FINANCIAL ACCOUNTING II

III. Consolidation

1. Relationships between firms and economic groups
2. Objectives of consolidation
3. The methods and techniques of consolidation
4. Phases of consolidation
5. Consolidation operations
6. Consolidated financial statements

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

Base

- IAS 24 – Related Party Disclosures
- IAS 27 – Consolidated and Separate Financial Statements
- IAS 28 – Investment in Associates
- IAS 31 – Interests in Joint Ventures
- IFRS 3- Business Combinations

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

In Portugal

- NCRF 13 – Interesses em empreendimentos conjuntos e investimentos em associadas
- NCRF 14 – Concentrações de actividades empresariais
- NCRF 15 – Investimentos em subsidiárias e consolidação
- For more detais see: *www.portugal.gov.pt/.../Apres_Sistema_Normalizaca_Contabilistica.pdf*

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

Business concentrations

- Vertical growth vs Horizontal growth
- Internal Development vs External Development

	Internal Development	External Development
Types	Branches Dependencies Delegations	Subordination contracts Groups Mergers Branches constitution Acquisition of participations

Adaptado de Elementos de Contabilidade Geral

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

	Internal Development	External Development
Advantages	Economy of management costs	Decentralization and responsibility allocation
	Functional specialization	Reduces the operational risk and more flexibility
	Better use of resources	Facilitates the diversification, vertical growth and cooperation with third parties
	Centralization of the decision power in functional or business areas	Facilitates the internationalization process
	More bargain power	Optimization of the financial, fiscal and legal issues

Adaptado de Elementos de Contabilidade Geral

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

- **Control** ia the power to manage the financial and operational policies of a firm in order to obtain benefices from its activities.
  - **One Subsidiary (branch)** is a firm that is controlled by other firm (known as mother-company)
  - **One Parent-firm** is a firm that holds one or more subsidiaries
  - ***A group*** is formed by parent-firm and all its subsidiaries

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

- According to the legal theory , the definition of group is based on four key points: :
  - Majority of the voting rights
  - have the right to exercise a dominant influence over a company which is one of the owners of capital;
  - possibility, by statute or contract, to appoint the board of directors or supervisory board;
  - hold at least 20% of the voting rights of a company

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

- **The group concept is closely linked to the concept of dominance and control.**

  - Consolidate = “make solid"

CONTABILIDADE GERAL II

1. Relationships between firms and economic groups

Economic Group – Group of companies in relation of dependence on a single management.

Necessary requirements:

- Autonomous juridical entities
- Dependência dessas entidades face a uma sociedade-mãe, que detém o:
  - power law (financial dependency - majority vote),
  - De facto power
    - Directive dependence – appointment / replacement of the majority of the directors or the supervisory board
    - Contractual dependence – the result of agreement between firms
    - Economic dependence - results from quasi-monopoly of the group, for example, by subcontracting.

CONTABILIDADE GERAL II

1. Relationships between firms and economic groups

- **Consolidation perimeter**
- Set of all group companies that will be included in consolidation, as well as the identification of the corresponding methods of consolidation.

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

- In defining the scope of consolidation it must be taken into account:
  - degree of dependency: power of control of the mother-firm on the dependent firm
  - Nature of activities:
    - Knowledge of its homogeneity
    - Compatibility of the correspondents financial information
  - Obstacles to consolidation
    - Situations that may harm the integration of the firm's accounts in the group consolidated accounts
  - Material importance
    - Relevance of the values of each firm in relation of the group

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

Tasks to be performed to determine the set of companies to consolidate:

- Develop the organizational structure of the group
- To know the nature of activities;
- Recognize the importance of the company;
- List other obstacles or restrictions on consolidation;
- Identify core businesses to consolidate

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

- Develop the **organizational structure of the group**
- List of all companies that depend directly or indirectly, the parent company:
  - Percentage of interest (participation) and
  - Percentage on control

In determining the scope of consolidation is necessary to take into account the percentage of participation and the percentage of control, the latter that determines whether an owned company enters or not in the consolidation

