Financial Accounting
Ch 3 – Head Office and Branch, Agency & Principal

1. Principles of Decentralization:

Decentralization is separation of a business into more manageable units. Centralized management may best serve a one-person owner manager operated business. It will have the owner manager's close supervision and will be operated as he wishes.

But as the business grows and has various lines of operations as well as distributed centers in areas, then it becomes impossible to manager it centrally by a Centralized management. It needs responsible managers at the different areas and operation fields. This type of management is decentralized management.

One reason for decentralization is that different operation units need expert management. Decentralization is the delegation of authority and responsibility by the Central manager.

The separate units in decentralized management may be called Responsibility Centers or Segments. Operation units that need different expert management are called Departments. Segments scattered around different areas and requiring different management are Branches.

An example: *Africa Beza College (ABC) has its Head Office (Home Office) in Addis Ababa. Its operation is too large to be managed by one individual. So at the Head Office, it has a General Manager and managers responsible for:*

Academic matters
Administration
Finance and Accounts

*These are **Departments**, which may also be called segments.*
*It is also running Colleges in Awassa, Shashemene and Lekempt, which are its **Branches**.*
If big enough, Departments or Branches may be segmented further into sub Departments that have their own different managers. Africa Beza College's Academic operation is further divided into sub units:

Accounting Department
Management and Marketing Department
Secretarial Science Department
MIS Department
Student Registration and records
Library

If manageable, operation units may be consolidated in one segment under one manager. For example, ABC has one manager for student affairs and administration operation. It also has one manager for Awassa and Shashemene Branches.

Types of Decentralized operations:

Business operations can be classifies by scope of responsibility assigned and the decision-making authority given to individual managers. There are three types of Decentralization

1. Cost centers
2. Profit centers
3. Investment centers

Cost centers

In cost center, the department manager has responsibility for control of ***costs*** incurred, and the authority to make decisions that affect these costs. He does not make decisions about sale of the output. Also he does not make decisions as to the plant assets available to the Department. This is commonly used for government organizations.

E.g. - Supervisor of power department

Profit centers

In profit center, the manager has responsibility and authority on matters that effect both ***cost and revenues*** for the department. He has no control over plant assets available for the center.

E.g. Bambis Department Store might decentralize its production by product line - Clothing Dept, sporting goods Dept, toys dept, foodstuff Dept, beverage Dept etc. – as profit center.

Investment centers

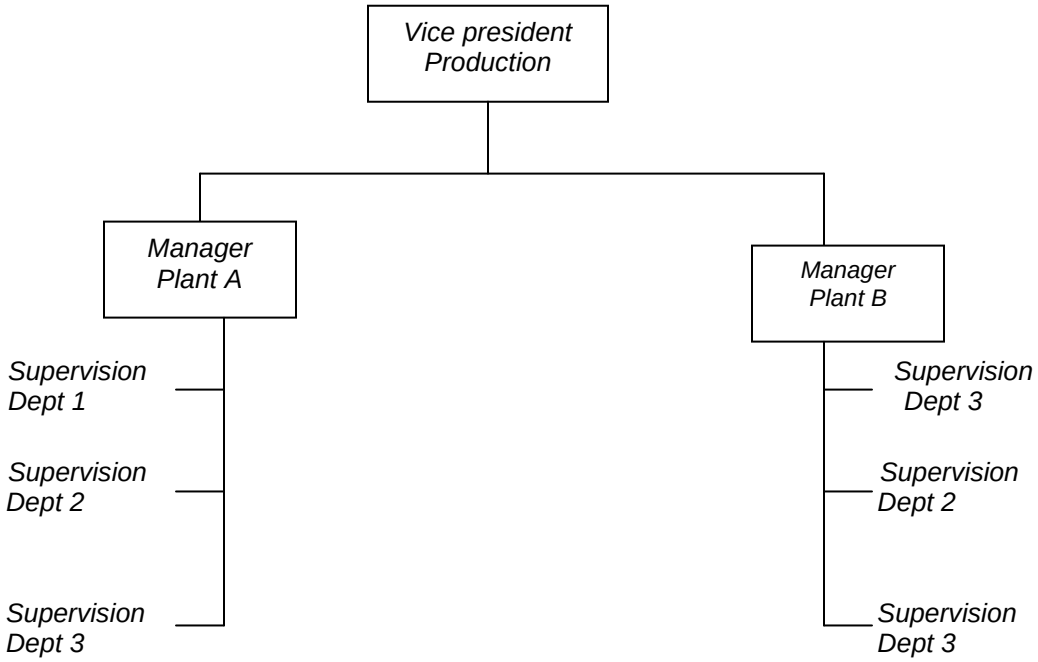
In an investment center, the manager has responsibility and authority on costs, revenues and plant assets available for the unit.

E.g. Mobil Oil Co.

2. Accounting for cost centers – (segmented operations)

Since manager's responsibility and authority is on costs the focus of accounting is on costs. The accounting tools of cost control are Budget and standard costs (Budgetary & cost accounting).

