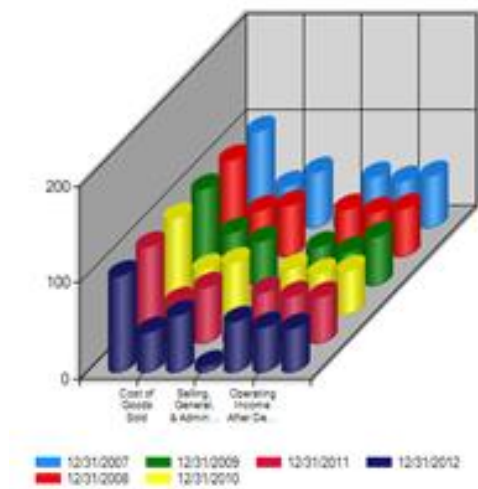


# Financial Statement Analysis Module

## Sample Assignments and Exercises Using the FSA Module



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## Assignment 1.1: Match the Business Model

### Introduction

The point has been often made in class that a firm's business model is a major driver of a firm's Balance Sheet (or Statement of Financial Position). In this assignment your task as an analyst is reversed. That is, given 10 common size financial statements and 10 different business descriptions can you identify which financial position is associated with each business description?

The following data is provided for 10 major companies in common size form (numbered 1-10) constructed from the FSA Module. That is, each stock's data is size adjusted. The common size statements use Total Assets as the scaling variable.

Select the statement for the scaling variable. Click on the cells to match dates between the base statement and the scaling statement. The scaling statement is shown below.

Statement:

Scale By:

12/31/2009	12/31/2010	12/31/2011	12/31/2012
12/31/2007	12/31/2007	12/31/2007	12/31/2007
12/31/2008	12/31/2008	12/31/2008	12/31/2008
12/31/2009	12/31/2009	12/31/2009	12/31/2009
12/31/2010	12/31/2010	12/31/2010	12/31/2010
12/31/2011	12/31/2011	12/31/2011	12/31/2011
12/31/2012	12/31/2012	12/31/2012	12/31/2012

### Brief Business Description for the Ten Companies

- A: This company engages in the manufacture, marketing, and sale of nonalcoholic beverages worldwide.
- B: This company operates general merchandise stores in the United States.
- C: This company designs, manufactures, and sells integrated digital technology platforms worldwide.
- D: This company provides information technology (IT) products and services worldwide.

E: This company engages in the manufacture and sale of a range of branded consumer packaged goods.

F: This company provides passenger and cargo air transportation services in the US and globally.

G: This company provides workforce (i.e., hiring) solutions and services.

H: This company owns and operates a chain of natural and organic foods supermarkets.

I: This company engages in the acquisition, exploration, development, and production of natural gas and oil properties in the United States. The company also offers marketing, midstream, drilling, and other oilfield services.

J: A hospitality company, that manages, franchises, owns, and develops branded hotels, resorts, and residential and vacation ownership properties worldwide. Its portfolio currently consists of 508 properties in 46 countries.

Required: From the Common Size Consolidated Balance Sheets plus Supplementary information your task is the following:

- i. Match the numbered common size balance sheets (1-10), scaled by Total Assets, to the letter descriptions of the companies (A-J). That is, match the numbers to the letters.
- ii. Provide brief reasons for how you chose the match. In particular, what particular line items did you focus in on and why.

