4. Income Statement Analysis. Earnings and Dividends

Table 6. The COCA-COLA Company and Subsidiaries Consolidated Statements of Income

THE COCA-COLA COMPANY			
CONSOLIDATED STATEMENTS OF INCOME			
In Millions, except Per Share data, unless otherwise specified			
	Dec. 31, 2014	*Dec. 31, 2013*	*Dec. 31, 2012*
NET OPERATING REVENUES	45 998	46 854	48 017
Cost of goods sold	17 889	18 421	19 053
GROSS PROFIT	28 109	28 433	28 964
Selling, general and administrative expenses	17 218	17 310	17 738
Other operating charges	1 183	895	447
OPERATING INCOME	9 708	10 228	10 779
Interest income	594	534	471
Interest expense	483	463	397
Equity income (loss) - net	769	602	819
Other income (loss) - net	-1 263	576	137
INCOME BEFORE INCOME TAXES	9 325	11 477	11 809
Income taxes	2 201	2 851	2 723
CONSOLIDATED NET INCOME	7 124	8 626	9 086
Less: Net income attributable to noncontrolling interests	26	42	67
NET INCOME ATTRIBUTABLE TO SHAREOWNERS OF T	7 098	8 584	9 019
BASIC NET INCOME PER SHARE (in dollars per share)	2	2	2
DILUTED NET INCOME PER SHARE (in dollars per share)	**2**	**2**	**2**
AVERAGE SHARES OUTSTANDING (in shares)	4 387	4 434	4 504
Effect of dilutive securities (in shares)	63	75	80
AVERAGE SHARES OUTSTANDING ASSUMING DILUTIC	4 450	4 509	4 584

Source: Form 10K of Coca-Cola Company for the fiscal year ended December 31, 2014

Two Types of Income Statement Presentation

An income statement reports a firm's **performance** by measuring revenues, expenses, and the profits (losses) generated over a period of time, typically a fiscal year.

In general, there are two types of income statement presentations: a multiple step or a single step.

Sections of a **multiple-step income statement**:

(1) Gross Profit = Net sales - Cost of Goods Sold (COGS)

Sometimes in financial analysis depreciation is separated from operating expenses.

(2) Earnings Before Interest and Taxes and Depreciation (EBITDA) = Gross Profit - Operating Expenses without Depreciation

Usually depreciation is not separated, and EBIT is calculated as:

(3) Net Operating Income (NOI) or Operating Income or Earnings Before Interest and Taxes (**EBIT**) = Gross Profit - Operating Expenses with Depreciation

(4) Net Profits Before Taxes (NPBT, taxable income) = Net Operating Income (NOI) + Interest Payments Received – Interest Expenses + Other Income – Other Expenses

(5) Net Income After Taxes (NI) = Taxable Income – Income Taxes

A **single-step income statement** shows all revenues and gains first and then all costs and expenses. Net income is a difference between total revenue and total expenses.

Income Statement

Basic Elements

Net sales (revenues) represent revenue from goods or services sold to customers. Sales are usually shown net of discounts and allowances.

Cost of goods sold in a retailing company equals beginning inventory plus purchases minus ending inventory. In a manufacturing company cost of goods sold equals beginning inventory plus the cost of goods manufactured minus ending inventory. A service company has cost of services.

Operating expenses consist of administrative expenses and selling expenses. Administrative expenses include salaries, accounting, insurance, depreciation expense for equipment and used in administration, bad debt expenses etc. Selling expenses include advertising costs, sales commissions and so on.

Net Operating Income is the most important item in an income statement, as it shows earnings from **main operating activities**.

The following items adjust net operating income for net financial flows, investment flows and other items.

Financial revenues and financial costs include items resulting from financial activities.

Other income (nonoperating income) **and other expenses** should include items resulting mainly from investment activities. They also relate to items of a secondary nature.

Special Income Statement Items

Special income statement items **should be presented separately** as they cannot be used to prepare forecasted income statement and estimate future profitability of a company. They cannot be included in financial analysis. In calculation of financial ratios, such special items should be also omitted.

Special income statement items include:

1. Unusual or Infrequent Items
2. Equity Earnings of Nonconsolidated Subsidiaries
3. Discontinued Operations
4. Extraordinary Items
5. Cumulative Effects of Change in Accounting Principle
6. Minority Share of Earnings.

Unusual or infrequent items may include write-downs of receivables or write-down of inventories. They are disclosed separately, before tax.