To illustrate assume the organization chart of a manufacturing Business is as follows:



Managerial Accts reports aid managers to control costs. One such report is Budget performance report. In the as following example of the manufacturing business organized as above, we see 3 level of cost centers. Vice president's office, Office of plant A manger, supervisor Dept A, 1

Budget performance
Vice president - Production
For Month ended October 31, 2003

	Budget	**Actual**	**Over**	**under**
Administration	19500	19700	200	
Plant A	467475*	470330*	2855*	
Plant B	395225	394300 -		925
	882200	884330	3055	925

Budget Report – Manager A
For Month ended October 31, 2003

	Budget	Actual	Over	under
Administrative	*17500*	*17350*		*150*
Dept 1	*109725***	*111280***	*1555***	
Dept 2	*190500*	*192600*	*2100*	
Dept 3	*149750*	*149100*		*650*
	*467475**	*470300**	*3655**	*800**

Budget performance report – supervisor Dept 1- Plant A
For the month ended Oct 31, 2003

	Budget	Actual	Over	under
Factory wages	*58100*	*58000*		*100*
Materials	*32500*	*34225*	*1725*	
Supervision Salaries	*6400*	*6400*		
Power n& light	*5750*	*5690*		*60*
Depreciation	*4000*	*4000*		---
Maintenance	*2000*	*1997*		*10*
Insurance	*975*	*975*		*- -*
	*109725***	*111280***	*1725**	*170*

Note the relationship between the figures marked *
Note the relationship between the figures marked **

Additional detail reports such as scrap report, factory wages report etc may be useful to supervisor's decisions to identify large deviations like the one under materials. An example of scrap report would be as follows:

Materials Scrap report –Dept 1- Plant A
For the month ended Oct 31, 2003

Material #	**Units spoiled**	**Unit Cost**	**$ loss**	**Remarks**
A392	*50*	*$ 3.10*	*155.00*	*Machine malfunction*
C417	*76*	*.80*	*60.80*	*Inexperienced employee*
G118	*5*	*1.10*	*5.50*	
J510	*120*	*8.25*	*990.00*	*Substandard materials*
K277	*2*	*1.50*	*3.00*	
P719	*7*	*2.10*	*14.70*	
V112	*22*	*4.25*	*93.50*	*Machine malfunction*
			1322.50	

3. Accounting for profit centers (Departments)

Since the Manager's responsibility and authority is on both cost and revenues, then the Accounting for Departments or profit centers is shown in a form of the income statement. This is done in three ways:

1) Gross profit by Departments
   The income statement shows *contribution of departments to Gross profit* of the Co. this is revenue less cost of goods sold both of which one under control of Departments managers.

   E.g. Income Statement Departmentalized through Gross profit is shown as Illustration 1.

2) Departmental margin / contribution/

This approach concentrates on the contribution of the department to overall company net income. It is important to identify costs as direct or indirect to the department.

- Direct expenses are those directly traceable to the department's benefits and those in the control of the Department manager
- Indirect expenses are those incurred for benefit of the Company as a whole and that are not controllable by a Department manager.

Illustration of income statement departmentalized through Department contribution is shown as Illustration 3.

3) Operating income by Departments

Department income may extend to operating income. In such a case each department need to be allocated operating expenses incurred for its benefit.

Allocating Operating Expenses to Departments:

Some of these expenses may be easily identified, but others need to be logically estimated and allocated to Departments. For example:

- Salary of sales person assigned to certain department can be identified to the department directly. So sales salaries can be charged to departments according to payroll records.
- Advertising expense may be treated as the case may be:
  - If the ad is specific to the department (e.g. foodstuff), then the foodstuff department is directly beneficial and the expense is charged to it.
  - If it is a general company ad, then the expense may be apportioned on the ratio of gross sales.
- Deprecation expense may be apportioned on the basis of average cost of equipment in the departments.
- Officers' salaries – may be apportioned equally or on basis of time allocated to departments.
- Un collectible account expenses, Miscellaneous selling expense, Miscellaneous Administration expense may be apportioned on the bases of sales percent etc.

Illustration of such income statement departmentalized through Operating Income is shown as Illustration 2.

Illustration 1: Departmental Gross Profit

XYZ co.
Income Statement
For the year ended Dec 31,2003

	Dept A	***Dept B***	***Total***
Revenue for sale:			
Net sales	*614700*	*262900*	*877600*
Cost of Goods sold:			
Inventory Jan 1,2003	*80150*	*61750*	*141900*
Net purchase	*328350*	*197950*	*526300*
Goods available for sale	*408500*	*259700*	*526300*
Less inventory Dec 31, 2003	*85150*	*78950*	*164100*
Cost of goods sold	*328350*	*180750*	*504100*
Gross profit	*291350*	*82150*	*373500*
Operating expenses:			
Selling expense			*113000*
Administrative expense			*110200*
Total operating expenses			*223200*
Income from operating			*150300*
Other expense interest expense			*2500*
Income Before taxes			*147800*
Income Tax			*64444*
Income after tax			*83356*