## Common Size Financial Statements

STATEMENT OF FINANCIAL POSITION	1	2	3	4	5	6	7	8	9	10
For Year	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012
<b>ASSETS</b>										
Cash & Cash Equivalents	9.80%	9.24%	10.05%	3.35%	1.68%	5.41%	1.63%	12.68%	8.73%	0.69%
Short-term Security Investments	9.41%	0.00%	11.48%	0.00%	23.31%	8.00%	0.00%	4.88%	0.60%	0.27%
Receivables - Total (Net)	5.52%	59.59%	4.78%	4.59%	3.71%	6.95%	14.24%	3.56%	25.65%	5.40%
Inventories - Total	3.79%	0.00%	5.61%	5.08%	7.07%	1.05%	16.41%	1.85%	1.92%	0.00%
Prepaid Expenses			0.00%				0.64%			0.00%
Current Assets - Other	6.68%	3.33%	5.25%	3.54%	3.94%	1.61%	1.11%	3.74%	4.56%	0.73%
Current Assets - Total	35.19%	72.16%	37.18%	16.57%	39.72%	23.01%	34.03%	26.71%	41.47%	7.08%
Plant, Property & Equip (Net)	16.80%	2.64%	33.17%	15.41%	41.42%	54.18%	63.64%	45.96%	11.74%	89.32%
Investments at Equity	10.69%	1.22%	1.18%		0.00%	2.91%	0.00%	0.00%	0.10%	1.43%
Investments and Advances - Other	2.21%	0.00%	8.02%	0.03%	4.18%	9.67%	0.00%	0.00%	11.11%	0.31%
Intangibles -- Total	31.72%	19.71%	18.90%	64.09%	12.52%	6.82%	0.47%	24.24%	27.71%	0.00%
Assets - Other	3.38%	4.27%	1.55%	3.90%	2.16%	3.42%	1.86%	3.10%	7.88%	1.85%
<b>TOTAL ASSETS</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Accounts Payable	2.28%	20.91%	3.58%	5.99%	4.67%	1.81%	14.65%	6.14%	6.67%	7.32%
Notes Payable	18.91%	0.62%	0.37%	3.49%	0.00%	0.00%	2.01%	0.00%	3.01%	0.00%
Accrued Expenses	7.01%	26.28%	9.05%	3.63%	5.80%	0.00%	4.97%	4.69%		2.92%
Taxes Payable	0.55%	0.00%	0.00%	0.31%	0.00%	0.00%	0.56%	0.00%	4.15%	0.00%
Debt (Long-Term) Due In One Year	1.83%	3.77%	0.00%	3.09%	0.02%	0.05%	4.20%	5.14%	4.69%	1.11%
Deferred Revenue (Current)	0.00%	0.79%	2.29%	0.00%	0.00%	0.00%	1.04%	15.21%	10.03%	0.00%
Other Current Liabilities	1.70%	0.85%	2.29%	2.32%	7.97%	6.23%	2.73%	18.10%	18.07%	3.70%
<b>Total Current Liabilities</b>	<b>32.28%</b>	<b>52.44%</b>	<b>15.29%</b>	<b>18.83%</b>	<b>18.46%</b>	<b>8.09%</b>	<b>29.13%</b>	<b>34.07%</b>	<b>36.59%</b>	<b>15.06%</b>
Long Term Debt	17.10%	6.59%	15.57%	15.94%	0.44%	16.09%	30.43%	29.85%	20.21%	29.69%
Deferred Taxes (Balance Sheet)	5.78%	0.26%	4.05%	7.66%	0.00%	1.05%	2.72%	4.10%	0.38%	6.75%
Deferred Revenue	0.00%	0.24%	0.56%	0.00%	0.00%	0.00%	0.00%	11.41%	3.77%	0.00%
Liabilities - Other	6.35%	4.81%	3.83%	9.14%	9.28%	11.54%	3.34%	19.30%	23.13%	5.49%
<b>TOTAL LIABILITIES</b>	<b>61.51%</b>	<b>64.34%</b>	<b>39.30%</b>	<b>51.58%</b>	<b>28.18%</b>	<b>36.77%</b>	<b>65.62%</b>	<b>98.72%</b>	<b>84.08%</b>	<b>56.99%</b>
Noncontrolling Interest	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Preferred Stock	0.00%	0.00%	0.00%	-0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	7.36%
Common Stock	2.04%	0.02%	0.01%	3.03%	48.97%	0.03%	0.11%	0.01%	0.37%	0.02%
Capital Surplus	13.20%	40.97%	23.07%	47.78%	0.00%	42.71%	8.15%	18.99%	41.66%	29.54%
Retained Earnings	67.36%	15.71%	38.10%	56.98%	23.30%	21.01%	27.31%	-14.85%	98.68%	1.05%
Accumulated OCI	-3.93%	0.49%	-0.47%	-7.06%	0.10%	-0.63%	-1.20%	-2.78%	-21.61%	-0.44%
Other Equity Accounts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Less: Treasury Stock	40.63%	21.52%	0.00%	52.63%	0.54%	0.01%	0.00%	0.09%	103.29%	0.12%
Shareholders Equity - Parent	38.05%	35.66%	60.70%	47.97%	71.82%	63.10%	34.38%	1.28%	15.82%	37.42%
Noncontrolling Interest - Nonredeem	0.44%	0.00%	0.00%	0.45%		0.13%	0.00%	0.00%	0.10%	5.59%
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>38.05%</b>	<b>35.66%</b>	<b>60.70%</b>	<b>48.09%</b>	<b>71.82%</b>	<b>63.10%</b>	<b>34.38%</b>	<b>1.28%</b>	<b>15.82%</b>	<b>30.06%</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
<b>Supplementary Items</b>										
Inventory: finished goods	1.36%	0.00%	2.41%	3.25%	7.07%				0.40%	
Inventory: WIP		0.00%	2.63%	0.52%	0.00%					
Inventory: Raw Materials and Supplie	2.06%	0.00%	0.57%	1.32%	0.00%					