Equity earnings are company’s share of the investee’s earnings. When a company is using equity method for its investment in stock, it reports equity earnings or losses. Equity earnings are pure accounting adjustments and are not accompanied by the cash flow from investment.

Discontinued operations (for example disposal of business) are presented separately in an income statement. Discontinued operations will not contribute to future operating cashflows.

Extraordinary items (gains or losses) net of their tax effects are also presented separately.

Cumulative effects of a change of an accounting principle should be presented for all previous periods as if the newly adopted accounting principle had been applied for previous periods.

Minority interests in earnings of subsidiaries present the portion of income that belongs to minority owners.

Earnings

Income statement presents net earnings and usually earnings per share (earnings divided by the number of shares outstanding).

Sometimes companies present **basic and diluted net earnings per share**. Diluted earnings are calculated using diluted number of shares (number of shares outstanding plus number of shares if convertible bonds or stock options were exercised).

Depreciation Methods

1. Straight-Line Method
2. Double Declining Balance Method
3. Declining Balance Method
4. Variable Declining Balance Method
5. Sum-of-the-Years' Digit Method
6. Operational
7. Unit-of-Production Method

Formulas:

1. Straight-Line Method

(6) $$\text{Depreciation}_t = \frac{\text{Cost - Salvage Value}}{\text{Life}}$$

2. Double Declining Balance Method

(7) $$\text{Depreciation}_t = \frac{2 \text{ x Net Value}_{t\text{-}1}}{\text{Life}}$$

3. Declining Balance Method

$$\text{Depreciation}_t = \text{Rate x (Cost} - \text{Depreciation from Prior Periods)}$$

(8) $$\text{Rate} = 1 - \left(\frac{\text{Salvage Value}}{\text{Cost}}\right)^{\frac{1}{\text{Life}}} \text{ rounded to three decimal places}$$

4. Variable Declining Balance Method

Two versions:

Linear:

(9) $$\text{Depreciation}_t = \frac{\text{Depreciation Factor x (Net Value - Salvage Value)}}{\text{Remaining Life}}$$

Declining:

(10) $$\text{Depreciation}_t = \frac{\text{Depreciation Factor x Net Value}}{\text{Life}}$$

5. Sum-of-the-Years' Digit Method

(11) $$\text{Depreciation}_t = \frac{(n - p + 1)}{\left(\frac{n \times (n+1)}{2}\right)} \times (\text{Net Value - Salvage Value})$$

Where: n – life, p – period
Example: n=5.
5/15+ 4/15+ 3/15+ 2/15+ 1/15 = 1

6. Operational Method

(12) $$\text{Depreciation}_t = \frac{\text{Machine Hours in year t}}{\text{Total Machine Hours}}(\text{Cost - Salvage Value})$$

7. Unit-of-Production Method

(13) $$\text{Depreciation}_t = \frac{\text{Output in year t}}{\text{Total Output}}(\text{Cost - Salvage Value})$$

Example 5. Depreciation Methods

A book value of a machine is $1000, life is 5 years.						
An estimated salvege value is $50.						
The expected machine hours in future years are following:						
Year	1	2	3	4	5	Sum
Machine hours	2920	5840	5840	2920	2480	20000
Required:						
a. Calculate yearly depreciation using						
1. straight line depreciation method (SLN),						
2. double declining balance method (DDB),						
3. fixed-declining balance method (DD),						
4.variable declining balance (VDB), using a progressive coefficient = 1,						
5. sum-of-the-year digits (SYD),						
6. operational method (PO).						
b. Present net value of a machine using above depreciation methods.						

