Learning Objectives:

After the completion of this Module you will be able to:

- Describe the basic components of the Income Statement
- Learn the concept of common sizing financial statements
- Identify factors that impact revenue analysis
- Differentiate between expenses associated to cost of goods sold, operating expenses and other income and expense items that impact financial analysis
- Explain the concepts of trend. Break-even and comparative analysis

In this Module the analysis of the Income Statement will be divided in four (4) main sections:

Revenue Analysis

Cost of Goods Sold Assessment

Operating Expense Analysis

Net Profit Analysis

STARBUCKS CORPORATION CONSOLIDATED STATEMENTS OF EARNINGS

(in millions, except per share data)

Fiscal Year Ended	Oct 2, 2016	Sep 27, 2015	Sep 28, 2014
Net revenues:			
Company-operated stores	\$ 16,844.1	\$ 15,197.3	\$ 12,977.9
Licensed stores	2,154.2	1,861.9	1,588.6
CPG, foodservice and other	2,317.6	2,103.5	1,881.3
Total net revenues	21,315.9	19,162.7	16,447.8
Cost of sales including occupancy costs	8,511.1	7,787.5	6,858.8
Store operating expenses	6,064.3	5,411.1	4,638.2
Other operating expenses	545.4	522.4	457.3
Depreciation and amortization expenses	980.8	893.9	709.6
General and administrative expenses	1,360.6	1,196.7	991.3
Litigation credit	_	_	(20.2)
Total operating expenses	17,462.2	15,811.6	13,635.0
Income from equity investees	318.2	249.9	268.3
Operating income	4,171.9	3,601.0	3,081.1
Gain resulting from acquisition of joint venture	_	390.6	_
Loss on extinguishment of debt	_	(61.1)	_
Interest income and other, net	108.0	43.0	142.7
Interest expense	(81.3)	(70.5)	(64.1)
Earnings before income taxes	4,198.6	3,903.0	3,159.7
Income tax expense	1,379.7	1,143.7	1,092.0
Net earnings including noncontrolling interests	2,818.9	2,759.3	2,067.7
Net earnings/(loss) attributable to noncontrolling interests	1.2	1.9	(0.4)
Net earnings attributable to Starbucks	\$ 2,817.7	\$ 2,757.4	\$ 2,068.1
Earnings per share — basic	\$ 1.91	\$ 1.84	\$ 1.37
Earnings per share — diluted	\$ 1.90	\$ 1.82	\$ 1.35
Weighted average shares outstanding:			
Basic	1,471.6	1,495.9	1,506.3
Diluted	1,486.7	1,513.4	1,526.3

Income Statement Analysis: Introduction

- When analyzing financial statements we analyze the Company's business activities
- The three (3) main activities are:
 - 1. Financial activities
 - 2. Investing activities
 - 3. Planning Activities
- In tandem with these concepts there is the analysis of Operating Activities that include revenue generation and the analysis of the Company's cost and expense structure

Business Activities

Investing Activities Financial Activities

Operating Activities

Revenues and expenses from providing goods and services

In Financial Analysis the first step in the process includes the spreading of financial statements

-The following are the advantages for using Spreadsheets:

- 1. A consistent approach to review accounts in financial statements for all Borrowers
- 2. Ability to identify trends
- 3. Assessment of financial patterns via common size analysis
- 4. Income and balance sheet accounts are grouped using the same line categories year by year thereby providing a consistent presentation of the accounts over a period of time

Basic Guidelines/Rules

- 1. Review the accounts in the financial statements
- 2. Spread the information into a spreadsheet
- 3. Numbers are rounded off to four or five digits
- 4. Spread fiscal and interim financial statements separately
- 5. Ensure to read the accountant's opinion and the financial statements footnotes before spreading the statements and begin the analysis

Main factors to consider when initiating the analysis:

- 1. Determine the Company's type of business and management objectives
- 2. Consider the external factors that may impact the business operations
- 3. Determine the types of financial statements to be analyzed fiscal or interim statements
- 4. Determine the Company's methods to recognize revenues and expenses

Main factors to consider when initiating the analysis:

- 5. Consider sales volumes and trends, product/service mix, order backlogs, sales discounts, returns and allowances, seasonal trends if applicable, and cyclical factors
- 6. Determine cost of goods sold calculations and the method use to account for inventory
- 7. Recognize the difference between fixed and variable expenses

Main factors to consider when initiating the analysis:

- 8. Identify the preparer of the financial statements
- 9. Taxation issues

CPA Opinion and review of financial statements footnotes before spreading:

- Footnotes of financial statements usually provide information regarding the basic accounting methods used by the accountants when preparing the statements
- Some footnotes also provide information not disclosed on the balance sheet. Income statements or cash flows.
- This information may be associated to potential lawsuits, and events that may take place after the financial statements were prepared

The Company's type of business and management objectives:

- Financial indicators and accounts for manufacturers, wholesalers, retailers and service companies are different.
- Manufacturers usually have a high fixed cost structure and usually profits are slim
- Wholesalers maintain a large volume of inventory at high prices. If these costs are not adequately managed through a strict control of operating expenses, profits could be impacted

The Company's type of business and management objectives:

- Changes in the Company's business strategy may impact financial results in both the income statement and the balance sheet.
- **External Factors:** Competitive, regulatory and economic conditions may impact the Company's income statement.
- Some examples include changes in tax and environmental laws and changes in import

The Income Statement Common Sizing Analysis:

- When spreading the statement and as a resource for the analysis the numbers are common-sized
- Common-sizing in the income statement is expressing every line item on the income statement as a percentage of net sales

The Income Statement Common Sizing Analysis:

• When financial statement are common sized, the assessment process in terms of determining financial trends is easier for the financial analyst reviewing a Borrower.

The Income Statement

Trend and Comparative Analysis:

- •A good indicator of the Company's performance is the change in major financial indicators in the income statement over several years.
- •Revenues on the income statement for example, should be compared with current sales, sales in previous periods and competitors sales growth.

The Income Statement Trend and Comparative Analysis:

- Comparison of financial results against previous is called "trend analysis".
- •When major financial indicators in the income statement are compared to companies in the same industry during the same period is called "comparative analysis"

The Income Statement

Revenue Analysis:

Formula: Each income statement line item X 100 = %

Net Sales

Revenue Recognition:

- A critical factor in the evaluation of the income statement and profitability is the method of revenue recognition used by the companies.
- Small companies usually prepare financial statements on a cash basis
- Larger companies prepare financial statements use the accrual basis of accounting to recognize revenues.
- This information is usually found or available in

Accrual Accounting:

- Accounting method where revenues are recognized when earned regardless of the timing of receipt of the actual cash.
- Expenses are recognized when incurred and other changes in financial condition are also recognized as they occur without regard of the timing of the cash receipts and expenditures

Accrual Accounting: Expense Recognition

- In the Income Statement different types of expenses are recognized by companies in different time periods.
- When considering accrual accounting expenses that are directly related to the sale of tangible assets are recognized as cost of good sold.
- Expenses associated to the cost of good sold are recognized when the inventory is sold.

Accrual Accounting: Expense Recognition

- Costs related to the purchase of fixed assets are not recognized when the fixed asset is purchased.
- This expense is registered as depreciation on the income statement over a period equal to the estimated useful life of this asset.

Income Statement and Critical Periods

- An income statement that includes 12 month of operations is called an annual statement or fiscal year-end statement
- Income statements prepared for periods of less than 12 months is called interim statements.
- Most interim financial statements recognized are semi-annual (6 months), quarterly (3 months) and monthly.

Income Statement and Critical Periods

- In lending transactions relationship managers will request potential Borrowers to submit a minimum of three (3) years fiscal statements.
- Interim statements are usually company prepared and may include accounting adjustments.
- In order to avoid confusing conclusions and to determine financial trends, it is recommended that fiscal (12 months) and interim financial statements are analyzed separately.
- Interim statement analysis must be performed evaluating similar periods. For example if you received interim statements for April 30, 2016 the financial analysis must be completed comparing this period to April 30 2015.

- When analyzing income statement two key issues of its structure must be kept in mind:
- A. The income statement appears to indicate that profits are equivalent to cash generated by operations. However this is not the case.
- B. There is a wide latitude given to management to make decisions on the reporting and deferment of operating expenses until future periods. This may materially impact the profitability results and presents an issue regarding quality of income generating when working on trend analysis.

- The format of the Income Statement from Sales to Net income figure may have some assessments to consider that all credits represent cash inflows while debits represent cash outflows.
- The accrual method of accounting dictates that income and expenses be recognized in the period in which is earned or incurred.
- Consequently a company that sells its product in one accounting period will show it as income even when the receivable is not collected until the following period.
- Inventory may also be purchased and delivered but not paid until future periods.

- As a result the net income's financial result may give the appearance of a good return in profits, but if the company has generated a large amount of receivables which may prove to be uncollectible, the profit may never be realized as "cash".
- On the operating expense category, there are expenses that do not represent a cash outflow in present and future periods.
- These expenses include depreciation of fixed assets, amortization of intangibles, deferred charges and loss on sales of fixed assets or investments.
- These non-cash charges reduce the reported profit results but have no effect on the cash derived from operations.