Illustration 2: Departmental Margin/Contribution/

Income Statement - For the year ended December 31, 2003

	Dept A	Dept B	Total
Net sales	614700	262900	877600
Cost of goods sold	323350	180750	504100
Gross profit	291350	82150	373500
Direct Department Exp:			
Sales salaries expense	54000	30900	84900
Adverting expense	9100	4900	14000
Un collectible accts	3270	1380	4600
Depreciation - store eqpt	2640	1760	4400
Other direct expenses	5885	4815	10700
Total Direct expenses	74845	43755	118600
Departmental Margin	216505	38395	254600
Indirect expenses:			
Office salaries			69600
Rent expense			15400
Utilities			5100
Advertising expense			5000
Other indirect expense			9500
Total indirect expenses			104600
Income from operations			105300
Other expenses:			
Interest expense			2500
Income before tax			147800
Income tax			64444
Net Income			83356

Illustration 3: Departmental Operating Income

Income Statement - For the year ended December 31, 2003

	Dept A	Dept B	Total
Net Sales	614700	262900	877600
Cost of goods sold	323350	180750	504100
Gross profit	291350	82150	373500
Operating expenses:			
Selling expenses:			
Sales salaries	54000	30900	84900
Advertising	12600	6400	19000
Depreciation - store eqpt.	2640	1760	4400
Misc. selling exp	3290	1410	4700
Total selling exp	72530	40470	113000
Administrative expenses:			
Office salaries	41760	27840	69600
Rent exp	10010	5390	15400
Utilities	3315	1785	5100
Uncountable Accounts	3220	1380	4600
Others Admin. Expenses	9245	6255	15500
Total Administrative expenses	67550	42650	110200
Total operating expenses	140080	83120	223200
Income (loss) from operation	151270	(970)	150300
Other expenses:			
Interest expense			2500
Income before Tax			147800
Income Tax			64444
Net Income			83356

4. Accounting for Head Office and Branches (Investment Centers)

Branches usually operate as Investment centers where the Branch manager is responsible to and has authority over Revenues, costs and assets invested. So they are evaluated as if they were separate entity, and ***separate set of accounts*** is maintained for each branch. Accordingly, they are evaluated in three ways:

- On profitability – Operating income is one of the reporting systems since the Branch manager is responsible for revenues and costs.
- On Investment – Since the branch manager is also responsible for Assets employed in the unit, the branch is also evaluated by return on investment i.e. how much income the branch makes per each $ invested.
- On Residual Income – An additional evaluation method is to set the minimum required income for branches and evaluate on basis of the excess income the branch earns.

Branch accounting system is thus aimed at producing the Income statement and balance sheet for each Branch. Each of the evaluating methods are described as follows:

Operating Income:

For example, assume Kangaroo shoe Company has branches in Awassa, Bahirdar and Lekempt. Branch income statements of the company for the year ended December 31, 2003 is as follows. It is the same as the Departmental Income Statement discussed above.

Kangaroo Shoe Company
Branch income Statements
For the year ended December 31, 2003

	Awassa Branch	*Bahirdar Branch*	*Lekempt Branch*
Sales	*560,000*	*672,000*	*750,000*
Cost of Goods sold	*336,000*	*470,400*	*562,500*
Gross Profit	*224,000*	*201,600*	*187,500*
Operating expenses	*154,000*	*117,600*	*112,500*
Operating Income	*70,000*	*84,000*	*75,000*

Based on operating income, Bahirdar Branch is the most profitable of Kangaroo co. Although this is a useful measure it does not reflect the amount of investment in assets committed to each branch to work with. For example if the amount of assets employed in Bahirdar is twice as much as the other branches, then Bahirdar is the least profitable in terms of rate of return on investment.

Rate of Return on investment (ROI):

The rate of return on Investment or some times called Rate of Return on Assets is also used to measure performance of branches. The rate is computed as follows:

Rate of Return on Investment (ROI) = Operating income ÷ Invested Assets

Rate of Return on Investment is useful because it constitutes all three factors that the manager controls i.e. Revenue, cost and assets.

To illustrate, assume the assets invested in the branches were as follows:

	Operating Income	*Invested Assets*	*ROI %*
Awassa Branch	*70,000*	*350,000*	*20*
Bahirdar Branch	*84,000*	*700,000*	*12*
Lekempt Branch	*75,000*	*500,000*	*15*

Although Bahirdar Branch has the best result in operating income it has the lowest (12%ROI) return relative to Assets invested. Awassa generated $0.20 income for each $1 invested to it (the highest), and the others $0.12 and $0.15 for each dollar invested.

Advantages of the ROI analysis are:

1. For deciding expanding operations, we choose Awassa that gives the highest return for each dollar we invest.
2. Branch performance can be compared even though the sizes of the branches vary.