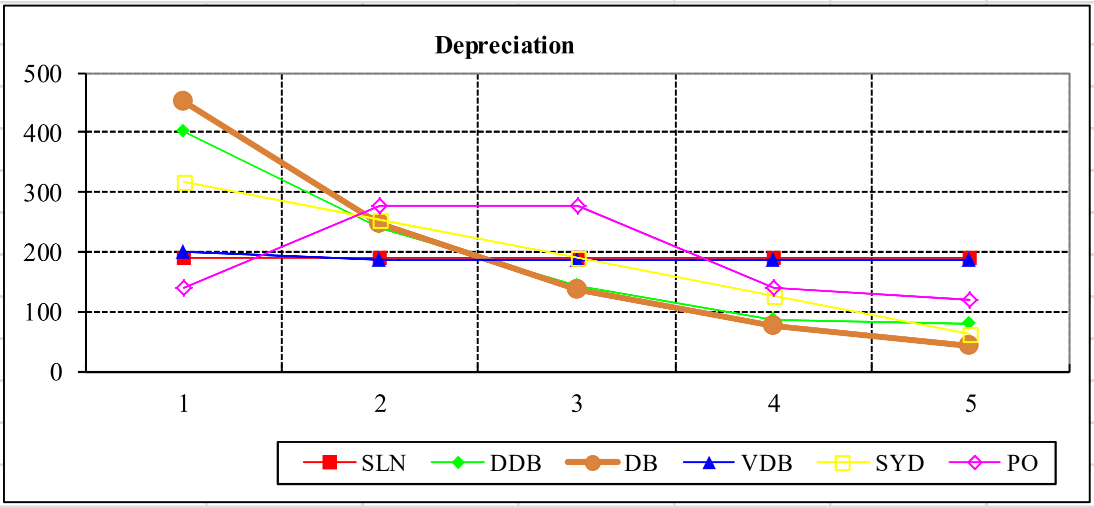
Solution

(a)

Depreciation

Year	1	2	3	4	5	Sum
SLN	190.000	190.000	190.000	190.000	190.000	950.000
DDB	400.000	240.000	144.000	86.400	79.600	950.000
DB	451.000	247.599	135.932	74.627	40.843	950.000
VDB	200.000	187.500	187.500	187.500	187.500	950.000
SYD	316.667	253.333	190.000	126.667	63.333	950.000
PO	138.700	277.400	277.400	138.700	117.800	950.000

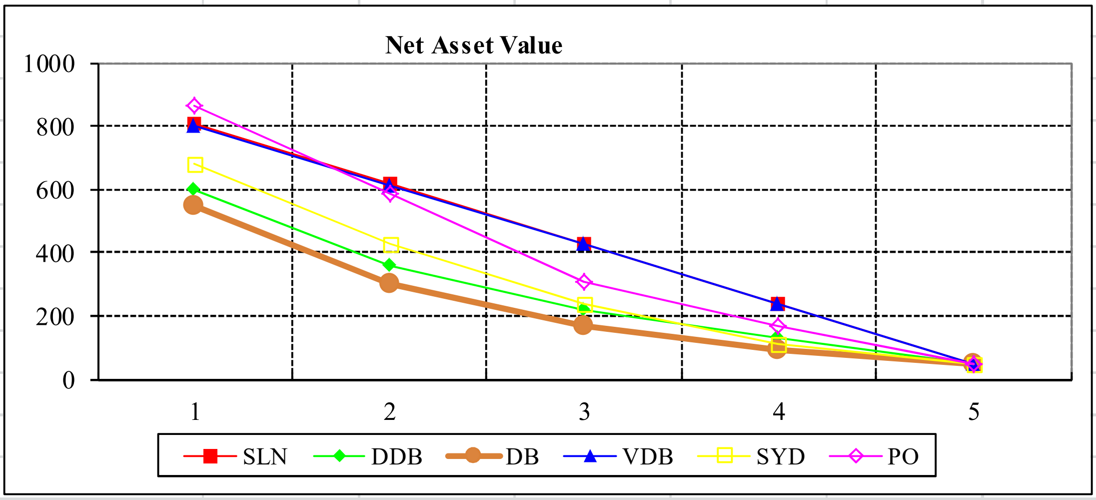
For DDB depreciation for the last period is equal to the difference between the gross value and the accumulated depreciaton for previous periods.



Ad 2.

Net Asset Value

Okres	1	2	3	4	5
SLN	810.000	620.000	430.000	240.000	50.000
DDB	600.000	360.000	216.000	129.600	50.000
DB	549.000	301.401	165.469	90.843	50.000
VDB	800.000	612.500	425.000	237.500	50.000
SYD	683.333	430.000	240.000	113.333	50.000
PO	861.300	583.900	306.500	167.800	50.000



Income Statement and Deferred Taxes

Example 6. Deferred Taxes

A company purchases a machine costing $,10,000 with a five-year estimated service life.
For a financial reporting purposes, a company uses straight-line depreciation method with a **five-year** life.
For income tax reporting, a machine is depreciated straight-line over **four** years.
Salvage value is equal to zero.
The machine is used to manufacture a product that will generate annual EBITDA of $7,500 for five years.
Interest payments are equal to zero and income tax rate is 20%.
(a) Show an income statement for tax purposes.
(b) Show an income statement for financial reporting purposes.
(c) Assuming that purchase of machine is financed by a loan with interest rate 0% and repayments are equal to depreciation show the true balance sheet and the balance sheet published for financial reporting purposes.