- The vast majority of business enterprises report financial results based on the accrual basis of accounting.
- However some professional service companies or sole proprietorships will use the cash method or a modified cash method.
- Cash method of accounting recognizes income and expenses when cash is involved. As such no receivables or payables would be recorded on the balance sheet, nor would sales and expenses be recorded until received or paid.

- The real of management discretion in recognizing operating expenses presents a problem during the assessment of the financial standing of a Borrower.
- A number of cash outlays may be charged to the income statement in the period in which incurred or they may be capitalized and amortized over successive periods.
- Research and development, promotion and advertising expenses and start up expenses are few examples of cash outlays which management can expense or capitalize.
- The accounting term "capitalize" is used to denote instances where a cash outlay is recorded as an asset on the balance sheet rather than as an expenses in the income statement

- The accounting rationale for capitalizing is that many cash outlays if charged as expenses to operations in the period incurred would not reasonably reflect the net profitability for the period because future periods will benefit from this outlay of cash.
- When an expense is capitalized, a decision must be made by management as to the period of time or the number of periods that will benefit from the outlay.
- There are two (2) methods of examining the Income Statement: Vertical and horizontal

- Both are equally important.
- Vertical analysis is most informative when compared with similar companies in the particular industry.
- A knowledge of conditions in an industry or in the economy are also vital to the analysis of the Income Statement.
- Horizontal Analysis: This refers to the comparison of operating results of a number of years.
- Main advantage of horizontal analysis is to view the trends in the company's operating performance and be able to predict with some limitations the future profitability financial indicators.

- Predictions, however should be considered with some limitations when judging the financial soundness of a potential Borrower.
- For example: In a highly technical industry the Company may have achieved successful in meeting new demands in developing and producing new products. However this can not be taken as an assurance that the same financial results will occur.
- In the analysis of financials that Financial Analyst should bear in mind that the Income Statement does not work independently from the Balance Sheet.

- Conversely changes on the Balance sheet may given some indication of causes behind income statement.
- For example: 1) Increase in the Allowance for doubtful receivables may mean the Company may be increasing the credit sales or may be granting credit to more marginal accounts. 2) Amount of long term debt on the balance sheet, and when considering the interest rate may be considered with the interest expense on the Income Statement

The Income Statement

Trend Analysis:

- Trend analysis is the evaluation of similar periods to determine common or different patterns
- This assessment is useful in detecting favorable and unfavorable signs of the company financial condition as reflected on the income statement and balance sheet.

- A good indicator of the Company's operating/profitability performance is the change in net sales level over several statements.
- It is worthwhile to consider the percentage growth rather than the absolute change in sales.

• Example: Color Code Inc.

<u>Year</u>	Net Sales	
2014	\$895	
2015	\$937	
2016	\$918	

Formula: Net Sales Y2 – Net Sales Year 1 / Net Sales Year 1 X 100

Period Net Sales	\$ Growth	% Growth
2015 – 2014	\$ 42	4.7 %
2016 – 2015	\$(19)	(2)

- The first item account you will find on the Income Statement will be *gross sales*.
- In some financial statements the accountants do not include gross sales and start the disclosure with *net sales*.

- •For those companies engaged in the wholesale and retail business, will have some adjustments part of the sales process.
- This includes Discounts, Allowances and returns
- These accounts adjustments are usually deducted from gross sales.

- Allowances results when there are issues with quality of merchandise and the clients are compensated from faulty goods by giving credit in future purchases.
- **Returns** result when the merchandise is returned and the bill for inventory purchases is cancelled.

- Discounts for large purchases are usually offered by large companies as an incentive in the sales process
- Companies can also offer discounts to improve the collection of accounts receivable.
- Discounts tend to reduce the Companies' gross profit and ultimately the overall profitability

The Income Statement

Revenue Analysis: Net sales

- For financial analysis you may consider the breakdown of sales by:
 - Geographical location
 - Product mix
 - Cyclical or seasonal fluctuations
 - Concentration on few customers
 - Order Backlogs

- Sales Mix: Companies often differentiate net sales by new accounts, product lines, sales territories or operating divisions.
- The analysis of the sales operating performance by using segment breakdowns assist the financial analyst in determining the specific factors impacting the sales results.
- Order backlogs: Considered an indicator of future net sales. The trends in order backlogs provide insight into revenue growth and the capacity of a company to supply the product.