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

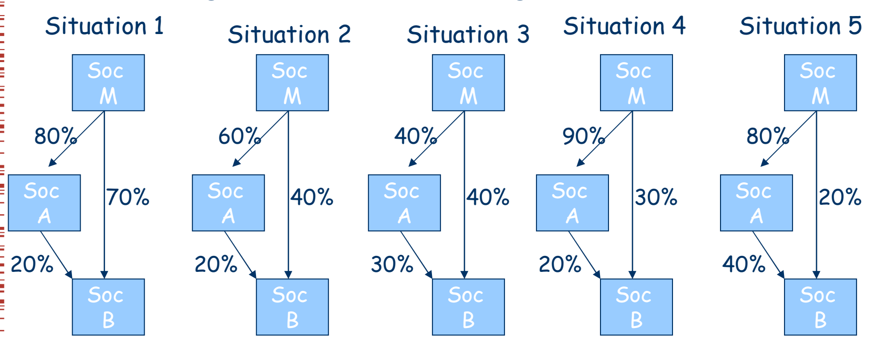
	Percentage of interest*	***vs* Percentage of control**
Concept	Fraction of Capital held directly and indirectly by the dependent society	Degree of dependence of subsidiaries compared to participants
Value	It is the product of the percentages of participation in directly or indirectly dependent companies - share of the assets of owned company that belongs to the owner company	It is the percentage of capital that the participant company controls (by direct or indirect) in the participate company - the voting rights

* Percentage of interest = Financial Percentage = Percentage of participation

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

Percentage of interest *vs* Percentage of control



NOTE: The figures indicate the % of share of a company in another

FINANCIAL ACCOUNTING II

1. Relationships between firms and economic groups

Perc Control/Int / Situations	Percentage of control			Percentage of interest		
	Direct	Indirect	Total	Direct	Indirect	Total
Situation 1						
M on A	80%	0%	80%	80%	0%	80%
A on B	20%	0%	20%	20%	0%	20%
M on B	70%	20%	90%	70%	16%	86%
Situation 2						
...						

FINANCIAL ACCOUNTING II

2. Objectives of consolidation

Consolidation = elaboration , for the group, of the financial statements that are done for the individual firms as it formed a single firm

- It allows the analysis of the economic and financial situation of a set of firms that belong to a group:
  - Return
  - Cost structure
  - Assets and Liabilities composition
  - Investment and financing capacity
  - In response to internal and external needs of information

FINANCIAL ACCOUNTING II

2. Objectives of consolidation

Objective – provide information about a set of firms that constitute a group in order to facilitate the decision making

Advantages	Disadvantages
Financial information of the group	Accounting conventions
Facilitates the strategic planning and the control of firms	Comparability between groups
Response to the internal and external needs of informaton	Comparability of the same firm along the time

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Methods and criteria for the accounts consolidation
- line to line consolidation
- proportional consolidation
- one line consolidation
- Cost criteria (Acquisition cost/ historical cost)

Applications
- Records in the journal/T
- Work maps

Consolidation Techniques
- Direct Consolidation
- Consolidation in stair /indirecta

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

	Percentage of Control		Type of control	Consolidation method
Voting rights > 50% 20% ≥ Voting rights < 50% ▪Dominant influence by contract; or ▪Power to nominate the board.	Exclusive Control (branch)	+	accounting structure compatible	Line to line (total)
If the accounting structure is not compatible → Patrimonial Equivalence				
20% ≥ Voting rights < 50% Participation with other groups	Shared control (*Emp. Conjunto*)	+	accounting structure compatible	Proportional method
If the accounting structure is not compatible → Patrimonial Equivalence				
Voting rights ≥ 20% significant influence justified	significant influence (associate)		Patrimonial Equivalence	
If the significant influence does not verify → Exclusion				

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

	Types of control	Consolidation Method	Consolidation lens
Branch or subsidiary	exclusive	total	Parent-firm
Joint Control	shared	Proportional	owner
Associate	significant influence	Patrimonial Equivalence*	-

* Alternative method of consolidation

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

1. Line to line consolidation (Total Method)

- Consist in including, in the balance sheet and net income statement of the mother-firm, of the the elements from branches
- The rights and results from others entities are designed *minority interests* .