Solution

(a)

	1	2	3	4	5	Total
EB ITDA	7500	7500	7500	7500	7500	37500
Depreciation	2500	2500	2500	2500		10000
Taxable Income	5000	5000	5000	5000	7500	27500
Taxes payable @ 20%	1000	1000	1000	1000	1500	5500
Net Income	4000	4000	4000	4000	6000	22000

The following numbers will appear in the income statement and the balance sheet.

(b) Income Statement

EB ITDA	7500	7500	7500	7500	7500	37500
Depreciation	2000	2000	2000	2000	2000	10000
Taxable Income	5500	5500	5500	5500	5500	27500
Taxes expense @ 20%	1100	1100	1100	1100	1100	5500
Net Income	4400	4400	4400	4400	4400	22000

Defered tax expense	100	100	100	100	-400
Defered tax liability	100	200	300	400	0
(on the balance sheet)					

(c)					
The true balance sheet (with true tax expenses)					
Assets					
BV of machinery	7500	5000	2500	0	0
Cash	4000	8000	12000	16000	22000
	11500	13000	14500	16000	22000
Liabilities					
Loan	7500	5000	2500	0	0
Net Income	4000	8000	12000	16000	22000
	11500	13000	14500	16000	22000
The balance sheet presented in accounting report					
Assets					
BV of machinery	8000	6000	4000	2000	0
Cash	4000	8000	12000	16000	22000
	12000	14000	16000	18000	22000
Liabilities					
Loan	7500	5000	2500	0	0
Net Income	4400	8800	13200	17600	22000
Defered tax liability	100	200	300	400	0
	12000	14000	16000	18000	22000

Statement of Comprehensive Income

Comprehensive income is equal to net income plus the period's change in accumulated other comprehensive income. Other comprehensive income includes:

1. Foreign currency translation adjustment.
2. Unrealized holding gains and losses on available-for-sale marketable securities.
3. Changes to stockholders equity resulting from additional minimum pension liability adjustments.
4. Unrealized gains and losses from derivative instruments.

Table 7. Consolidated Statements of Comprehensive Income

THE COCA-COLA COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year Ended December 31,	2013	2012	2011
(In millions)			
CONSOLIDATED NET INCOME	$ 8,626	$ 9,086	$ 8,646
Other comprehensive income:			
Net foreign currency translation adjustment	(1,187)	(182)	(692)
Net gain (loss) on derivatives	151	99	145
Net unrealized gain (loss) on available-for-sale securities	(80)	178	(7)
Net change in pension and other benefit liabilities	1,066	(668)	(763)
TOTAL COMPREHENSIVE INCOME	8,576	8,513	7,329
Less: Comprehensive income (loss) attributable to noncontrolling interests	39	105	10
TOTAL COMPREHENSIVE INCOME ATTRIBUTABLE TO SHAREOWNERS OF THE COCA-COLA COMPANY	$ 8,537	$ 8,408	$ 7,319

Refer to Notes to Consolidated Financial Statements.

Source: Form 10K of Coca-Cola Company for the fiscal year ended December 31, 2013

Statement of Shareowners' Equity

This statement shows number of common shares outstanding and beginning balances, changes during a year and ending balances of:

1. Common stock
2. Capital surplus
3. Reinvested earnings
4. Accumulated other comprehensive income
5. Treasury stock

Capital surplus is equal to additional paid-in capital. Reinvested earnings (historically shown in the statement of retained earnings) present the net income for all past periods minus the dividends.

(14) Increase in Retained earnings (RE) = net income (NI) – dividends

Table 8. Consolidated Statements of Shareowners' Equity

THE COCA-COLA COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF SHAREOWNERS' EQUITY