The causes of differences in ROI of branches may be analyzed further by expanding the formula as:

$$\text{ROI} = \frac{\text{Operating Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Invested Asset}}$$

This has two parts:

1. The ratio Operating Income / sales are known as ***Profit margin.***
2. The ratio Sales to Invested Assets is known as the ***Investment turnover.***

So, ROI may also be calculated as:

ROI = Profit Margin x Investment Turnover

To illustrate the application of the ratio with the above example:

ROI = Profit Margin x Investment Turnover

$$ROI = \frac{\text{Operating Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Invested Asset}}.$$

Awassa Branch

$$ROI = \frac{70{,}000}{560{,}000} \times \frac{560{,}000}{350{,}000}.$$

$$ROI = 12.5\% \times 1.6$$

$$ROI = 20\%$$

Bahirdar Branch

$$ROI = \frac{84{,}000}{672{,}000} \times \frac{672{,}000}{700{,}000}.$$

$$ROI = 12.5\% \times 0.96$$

$$ROI = 12\%$$

Lekemt Branch

$$ROI = \frac{75{,}000}{750{,}000} \times \frac{750{,}000}{500{,}000}.$$

$$ROI = 12.5\% \times 1.5$$

$$ROI = 15\%$$

Even though the Profit margin of Awassa and Bahirdar are the same, the rate of return of Awassa is higher because its turnover on Invested Assets is higher. So, one way of increasing rate of return on investment is to increase the turnover on Assets. Another way, if possible, is to increase the ***gross*** *profit margin.*

Residual Income:

Residual income is the excess of branch operating income over a minimum amount of desired operating income. The minimum amount of income is determined by management based on their wish of a minimum return on their investment. This rate multiplied by the total assets of the branch gives us the minimum amount of income. The residual income is therefore the difference between total income and the minimum income so determined.

To illustrate the application of evaluation using Residual Income based on a requirement of 10% minimum return on assets in the above example:

	Awassa Branch	*Bahirdar Branch*	*Lekempt Branch*
Operating income	*70,000*	*84,000*	*75,000*
Minimum amount of Branch Operating Income:			
350,000 x 10%	*35,000*		
700,000 x 10%		*70,000*	
500,000 x 10%			*50,000*
Residual Income	*35,000*	*14,000*	*25,000*

Observation: Although the income of Bahirdar branch is higher than Lekempt branch, Lekempt has done better and got a higher residual income than Bahirdar. This is because the assets employed by Bahirdar are higher by Br 200,000 (700,000 – 500,000) than Lekempt.

Accounting for Branch Operations

For accounting purposes branches are treated as separate entities. Recording for Branch Accounting is done the same way as other accounts except the maintenance of reciprocal ledger accounts where transactions of inter company activities are posted.

In its books, the branch keeps an account named “Head Office”. In reciprocity, the Head Office opens an account in the name of the Branch – e.g. Awassa Branch.

Startup costs of opening new branches are recognized as expenses of the accounting period by most enterprises. However, the practice faces criticism on the basis of the matching principle and some enterprises used to capitalize startup costs and amortize them over future periods.

To illustrate the entries involving reciprocal accounts assume:

1. The Head Office of Kangaroo Shoe Co. in Addis Ababa buys a computer for Birr 10,000.00 and sends it to Awassa Branch. The transaction affects both books of the Head Office and Awassa Branch.

   Head Office Books:
   In the Head Office, they have paid cash Br 10,000 for the computer that will be the asset of Awassa Branch. So, the entry in the books of the Head Office is:

Awassa Branch	10000.00	
Cash		10000.00
To record purchase of computer for Awassa Branch		

   Awassa Branch Books:
   At Awassa Branch the computer needs to be recorded as an asset (Equipment). Since the Branch got it from Head Office it credits the Head Office Account in reciprocity.

Equipment	10000.00	
Head Office		10000.00
To record receipt of computer from Head Office		

2. Bahirdar Branch sends its excess cash holding of Br 5,000.00 to Head Offfice.

   Bahirdar Branch Books:
   Cash asset of Bahirdar Branch has decreased and is sent to Head Office. S, the entry in the books of the Branch is:

Head Office	5000.00

Cash 5000.00
To record remittance of Br 5000 to Head Office.

Head Office Books:
In the Head office, they have received cash of Br 5000.00 from Bahirdar and the reciprocal entry in the books of Head office is:

Cash 5000.00
Bahirdar Branch 5000.00
To record receipt of cash from Bahirdar Branch.

3. Merchandise is shipped to Awassa Branch from the Head Office billed at $60,000 HO cost

Head Office Books:
In the Head office, they have shipped merchandise to Awassa

Awassa Branch 60,000.00
Merchandise Inventory 60,000.00
To record shipment of merchandise to Awassa Branch.

Awassa Branch Books:
Awassa Branch received merchandise from Head Office.

Merchandise Inventory 60,000.00
Head Office 60,000.00
To record receipt of merchandise from Head Office

Financial Statements for Branch Accounting

As separate accounting entities, Branches come up with their own financial statements – i.e. the usual Income Statement and Balance sheet for each branch.
At the main office the accounting is all branches is consolidated and consolidated Income statement and Balance sheet are extracted to show the overall results and financial condition of the Company as a whole.
The following shows what the financial statements of Branches and the consolidated financial statements look like:

A. Awassa Branch

Income Statement:

KSC - Awassa Branch
Income Statement
For the period ended 31/12/03

Sales ----------	560,000
Cost of Goods Sold ----------	336,000
Gross Profit ----------	224,000
Operating Expenses ----------	154,000
Operating Income ----------	70,000

Balance sheet:

KSC - Awassa Branch
Balance Sheet
For the period ended 31/12/03

Assets:		
Cash ----------	120,000	
Non-cash Assets ----------	350,000	
Total assets ----------		**470,000**
Liabilities:		
Accounts Payable ----------	30,000	
Other Liabilities ----------	20,000	
Head Office Acct ----------	350,000	**400,000**
Share Holders Equity:		
Retained Earnings ----------	70,000	**70,000**
Total Liab & Share holders Equity ----------		**470,000**

B. Bahirdar Branch:

Income Statement:

KSC - Bahirdar Branch
Income Statement
For the period ended 31/12/03

Sales ----------	672,000
Cost of Goods Sold ----------	470,400
Gross Profit ----------	201,600
Operating Expenses ----------	117,600
Operating Income ----------	84,000

Balance Sheet:

KSC - Bahirdar Branch
Balance Sheet
For the period ended 31/12/03

Assets:		
Cash ----------	154,000	
Non-cash Assets ----------	660,000	
Total assets ----------		**814,000**
Liabilities:		
Accounts Payable ----------	10,000	
Other Liabilities ----------	20,000	
Head Office Acct ----------	700,000	**730,000**
Share Holders Equity:		
Retained Earnings ----------	84,000	**84,000**
Total Liab & Share holders Equity -----		**814,000**

C. Lekempt Branch:

Income Statement:

KSC - Lekempt Branch
Income Statement
For the period ended 31/12/03

Sales ----------	750,000
Cost of Goods Sold ----------	562,500
Gross Profit ----------	187,500
Operating Expenses ----------	112,500
Operating Income ----------	75,000

Balance Sheet:

KSC - Lekempt Branch
Balance Sheet
For the period ended 31/12/03

Assets:		
Cash ----------	175,000	
Non-cash Assets ----------	500,000	
Total assets ----------		**675,000**
Liabilities:		
Accounts Payable ----------	70,000	
Other Liabilities ----------	30,000	
Head Office Acct ----------	500,000	**600,000**
Share Holders Equity:		
Retained Earnings ----------	75,000	**75,000**
Total Liab & Share holders Equity ----		**675,000**

Consolidated Statements

In order to facilitate consolidation of the financial statements, a working paper is prepared. The working paper has a column for elimination of intercompany account balances. It has 3 major purposes:

1. Combining ledger account balances of the Head Office and of Branches for accounts like Revenue, expenses, assets and liabilities.
2. Eliminating any intercompany profit and losses.
3. Eliminating reciprocal accounts balances.

Illustration of Working paper for Billing at cost

Kangaroo Shoe Company

Working Paper for Combined Financial Statements of Head Office and Branches

For the period ended 31/12/03

Account Title	*A/c No.*	*Head Office Debit (Credit)*	*Awassa Branch Debit (Credit)*	*Bahirdar Branch Debit (Credit)*	*Lekempt Branch Debit (Credit)*	*Eliminations Debit (credit)*	*Consolidated Debit (Credit)*
Income Statement							
Sales		(1,500,000)	(560,000)	(672,000)	(750,000)		(3,482,000)
Cost of Goods Sold		1,200,000	336,000	470,400	562,500		2,568,900
Operating Expenses		180,000	154,000	117,600	112,500		564,100
Net Income - To Retained Earnings Statement		120,000	70,000	84,000	75,000		349,000
		0	0	0	0		0
Retained Earnings Statement							
Beginning Balance		0	0	0	0		0
Net Income (from Income Statement)		(120,000)	(70,000)	(84,000)	(75,000)		(349,000)
Dividend Declared		0	0	0	0		
Retained Earnings Ending (to Balance sheet)		120,000	70,000	84,000	75,000		349,000
Totals		0	0	0	0		0
Balance Sheet							
Cash		290,000	120,000	154,000	175,000		739,000
Other Assets		1,280,000	350,000	660,000	500,000		2,790,000
Accounts Payable		(150,000)	(30,000)	(10,000)	(70,000)		(260,000)
Other Liabilities		(260,000)	(20,000)	(20,000)	(30,000)		(120,000)
Inter Company Accounts:							
Head Office			(350,000)	(700,000)	(500,000)	1,550,000	0
Awassa Branch		350,000				(350,000)	0
Bahirdar Branch		700,000				(700,000)	0
Lekempt Branch		500,000				(500,000)	0
Shareholders' Equity		(2,800,000)					(2,800,000)
Retained Earnings		(120,000)	(70,000)	(84,000)	(75,000)		(349,000)
T0tals		0	0	0	0		0

Consolidated Income Statement:

Kangaroo Shoe Company
Consolidated Income Statement
For the period ended 31/12/03

Sales ----------	3,482,000
Cost of Goods Sold ----------	2,568,900
Gross Profit ----------	913,100
Operating Expenses ----------	564,100
Income before tax ----------	349,000
Income Tax (30%) ----------	104,700
Net Income before tax ----------	244,300

Retained Earnings Statement:

Kangaroo Shoe Company
Retained earningsStatement
For the period ended 31/12/03

Retained Earnings Begining ----------	0
Net Income ----------	244,300
Total ----------	244,300
Dividend Declared ----------	0
Retained Earnings Ending ----------	244,300

Consolidated Balance Sheet:

Kangaroo Shoe Company
Consolidated Balance Sheet
For the period ended 31/12/03

Assets:		
Cash ----------	739,000	
Non-cash Assets ----------	2,790,000	
Total assets ----------		**3,529,000**
Liabilities:		
Accounts Payable ----------	260,000	
Tax Payable ----------	104,700	
Other Liabilities	120,000	**484,700**
Share Holders Equity:		
Share Capital ----------	2,800,000	
Retained Earnings ----------	244,300	**3,044,300**
Total Liab & Shareholders Equity ---		**3,529,000**

Closing Entries for Branches and the Head Office

Branch Books –Awassa Branch	Head Office Books
Sales 560,000 Cost of Goods sold 336,000 Operating Expenses 154,000 Income Summary 70,000 To close Revenue and Expense accounts Income Summary 70,000 Head Office 70,000 To transfer the profit to Head office Account	 Awassa Branch 70,000 Income summary 70,000 To transfer the profit of Awassa Branch to the Head office profit

Reconciliation of Reciprocal ledger accounts

Due to timing and delay of transactions and communications between a Branch and the Head Office (e.g. shipment of merchandise), the balance of the Branch ledger account in the Head Office Books may not agree with the balance of the Head Office account in the Branch Books ***at the end of the period***. The lack of agreement between reciprocal account balances causes no difficulty during an accounting period, but at the end of each period the balances must be brought into agreement before combined financial statements are prepared. So Reconciliation of reciprocal accounts must be done and the balances agree at the end of the period. (The procedure is the same as in Bank account reconciliation)

Illustration of Reconciliation of reciprocal ledger accounts:

Mekelle Branch Account (in the books of Head Office)				
Date	Explanation	Debit	Credit	Balance
2018				
Nov 30	*Balance*			*62,500 Dr*
Dec 10	*Cash Received from Branch*		*20,000*	*42,500 Dr*
27	*Collection of A/R of Branch*		*1,000*	*41,500 Dr*
29	*Merchandise shipped to Branch*	*8,000*		*49,500 Dr*

Head Office Account (in the books of the Branch)				
Date	Explanation	Debit	Credit	Balance
2018				
Nov 30	*Balance*			*62,500 Cr*
Dec 7	*Cash sent to HO*	*20,000*		*42,500 Cr*
28	*acquired Equipment for HO*	*3,000*		*39,500 Cr*
30	*Collection of HO A/R*		*2,000*	*41,500 Cr*

Comparison of the reciprocal ledger accounts shows four reconciling items:

1. ***A debit of $8,000 in Mekelle Branch Account without a related credit in the Head Office Account.***
   On December 29 the Head Office dispatched merchandise to Mekelle and debited the Branch account for the cost $8,000. Mekelle Branch received the merchandise and credited Head Office few days 2019 just after the fiscal year. The required entry to recognize the merchandise shipment in transit in the **Branch books** is:

Merchandise Inventory in transit	*8,000*	
Head Office		*8,000*
To record shipment of merchandise in transit from Head Office		

   When the merchandise arrives in 2019, the branch debits merchandise inventory and credits merchandise inventory in transit account.

2. ***A Credit of $1,000 in Mekelle Branch account without related debit in the Head Office account.***
   On December 27, trade Accounts receivable of the branch were collected by the Head Office. The Collection was recorded by the Head Office by a debit to Cash account and credit to Mekelle Branch Account. No Journal entry was made by Mekelle Branch. Therefore the following journal entry is required in the ***Books of Mekelle Branch***:

Head Office	*1,000*	
Trade Accounts Receivable		*1,000*
To record collection of accounts receivable by Head Office		

3. ***A Debit of $1,000 in the Head Office account without a related credit in Mekelle Branch account.***
   On December 28, the branch purchased equipment for $ 3,000 for the use of the Head Office. The Branch passed the entry debiting Head Office and crediting Cash. No journal entry was made by the Head Office. The following Journal entry is required on December 31, 2018 in the ***books of the Head Office***:

Equipment t	*3,000*	
Mekelle Branch		*3,000*
To record equipment acquired by the branch		

4. ***A credit of $2,000 in the Head Office ledger account without corresponding credit in Mekelle Branch account.***
   On December 30, Trade Accounts Receivable of the Head Office was collected by Mekelle Branch. The Branch passed the entry debiting Cash and Crediting Head Office accounts. No corresponding entry was made by the Head Office. So, the following journal entry is required in ***the books of the Head Office***:

Mekelle Branch	*2,000*	
Trade Accounts Receivable		*2,000*
To record collection of accounts receivable by the branch		

Reconciliation Schedule:

The effect of the foregoing journal entries was to update the reciprocal ledger accounts as shown in the following Reconciliation schedule:

Mercer Company – Head Office and Mekelle Branch
Reconciliation of Reciprocal ledger Accounts
December 31, 2018

	Mekelle Branch Account (in Head Office Books)	Head Office Account (in Mekelle Branch Books)
Balance Before Adjustments	$ 49,500 Dr	$ 41,500 Cr
Add: (1) Merchandise shipped to Branch by Head Office		8,000
(4) Head Office A/R collected by Branch	2,000	
Less: (2) Branch A/R collected by Head Office		(1,000)
(3) Equipment acquired by Branch	(3,000)	
Adjusted Balance	$ 48,500 Dr	$ 48,500 Cr