- Cost of Goods Sold: Amount expensed to the Income Statement for the purchase and production of goods.
- The calculation and the evaluation of this expense item on the income statement if different depending the type of business.
- As such cost of goods for manufacturers, retailers, wholesalers and service companies is different.
- For manufacturers: In order to determine the cost of good sold it is necessary to determine all direct manufacturing costs over the year. This includes material costs, labor expenses, factory overhead and taxes.
- Work in progress inventory is then added to this calculation to arrive at the total cost of good sold number.

The Income Statement

Expense Analysis: Cost of Goods Sold

Manufacturer:

Calculated as:

Beginning Inventory

- + Raw Materials used
 - + Labor Expense
- + Manufacturing Overhead
- Work in Progress Inventory
 - Ending Inventory
 - = Cost of Goods Sold

 Cost of Goods Sold: This number is the total of costs directly related to the manufacturing and purchase of goods in addition to any work in progress inventory less the finished goods inventory

The Income Statement

Expense Analysis: Cost of Goods Sold

Retailers and Wholesalers:

Calculated as:

Beginning Inventory

- + Net Cost of Purchases
 - Ending Inventory
 - = Cost of Goods Sold

The Income Statement

Expense Analysis: Gross Profit

- When cost of goods sold is deducted from net sales the resulting amount is the gross profit.

Gross Profit is the amount of money available to cover all other operating expenses.

- Gross profit usually reflects the type of industry in which the company operates.

The Income Statement

Expense Analysis: Gross Profit

- Some of the questions to consider when analyzing gross profit are:
- a. Did the Company increase its prices?
- b. Did the product mix change?
- c. What changes are expected next year?
- Answers to these questions can provide important information about the Company's operations.

The Income Statement Expense Analysis: Gross Profit & Gross Margin

Once net sales and cost of good sold are calculated next step is to calculate gross margin.

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The Income Statement Expense Analysis: Gross Profit & Gross Margin

• Gross Profit: Difference between sales (revenues) and cost of goods

Formula: Net sales – Cost of Goods sold= Gross Profit

The Income Statement Expense Analysis: Gross Profit & Gross Margin

• Gross Margin: It is the Gross Profit expressed as a percentage of sales

Formula: Gross Profit

_____ X 100 = Gross Profit Margin

Net Sales

The Income Statement Expense Analysis: Gross Profit & Gross Margin

- As an Analyst it is important to determine sharp changes in gross margin levels.
- In the event of trends showing deteriorating margins this may be signs of the Company's purchasing difficulties, manufacturing or services inefficiencies, pricing issues or inventory accumulation.
- Gross profit margins considering acceptable vary between industries.
- Given this fact it is important to compare the Company's margins with other companies in the same industry.

The Income Statement **Expense Analysis: Operating Expenses**

- Costs incurred during the normal course of business
- Are broken down between controllable and noncontrollable costs

The Income Statement/ Expense Analysis: Operating Expenses

- Operating expenses such as selling, general and administrative expenses represent costs no directly related to the production of goods and services.
- •The Analyst should obtain a detailed breakdown of operating expenses including salaries for different types of personnel, auto expenses, insurance, repairs and maintenance, utilities, entertainment, profit sharing, legal, accounting, advertising and postage.
- •Usually a business owner has more control over operating expenses when compared to cost of good sold.
- These expenses reflect management decisions that provide some insight into management style and the ability to adjust to change

The Income Statement

Expense Analysis: Operating Expenses: When reviewing expenses it is important to compare them against the sales for the year as follows:

• Formula:

Total Operating Expenses X 100

Net sales

The Income Statement

Expense Analysis: Operating Expenses: - When evaluating operating expenses it is also important to assess Management's ability to control costs by calculating the growth in operating expenses by category against the growth in sales.

Formula:

Operating expense Year 2 – Operating Expense Year 1= Growth in operating expenses in dollars / Operating Expense Year 2 X 100

Compared to Sales Growth: Net Sales Year 2 – Net Sales Year 1 / Net Sales Year 1

= Sales Growth (In dollars) X 100 = Sales rate of Growth (%).

The Income Statement

Expense Analysis: Operating Expenses: The following are some of the expense categories where the Company's management has discretion:

Controllable costs

- Bonuses
- Profit sharing contributions
 - Officer salaries
- Rent expense to a related entity
 - Travel and entertainment

The Income Statement

Expense Analysis: Operating Expenses considered fixed are also named **Non- Controllable costs.**

- These expenses include:
- Utilities
- Long term leases

The Income Statement

Operating Profit: To calculate operating income or operating losses subtract operating expenses from gross profit

Total Gross Profit (In dollars) – operating expenses (in dollars) = Operating profit or loss.

