equipment makes specific identification economically feasible for many companies

FIFO

- **FIFO** assigns the cost of the **earliest** acquired units to cost of goods sold
- The costs of the newer units is assigned to the units in ending inventory
- FIFO provides inventory valuations that closely approximate the actual market value of the inventory at the balance sheet date
- In periods of rising prices, FIFO leads to higher net income

Weighted Average

- The **weighted-average method** computes a unit cost by dividing the total acquisition cost of all items available for sale by the number of units available for sale
- The weighted-average method produces gross profit somewhere between that obtained under FIFO and LIFO

Perpetual and Periodic Inventory Systems

There are two main systems for keeping inventory records:

- Perpetual system
- Periodic system

The **perpetual inventory system** keeps a continuous record of inventories and cost of goods sold

The **periodic inventory system** computes cost of goods sold and an updated inventory balance only at the end of the accounting period

Inventory systems

Perpetual inventory system

- Register all entrances of stocks
- So, at any time the firm knows
  - The quantity of products/stock in the warehouse;
  - The value of those stocks; and
  - The Margin after each sale.

Required system for Large and Medium Companies applying SNC. Only micro-companies can use the periodic inventory system.

Inventory systems

Periodic inventory system

- We do not use the inventories accounts at each entry and exit of inventories.
- The physical count of the inventories and its valuation needs to be done periodically in order to obtain the results of sales.

Inventory systems

Periodic inventory system

- Inventories (Merchandise/Raw materials) is not used after the acquisition or sale of products
- The firms only knows:
  - The quantity of stock in the warehouse.
  - The value of acquisitions and beginning of the year inventory
- The physical counting of stock and respectively valuation is essential to calculate the Cost of good sold in the end of the year

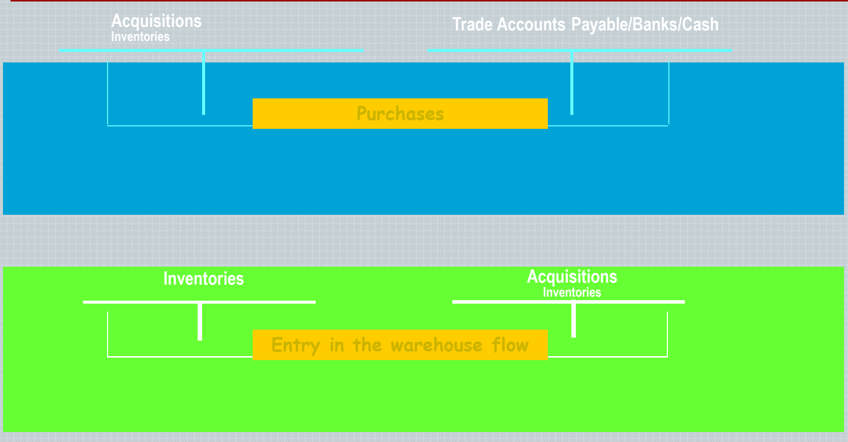
Periodic Inventory System

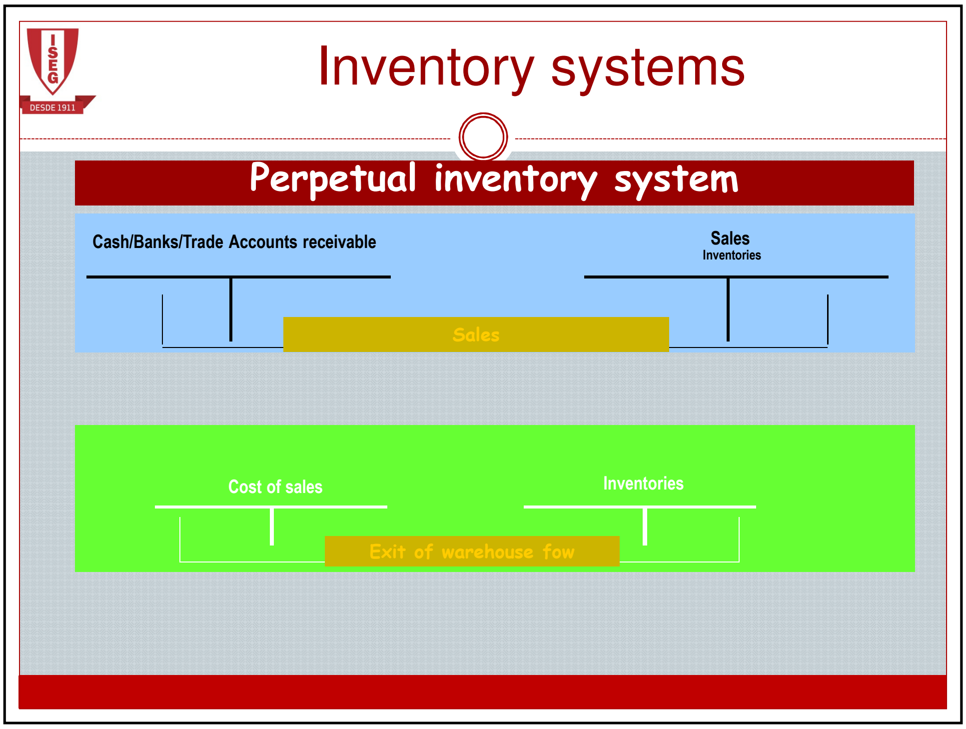
Under the periodic system, the calculation of cost of goods sold is delayed until there is a physical count:

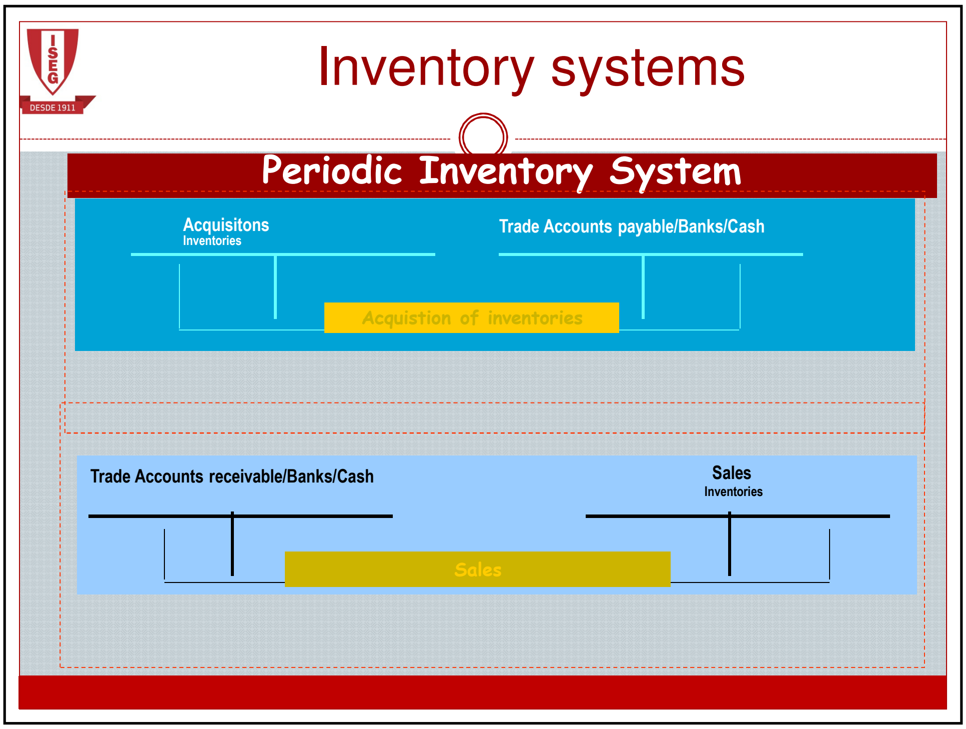
COGS = Beginning of the year Inventories
+ Acquisitions of inventories
– End of the year inventories
+/- Reclassification/Regularization of inventories

Inventory systems

Perpetual inventory system




Inventory systems
Perpetual inventory system
Cash/Banks/Trade Accounts receivable
Sales
Inventories
Sales
Cost of sales
Inventories
Exit of warehouse fow


Inventory systems
Periodic Inventory System
Acquisitons
Inventories
Trade Accounts payable/Banks/Cash
Acquistion of inventories
Trade Accounts receivable/Banks/Cash
Sales
Inventories
Sales

Accounting I

OPERATING ACTIVITIES

INVENTORIES

VAT

Key formulas

Net acquisition = Gross acquisition - Returns to suppliers - Obtained (commercial) discounts

Key formulas

Net Sales = Gross Sales - Returns from clients - (commercial) discounts offered

Key formulas

Cost of Sales = Initial Inventory + Net Acquisitions - Final Inventories - Inventories regularizations

Key formulas

Gross Result from sales = Net Sales - Cost of sales

Key formulas

Sales Price = Aquisition cost + Margin

% On top of sales price
or
% on top pf acquisiton price

VAT

VAT = Value added Tax

VAT

- Indirect Tax, focused on consumption
- It is applied in all stages of the economic cycle
- Company acts as tax collector

VAT

VAT

VAT

VAT

Value Added Tax Account (243) is divided into:

- VAT supported
- VAT deductible
- VAT liquidated
- VAT regularizations
- VAT calculations
- VAT to pay
- VAT to recover
- VAT reimbursable

Determining VAT

How to determine VAT?

VAT liquidated - VAT deductible ± VAT regularizations = VAT calculated

VAT liquidated:
• Sales of inventories;
• Services provided;
• Cash Advance from Customers;
• Internal consumption and free transactions.

VAT deductible:
• Purchase of inventories;
• Purchase of fixed tangible assets;
• Acquisition of External services;
• Cash Advances to suppliers.

VAT regularizations:
• Errors;
• Returns and discounts;
• Annulment of cash advance received;
• Annulment of cash advance paid;
• Bad debt;
• Thefts, accidents, etc.
• Others.

VAT calculated → VAT to recover / VAT To pay