Transactions between Branches

Efficient operation may on occasion require that merchandise or other asset be transferred from one Branch to the other. Generally a Branch does not carry reciprocal ledger account with another Branch, but records the transfer in the Head Office ledger account. For Example:
Assume Awassa Branch shipped merchandise costing $6,000 to Lekempt Branch. The Journal entries in the three books of accounts are as follows:

In the Books of Awassa Branch:

Head Office 6,000
Merchandise Inventory 6,000
To record transfer of merchandise to Lekempt Branch

In the Books of Head Office:

Lekempt Branch 6,000
Awassa Branch 6,000
To record transfer of merchandise from Awassa Branch to Lekempt Branch

In the Books of Lekempt Branch:

Merchandise Inventory 6,000
Head Office 6,000
To record transfer of merchandise to Lekempt Branch

Merchandise Shipments to Branches

Merchandise inventories that are transferred to Branches are billed in three ways:
1. At Head Office cost – this is the most commonly used as shown in the foregoing examples.

2. At Head Office cost plus a markup – Merchandise costing $100,000 sent to Mekelle may be charged at $ 110,000 (10% markup) based on Company policy. This is not common. The Journal entry would be passed as:

In the Books of Head Office:

Mekelle Branch	*110,000*	
Merchandise Inventory		*100,000*
Allowance for Inventory markup – Mekelle Branch		*10,000*

To record transfer of merchandise shipped to Mekelle Branch at 10% markup

In the Books of Head Office:

Merchandise Inventory	*110,000*	
Head Office		*110,000*

To record transfer of merchandise shipped from Head Office

Allowance for Inventory overvaluation account:
Two points:

- This account a deferred income account to the Head Office, because the income does not materialize until the merchandise is sold by the Branch.
- The Head Office is recording the $10,000 as income. But there is no sale or revenue by the Company as a whole as ownership of the inventory is not transferred. So, the amount is eliminated for the purpose of combined financial statements. As described above the working paper column of elimination is used to eliminate this inter-company profit/loss.

Illustration of the working paper for billing above cost is shown on next page.

3. At selling/retail price – This is seldom done for control purpose. The procedure and concept is the same as cost plus markup.

Smaldino Company

Working Paper for Combined Financial Statements of Head Office and Mason Branch

For the period ended 31/12/03 (Billing above cost)

Account Title	*A/c No.*	*Head Office Debit (Credit)*	*Mason Branch Debit (Credit)*	*Eliminations Debit (credit)*	*Consolidated Debit (Credit)*
Income Statement					
Sales		(400,000)	(80,000)		(,480,000)
Cost of Goods Sold		235,000	67,500	(a) (22,500)	280,000
Operating Expenses		90,000	23,000		113,000
Net Income (loss) - To Retained Earnings Statement		75,000	(10,500)	(b) 22,500	87,000
		0	0		0
Retained Earnings Statement					
Beginning Balance		(70,000)			(70,000)
Net Income (from Income Statement)		(75,000)	10,500	(b) (22,500)	(87,000)
Dividend Declared		40,000			40,000
Retained Earnings Ending (to Balance sheet)		105,000	(10,500)		117,000
Totals		0	0		0
Balance Sheet					
Cash		25,000	5,000		30,000
Accounts Receivable		39,000	18,000		57,000
Inventories		45,000	22,500	(a) (7,500)	60,000
Allowance for overvaluation of inventory – Mason		(30,000)		(a) 30,000	
Mason Branch		56,000		(c) (56,000)	
Equipment		150,000			150,000
Accumulated Depreciation		(10,000)			(10,000)
Accounts Payable		(20,000)			(20,000)
Head Office			(56,000)	(c) 56,000	
Shareholders' Equity		(150,000)			(150,000)
Retained Earnings		(105,000)	10,500		(117,000)
T0tals		0	0		0

Elimination entries:

(a) To reduce ending inventory and cost of goods sold of branch to cost, and to eliminate unadjusted balance of Allowance of overvaluation of Inventories-Mason Branch ledger account. The three steps computation of the elimination amounts are:

- *Ending Inventory of the Branch $22,500 at billed price including markup*
  Includes markup 22500 x $33^{1/3}$% = 7,500
  Inventory at cost 15,000
  The Inventory account is thus decreased to $15,000 for the combined statement. So, $7,500 markup applicable fo the Inventory Account is decreased in the Elimination column.

- *The Cost of Goods sold, $67,500.*
  Includes the markup, 67,500 x $33^{1/3}$% = 22,500 (or 30,000 – 7,500)
  So, $22,500 will be decreased or eliminated from the Cost of Gods Sold account.

- *The decrease in the cost of Goods Sold and in Inventory accounts of the Branch books is offset by elimination of Allowance for Overvaluation of Inventories in the Head Office books.*

(b) To increase income of home office by portion of merchandise markup that was realized by branch sales.
- Total markup of $30,000 less markup applicable to ending Inventory, $7,500 = $22,500 is realized Income of the Head Office.