- Operating Profit Margin= Total Operating Profit / Net Sales X 100

The Income Statement/ The Concept of Operating Leverage:

- The Operating leverage concept describes the relationship between fixed costs, total costs and net sales.
- Considered a critical concept in financial analysis as it influences profits, cash flow and the Company's ability to grow and repay debt
- Higher level of operating costs the higher the operating leverage
- The Operating Leverage is the ratio of fixed costs to total costs
- Formula: Total Fixed Costs/Total Costs

The Income Statement/ The Concept of Operating Leverage:

- The Company's controls over costs/expenses is usually determined on the type of cost associated to the business
- **Fixed costs:** Defined as general, administrative and selling expenses
- These costs are considered fixed or semi-variable.
- Variable costs are usually the cost of goods sold
- Cost of goods vary by the cost of each product sold and by the sales mix.

The Income Statement/ The Concept of Operating Leverage:

- A Company with a high operating leverage and high vulnerability for lower sales represent higher potential loan risk.
- A moderate increase in sales in a company with a high level of fixed costs may assist in improving profitability
- A company with low operating leverage can withstand substantial decreases in sales before becoming unprofitable

The Income Statement/ The Concept of Breakeven Analysis:

- Break-Even analysis helps lenders and the Company's management determine:
- A. The level of sales in the company's operation at which no profit or loss exists
- B. Whether the projected sales can support fixed and variable costs
- C. The optimal level of sales for the Company necessary to repay debt
- D. The effect in the changes in the cost structure or sales price on breakeven sales.
- E. Provides an important link between the income statement and the balance sheet. Through pro-forma analysis the lender can determine the level of assets and the debt and capital needed to support the break even point in sales

- After the evaluation of operating profit or losses of a company lenders should assess income or expense items that are outside the normal operations.
- This will assist if the expenses are considered recurring and/or have a significant impact on the Company's overall profitability

- Other Income: Income generated outside the normal operating activities
- This income is not generated from the sales of company's products or services but from other unrelated activity
- Some companies may have a reliance on these sources of income as they may be recurrent

- Other Income: Some of these income sources include:
- 1. Rental Income
- 2. Interest Income
- 3. Profit on the sale of fixed assets
- 4. Dividend Income
- 5. Discounts earned

- Other Income: Some of these income sources include:
- 1. **Rental Income**: Usually originated from building facilities or equipment
- A company with excess capacity can be rented or leased without interrupting the flow of the normal operations
- In lending transactions it is recommended the lender assess how recurrent this source of income is.

- Other Income: Some of these income sources include:
- 2. **Interest Income**: Usually originated from excess cash invested in savings deposits or from other investments
- In scenarios where these investments are recurring the market rate will impact the income generated.

- Other Income: Some of these income sources include:
- 3. **Profit on Sales of Fixed Asset**: A company can generate additional income by selling excess fixed assets at a profit.
- Example: The Company may decide to upgrade its fixed assets and sell used equipment. If the sale results in a price in excess of the equiment's book value, the excess will be other income.

- Other Income: Some of these income sources include:
- 4. **Dividend Income**: Companies with stock investments in other companies or public companies may receive dividend payments.
- These dividends are considered non-operating income
- Lenders may not considered this income as a dependable source given market rates and the absence of an independent valuation of the company generating the dividends

- Other Income: Some of these income sources include:
- 4. Discount Income: This is income generated from the prompt payments to suppliers and not considered dependable

- Other Expenses: A Company may have other expenses also called "non-operating" expenses
- These expenses may include:
- 1. Interest Expense
- 2. Loss on the sale of fixed assets
- 3. Loss on discontinued operations

- 1. **Interest Expense**: This expense is usually shown in the financial statements as non-operating because not all companies borrow money.
- Because this cost is discretionary it is not listed as part of the Company's normal operating expenses
- The cost of borrowing money depends both on the company's level of borrowing needs or whether the debt is on a fixed or variable rate.
- This is an expense that constitutes a small percentage of net sales. Therefore, it is not considered a deciding factor in the success or failure of a company.

- 2. Loss in the sale of fixed assets: Constitute the sales of a fixed asset below its book value.
- In a lending evaluation the analyst must determine if additional sales of fixed asset at a loss is expected.
- This situation could occur in situations where the company has under-estimated the depreciation of used equipment on a consistent basis.

The Income Statement/ Other Income or Other Expenses:

- 3. Loss of Discontinued Operations: A company may decide to discontinue an operation, certain products or services as they have become unprofitable

The Income Statement/ Income Taxes

- Provision for income taxes is deducted from the company's profits to get net profit after tax (NPAT)
- If the company's financial statements were prepared using GAAP and accrual basis of accounting, the provision for taxes shown in the income statement differ from the actual taxes paid in cash and/or the amount shown as accrued taxes on the balance sheet.