BALANCE SHEET EM

Assets EM (PF of 90% of F. A)	OE EM
	Liabilities EM

Balance sheet F. A

Assets F. A	OE F. A
	Liabilities F. A

Consolidated balance sheet EM

Assets EM (s/ PF of 90% of F. A)	OE EM
	Minority Interests
Assets F. A	Liabilities M
	Liabilities F. A

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

1. Line to Line

A. Sum, line to line, of 100% of all accounts of the balance sheet and net income statement;

B. Eliminate the financial participations (411 of participant) in exchange of Owners equity of the participated

=> Determine the *Consolidation Differences and Minority interests*

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

1. Line to line consolidation - Phases

C. Cancel the active and passive debts between the several firms;

D. Cancel the operations between firms of the group:

i) reciprocal operations: operations that, being cancelled, do not affect the consolidated results ex: purchases and/or sales; services, financial expenses;

ii) non reciprocal operations : operations that, being cancelled, , do affect the consolidated results (not realized resufls), ex: internal sales of tangible assets, results included in the inventories, dividends...

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

2. Proportional Method

- Consists in the integration of the part that proportional belongs to the elements of the balance sheet and net income in the consolidate accounts
- Does not exist Minority Interests but exist (or may exist) consolidation differences;
- Apply in the total consolidation accounts but with the necessary adjustments
- Limited application.

Balance sheet M

Assets M (PF of 50% of B)	OE M
	Liabilities M

Balance sheet B

Assets B	OE B
	Liabilities B

Consolidate balance sheet M

Assets M (s/ PF of 50% of B)	OE M
50% Assets B	Liabilities M 50% Liabilities B

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

3. Patrimonial Equivalence Method

- It is not a proper consolidation method, although it is seen as one.
- It is a valuation criteria of the financial investments;
- Consists in the adjustment, in the balance sheet of the participant firm, of the book value of the own capital parts , by the value that it is correspondent of the own OE of the participated firms

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

3. Patrimonial Equivalence Method

Phases:

1. Determine the book value of financial contribution (proportional to equity of the subsidiary);
2. Accounting for the difference between the purchase price and the percentage of participation in equity of the subsidiary (book value) as Consolidation Differences in exchange for Financial Inv;
3. Participation in net income is income / expense in the year for consideration for Financial Inv (if the participation has been acquired at the beginning of the year);
4. Any changes in OE, in addition to Net income, must be reflected in the Financial Inv in exchange of Adjustments to Capital

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

4. Cost Method

- This is not a method of consolidation but it is a valuation method applied exceptionally in the consolidation of accounts;
- Consists in maintaining, in the balance sheet of the participating business, the value of financial participation at cost
- With this criteria, it is only recorded the attribution and receipt of dividends, and the acquisition/sale of financial investments

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Consolidation Differences

- It is the difference between the acquisition value of the contribution (by the participant) and the book value of the corresponding percentage in the equity of the subsidiary.
- It is not possible to attribute this difference directly to balance sheet items (fair value).
- Reported at the date of acquisition.

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Consolidation Differences

- Acquisition value > Book value of the adjusted percentage of the fair value of the assets and liabilities => Consolidation Differences Positive/active => Intangible Assets => *Goodwill*

- Acquisition value < Book value of the adjusted percentage of the fair value of the assets and liabilities => Consolidation Differences Negative => Potential Gain => reinforce of the Owners Equity => *Badwill* or negative *Goodwill*

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Minority Interests

:

It consists in the part of capital held by third parties in subsidiaries included in consolidation (total method) and it needs to be recognized in the consolidated financial

- Balance Sheet: percentage of OE included in the net income that corresponds to minority participations
- Income Statement: it is the part of the result that corresponds to the third parties participations

It reflects the third parties interests at the date of elaboration of the financial statements

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Application forms

- Accounting records
  Debits and Credits in the Journal to make the consolidation, according to the accounting practices
- Appropriate working maps to the consolidation task

	Parent-Firm	Branch	P+B	Debit	Credit	Consolidated
Fixed Tangible Assets						
Intangible Assets						
Financial Investments						

FINANCIAL ACCOUNTING II

3. The methods and techniques of consolidation

Consolidation Techniques

Technique	Direct Consolidation	Indirect Consolidation
Way	All group companies to consolidate are integrated directly into the parent company	The consolidation is made in the company involved, which requires the consolidation in steps
It is need to	Previous determination of all control percentages and direct and indirect participation percentage of mother-firms in other firms	Sequential definition of the control percentages and of the control and interest percentages
Advantages	Fast Less costs Centralization of control	Higher segmentation of the information in subgroups => better knowledge of the group Decentralization of the consolidation work (less margin for error)
Disadvantages	Lack of segmental information Probable less rigor More difficulty of control	Higher processing cost Time consuming

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation
2. Pre-preparation - Adjustments
3. Consolidation operations - Eliminations
4. Elaborations of the consolidation documents

Individual Annual Accounts

+/-

Pre-preparation - Adjustments

=

ndividual Annual Accountss (Pre-Consolidation) - Aggregation

+/-

Eliminations of consolidation

=

Consolidated Accounts

Made in the accounts of the same company, thereby affecting only its financial statements for the subsequent consolidation => Operations prior to consolidation.