(c) To eliminate reciprocal ledger account balances.

Schedule of Flow of Merchandise:

The schedule is prepared to facilitate the elimination process. It is illustrated as herebelow:

Smaldino Company
Flow of Merchandise for Mason Branch
During 2003

	Billed Price	**Home Office cost**	**Markup (50% of Cost**
Beginning Inventory			
Add: Shipments from home Office	90,000	60,000	30,000
Available for sale	90,000	60,000	30,000
Less: Ending Inventories	22,500	15,000	7,500
Cost of Goods sold	67,500	45,000	22,500

Agency & Principal

Characteristics and principles to distinguish between agency and Branches:

An Agency is a separate legal entity than the delegating enterprise, the **Principal**. Agency is based on legal contractual agreement known as agency contract.(Articles 44-55, 60-62 of the Ethiopian Commercial Code)

An Agent is defined as an enterprise that independently, professionally and for gain/profit undertakes to buy or to sell goods in the name and on behalf of the Principal.
An agent is a trader and has both economic and **accounting entity** by itself. It has its own accounting records separate and different from the principal.

A Branch, however, has no legal entity. It is a unit of the Home Office located elsewhere than the home office. It has its own economic and accounting entity and performs reciprocal accounts and consolidated statements.

Assignment – Exercise on Branch/segment Accounting

1. A Cost center has a monthly budget of $10,000 for light and power. During the month actual cost of Power and Light is $ 9,000. The Variation is _____.

2. A Department, whose Manager is responsible for operating costs, revenues and for Assets invested, is called _____

3. Name the statement that is commonly used to measure operation of:
   a. A Cost center: _____
   b. A Profit center _____
   c. An Investment Center _____

4. A Branch has investment turnover of 2.5, and its profit margin is 10%. What is its return on investment? _____

5. A Department of a Supermarket reported operating income of $200,000.00, based on invested assets of $1,000,000.00. If the minimum rate of return on Departmental investment is 15%,
   a. what is the residual income of the Department? _____
   b. What is the rate of return on Investment? _____

6. The Head Office in Addis Ababa purchased and sent supplies of $4,000 to Dessie Branch. Show the Journal Entry to be passed at:
   A. The Head Office
   B. Dessie Branch

7. Name the three main types of business segments:
   _____ _____ _____

8. Shoa Supermarket operates in a leased building of 1,000 sq m. area, and pays an annual rent of Br 100,000.00. The rent expense is allocated to each department on the basis of the area it uses, which is:

Foodstuff department	500 sq m.
Clothing Department	300 sq m.
Bar	200 sq m.

   What is the annual cost of rent to be allocated to:
   A. The Foodstuff Department? _____
   B. The clothing department? _____
   C. The Bar Department? _____

9. The following incomplete data is given for divisions A, & B of XYZ Co, whose minimum rate of return on Divisional investment is 10%. Find the missing amounts (a) – (h) and show your answers by filling in the blanks:

	Division A	**Division B**
Sales	660,000	1,120,000
Operating income	99,000	168,000
Invested Assets	550,000	800,000
Rate of Return on Investment (%)	(a)	(e)
Profit margin (%)	(b)	(f)
Investment Turnover (2 decimal) (c)		(g)
Residual Income ($)	(d)	(h)

Answer by filling in the blank:

(a) _____ (e) _____
(b) _____ (f) _____
(c) _____ (g) _____
(d) _____ (h) _____

10. The Jimma Branch of AZ Co. had the following income statement data at the end of the period:

Sales		$100,000
Cost of Goods Sold	70,000	
Gross Margin	30,000	
Operating Expenses	10,000	
Operating Income		20,000

11. Following the order of the Head Office of ABC Co., Awassa Branch purchased and sent an Office Equipment costing $10,000 to Bahirdar Branch for their use. Show the Journal Entries of:
    a. Awassa Branch
    b. Head Office
    c. Bahirdar Branch

12. (Ex4.17) On May 31, 1999, end of the period, the un adjusted balances of the Troy Branch ledger account in the Head Office Books of Argos Co. was $380,000 Debit, and the Head Office account in Troy Branch Books was $140,000 Credit.
    Additional Information:
    12.1. On May 31, 1999, the Head Ofice had shipped merchandise to the Branch at Billied price of $280,000. The Branch did not receive the shipment until June 3. The Co. uses perpetual Inventory system.
    12.2. On May 31, 1999, the Branch had sent $10,000 cash to the Head Office, which did not receive it until June 2.
    12.3. On May 31, 1999, the Head Office had prepared the following Journal entry without notifying the Branch.

Cash	50,000	
Troy Branch		50,000

    To record collection of Accounts Receivable of the Branch.

    Prepare Journal Entries on May 31, 1999, to reconcile the reciprocal accounts for:
    a) The Head Office, and
    b) The Troy Branch

13. Assela Branch of an Enterprise remitted cash $ 35,000 to its Head Office in Addis Ababa. Show the reciprocal journal entries to be passed

    a. At Assela Branch
    b. At the Head Office

14. Dilla branch of Africa Beza College has invested assets of $100,000. Its Operating income for the year has been $ 10,000. Find the rate of return on investment,