Year Ended December 31,	2013	2012	2011
(In millions except per share data)			
EQUITY ATTRIBUTABLE TO SHAREOWNERS OF THE COCA-COLA COMPANY			
NUMBER OF COMMON SHARES OUTSTANDING			
Balance at beginning of year	**4,469**	4,526	4,583
Purchases of treasury stock	**(121)**	(121)	(127)
Treasury stock issued to employees related to stock compensation plans	**54**	64	70
Balance at end of year	**4,402**	4,469	4,526
COMMON STOCK	**$ 1,760**	$ 1,760	$ 1,760
CAPITAL SURPLUS			
Balance at beginning of year	**11,379**	10,332	9,177
Stock issued to employees related to stock compensation plans	**569**	640	724
Tax benefit (charge) from stock compensation plans	**144**	144	79
Stock-based compensation	**227**	259	354
Other activities	**(43)**	4	(2)
Balance at end of year	**12,276**	11,379	10,332
REINVESTED EARNINGS			
Balance at beginning of year	**58,045**	53,621	49,337
Net income attributable to shareowners of The Coca-Cola Company	**8,584**	9,019	8,584
Dividends (per share — $1.12, $1.02 and $0.94 in 2013, 2012 and 2011, respectively)	**(4,969)**	(4,595)	(4,300)
Balance at end of year	**61,660**	58,045	53,621
ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)			
Balance at beginning of year	**(3,385)**	(2,774)	(1,509)
Net other comprehensive income (loss)	**(47)**	(611)	(1,265)
Balance at end of year	**(3,432)**	(3,385)	(2,774)
TREASURY STOCK			
Balance at beginning of year	**(35,009)**	(31,304)	(27,762)
Stock issued to employees related to stock compensation plans	**745**	786	830
Purchases of treasury stock	**(4,827)**	(4,491)	(4,372)
Balance at end of year	**(39,091)**	(35,009)	(31,304)
TOTAL EQUITY ATTRIBUTABLE TO SHAREOWNERS OF THE COCA-COLA COMPANY	**$ 33,173**	$ 32,790	$ 31,635
EQUITY ATTRIBUTABLE TO NONCONTROLLING INTERESTS			
Balance at beginning of year	**$ 378**	$ 286	$ 314
Net income attributable to noncontrolling interests	**42**	67	62
Net foreign currency translation adjustment	**(3)**	38	(52)
Dividends paid to noncontrolling interests	**(58)**	(48)	(38)
Acquisition of interests held by noncontrolling owners	**(34)**	(15)	—
Contributions by noncontrolling interests	**6**	—	—
Business combinations	**25**	50	—
Deconsolidation of certain entities	**(89)**	—	—
TOTAL EQUITY ATTRIBUTABLE TO NONCONTROLLING INTERESTS	**$ 267**	$ 378	$ 286

Refer to Notes to Consolidated Financial Statements.

Source: Form 10K of Coca-Cola Company for the fiscal year ended December 31, 2013

Task 4

Insert sheet Income Statement from a file Financial_Report.xlsx into the worksheet named AllTasks.xlsx and name it "Income".

Read all the income statement items. Be sure to understand all items. Most of them are explained in my Teaching Notes.

1. Discuss growth of net operating revenues and growth of operating income.
2. Show the impact of operating income and other sources of income on taxable income.

What is the effective income tax rate ?

Problem 5. Growth of Operating Revenues and Operating Income

Required:

Calculate growth rates for operating revenues and operationg income.

Solution

	Dec. 31, 2014	Dec. 31, 2013	Dec. 31, 2012
NET OPERATING REVENUES	-1,8%	-2,4%	3,2%
OPERATING INCOME	-5,1%	-5,1%	6,0%

During the last years the company's results are deteriorating in term of sales and much more in terms of operating income.

Problem 6. Structure of Taxable Income

Required:

(a) Calculate the impact of operating income and other sourses of income on taxable income.

(b) What is the effective income tax rate ?

Solution

(a)

	Dec. 31, 2014	Dec. 31, 2013	Dec. 31, 2012
OPERATING INCOME	9 708	10 228	10 779
Interest income, net	111	71	74
Equity income (loss) - net	769	602	819
Other income (loss) - net	-1 263	576	137
INCOME BEFORE INCOME TAXES	9 325	11 477	11 809
Income taxes	2 201	2 851	2 723
CONSOLIDATED NET INCOME	7 124	8 626	9 086

	Dec. 31, 2014	Dec. 31, 2013	Dec. 31, 2012
OPERATING INCOME	104,1%	89,1%	91,3%
Interest income, net	1,2%	0,6%	0,6%
Equity income (loss) - net	8,2%	5,2%	6,9%
Other income (loss) - net	-13,5%	5,0%	1,2%
INCOME BEFORE INCOME TAXES	100,0%	100,0%	100,0%
Income taxes	23,6%	24,8%	23,1%
CONSOLIDATED NET INCOME	76,4%	75,2%	76,9%

(b)

Effective income tax rate is	23,6%	24,8%	23,1%