It is about the aggregate accounts of two or more companies, including accounts of an opposite or reciprocal signs. They are already a consolidate operation.

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

- Definition of Data Consolidation;
- Data collection;
- Manual of Consolidation
- Scope of Consolidation
- Chart of the Group;
- Calculation of Percentage of Control and Interest;
- Determination of consolidation methods to apply

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

Consolidation Date

- Should coincide with the date of closing of accounts of the parent company, although it is permissible if another date would result in improved financial reporting.
- In situations of conflict between the date of consolidation and closing of accounts (some) subsidiaries:
  - Closing date with difference less than 3 months– consolidation based in:
    - Intermediate accounts;
    - individual accounts corrected by the revenant and significant events occurred between the closing of accounts and the consolidation moment
    - Accounts at the closing date with reference, in annex, to the relevant events occurred between the 2 dates
  - Closing date with difference more than 3 months– consolidation is compulsory based in intermediate accounts

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

Consolidation Manual

- Guide the work of consolidation and as such should reflect the specificity of the group to consolidate;
- Elements should include:
  - Account chart
  - Calendar of consolidation;
  - Criteria for defining the scope of consolidation;
  - Organization and consolidation methods applied
  - The valuation and other accounting rules in the group;
  - Process validation of intra-group;
  - Methodology for elimination of intra-group;
  - Technique to be used for the consolidation (and criterion of application);
  - Structure and Content of the Dossier Consolidation;
  - Structure and Contents of the documents summarizing the information and control

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

- It is mandatory consolidation of accounts mother-firm subject to the national law (which holds the power of law or de facto power): SA, LDA
- Are exempt from the consolidation of the mother-firms that are public companies, cooperatives, partnerships, etc.;
- Should be consolidated all subsidiaries regardless of the location.

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

<u>**Firms that to not need to consolidate (DL 158/2009, art.7.º)**</u>

1. Mother firms that exceed the limits of
   - total balance sheet: 7,5 millions Euros
   - Sales and turnover: 15 millions Euros
   - Average employees: 250
   - During more than 2 consecutive years
2. Mother firms that are a branch of a firm in the

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparação

<u>**Exclusions**</u>

- <u>Branches that are always excluded from consolidation:</u> firms that are in a very different activity in such a way that its inclusion in consolidation would not make the firm show the appropriate and truthful image of the firm. EX: Banks, Insurance
- <u>Branches that are optional to exclude from consolidation</u>
  - Because those firms are not relevant. EX: small firms which time and cost is very consuming and whose information is not relevant
  - Because are subject to restrictions that warm the parent-firm accounts. Ex: firms in bankruptcy, etc;
  - Because they were acquired with the goal of being sold.

FINANCIAL ACCOUNTING II

4. Phases of consolidation

Consolidation perimeter

1. Determination of the companies that will be included in the consolidation
2. Factors to consider in defining the perimeter
   a) Degree of dependence
   b) Nature of activities
   c) Material Relevance
3. Choose the method of consolidation according to the percentage of control (but considering the percentage of interests)
   a) Exclusive Control - Percentage of Control Exceeding 50%;
   b) Joint Monitoring - Power Control distributed by limited group of companies (typically the situation of 50-50 or lower participation - between 20 and 50% - but with shared control)
   c) Significant influence - Percentage of Control between 20 and 50% Other Companies

FINANCIAL ACCOUNTING II

4. Phases of consolidation

1. Preparation

Type of control	Method
Exclusive Control - branch included in the consolidation	Line-to-line
Exclusive Control- branch compulsory excluded from consolidation	Patrimonial Equivalence
Exclusive Control- branch optionally excluded from consolidation	Cost
Joint Control - Joint Venture	Proportional
Significant Influence- associate firm included in the consolidation	Patrimonial Equivalence
Significant Influence - associate firm optional excluded form consolidation	Cost
Other Firms	Cost

FINANCIAL ACCOUNTING II

4. Phases of consolidation

2. Pre-consolidation operations – Adjustments

Standardization of the Individual Accounts of each company, aiming the consolidation of accounts. The adjustments may result from

- Measurement criteria
- Adaptation to the criteria of the SNC;
- Omission of transactions within the group
- Conversion to currency of financial statements in foreign currency;
- Differences between balances of intra-group

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FINANCIAL ACCOUNTING II

4. Phases of Consolidation

3.Eliminations

It is necessary to eliminate some values in order to avoid duplications in the aggregation process. For example:

- Balance between group firms:
  - Clients/Suppliers;
  - Loans;
  - Acquisitions/Sales;
- Intern Results by operations in the group:
  - Results on the inventories ;
  - Closing of fixed assets;
- Financial Investments;
- ...

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FINANCIAL ACCOUNTING II

4. Phases of consolidation

4. Consolidation documents

- Consolidated Balance sheet
- Consolidated Net Income Statement:
- Annex;
- Consolidated Cash Flow Statement;
- Annex to Consolidated Cash Flow Statement.

FINANCIAL ACCOUNTING II

5. Consolidation operations

1. Accumulation of balance sheets and income statement of business consolidation, given the consolidation method to apply (or proportional integral method);
2. Compensation between the parts of capital held by the parent and the equity of subsidiaries (net income is excluded if it was obtained after the date of acquisition of Financial Part.):
   a. Elimination of the financial participations of the mother-firm in the branches in exchange of OE
   b. Calculation the consolidation differences
   c. Recognition of the minority interests (in OE and Net Income);
3. Elimination of the operation between firms of the group

FINANCIAL ACCOUNTING II

5. Consolidation operations

1. Balance Sheet and Net Income
   1. Global Method – accumulation of 100% of branch

Financial Participations	88,000	0	88,000
Fixed Tangible Assets	600,000	88,000	688,000
Depreciations	-200,000	-20,000	-220,000
Inventories	800,000	40,000	840,000
Clients	1,200,000	60,000	1,260,000
Cash and Banks	72,000	12,000	84,000
Total Assets	2,560,000	180,000	2,740,000
Owners Equity	M	F	M + F
Capital	800,000	64,000	864,000
Reserves	1,200,000	16,000	1,216,000
Net Income of period	200,000	40,000	240,000
Total OE	2,200,000	120,000	2,320,000
Suppliers	320,000	48,000	368,000
Other accounts payable	40,000	12,000	52,000
Total Liabilities	360,000	60,000	420,000
Total OE and Liabilities	2,560,000	180,000	2,740,000

Expenses	M	F	M + F
Cost of Sales	2,520,000	240,000	2,760,000
External Services	480,000	44,000	524,000
Staff Expenses	840,000	100,000	940,000
Depreciations	80,000	8,000	88,000
Financing Expenses	40,000	16,000	56,000
Other expenses and losses	4,000	200	4,200
Tax	68,000	13,600	81,600
Net Income of period	200,000	40,000	240,000
Total	4,232,000	461,800	4,693,800
Revenus	M	F	M + F
Sales	4,000,000	440,000	4,440,000
Services	108,000	8,000	116,000
Others financial revenues and	40,000	12,000	52,000
Interests and similars	80,000	1,200	81,200
Others revenues and gains	4,000	600	4,600
Total	4,232,000	461,800	4,693,800

FINANCIAL ACCOUNTING II

5. Consolidation operations

2. Compensation between the shareholdings held by the parent and the equity of subsidiaries
3. Part of Capital = Fraction of the OE of the branch
   i. Direct cancelation of the financial investments in exchange of the OE
   ii. There are no consolidation differences
   iii. It is necessary to recognize eventual minority interests (% of capital not owned by the group), in the global method.

Book value of capital fraction	80,000
(80% of OE with exception of results)	
Consolidation Differences	0
(aq. Value - Book value of capital fraction)	
Minority Interests	20,000
Minority Interests - Net Income	8,000

OE of F		Particip of M	IM
Capital	80,000	64,000	16,000
Reserves	20,000	16,000	4,000
Net Income	40,000	32,000	8,000