## **Assignment 1.2: Understanding Analyst Earnings' Forecasts using Common Size Analysis**

### **Introduction**

Income forecasts from financial analysts have a profound impact upon management and the decisions they make. This is because earnings' season not only affects the fortunes of investors but also the success or failure of the management being rated. In turn, the financial analyst industry has become increasingly competitive and is also subjected to close scrutiny from the popular financial press (e.g., the current Bloomberg ratings provided on the course blackboard with assignment 4).

In this assignment you will start with the consensus sales forecast numbers as your "top line" from which you will make your own earnings forecasts for Apple's 2013 and 2014 earnings and diluted earnings per share. The consensus forecast sales numbers are provided in Appendix 1 (the same as provided in the lecture), common size analysis and related information is provided in Appendix 2, Porter's 5-Forces is summarized in Appendix 3, and an extended common size analysis is provided in Appendix 4.

### **Required**

1. Using the latest year's common size analysis (2012), forecast earnings and diluted earnings per share for Apple 2013 and 2014. Be sure to provide what the scale of your numbers is (i.e., millions, billions or whatever scale you choose to work with).
2. Compare this projection to the consensus analyst forecasts comment and provide brief support whether your forecasts are consistent or not with the analyst consensus.
3. Refer to Appendix 3. This appendix provides Michael Porter's analysis of Competitive Intensity and its impact upon profits. Apply Porter's conceptual framework to reassess your common size analysis for Apple in 1. above. Based upon this analysis identify which common size year(s) you view to be more relevant for forecasting Apple's earnings from for 2013 and 2014. Again provide brief reasons in support of your answer.
4. Given your answer to part 3. repeat part 1. to make the best forecast you can. Given your forecast do you expect Apple to meet, beat or fall short of the current consensus analyst forecasts for 2013 and 2014? – (Provide brief reasons in support of your answer).

Keep within 3 pages for your answers to the above four parts.

## Appendix 1: Analyst Sales Forecasts

### Analyst Estimates

Get Analyst Estimate

Earnings Est	Current Qtr. Sep 13	Next Qtr. Dec 13	Current Year Sep 13	Next Year Sep 14
Avg. Estimate	7.64	13.52	39.10	42.53
No. of Analysts	47.00	41.00	54.00	52.00
Low Estimate	7.22	11.21	38.58	36.08
High Estimate	8.22	15.63	39.70	47.22
Year Ago EPS	8.67	13.81	44.15	39.10

Revenue Est	Current Qtr. Sep 13	Next Qtr. Dec 13	Current Year Sep 13	Next Year Sep 14
Avg. Estimate	35.97B	54.77B	169.45B	180.52B
No. of Analysts	44	37	50	49
Low Estimate	34.50B	49.05B	168.00B	166.94B
High Estimate	37.79B	58.80B	171.23B	198.00B
Year Ago Sales	35.97B	54.51B	156.51B	169.45B
Sales Growth (year/est)	0.00%	0.50%	8.30%	6.50%

Earnings History	Sep 12	Dec 12	Mar 13	Jun 13
EPS Est	8.75	13.47	10.00	7.32
EPS Actual	8.67	13.81	10.09	7.47
Difference	-0.08	0.34	0.09	0.15
Surprise %	-0.90%	2.50%	0.90%	2.00%

## Appendix 2: Common Size Analysis

AAPL

SEC Filings

Select Stock: APPLE INC (AAPL) AAPL ?

Filing Date: 31 October 2012 10-K Search Tickers

Select Statement: CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$) Export to Excel

Financial Report Complete Filing Search SEC Filings

Plot	Line Item	12 Months Ended		
<input type="checkbox"/>	CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$)	Sep. 29, 2012	Sep. 24, 2011	Sep. 25, 2010
<input type="checkbox"/>	In Millions, except Share data in Thousands, unless otherwise specified			
<input checked="" type="checkbox"/>	Net sales	100.0000%	100.0000%	100.0000%
<input checked="" type="checkbox"/>	Cost of sales	56.1288%	59.5211%	60.6225%
<input checked="" type="checkbox"/>	Gross margin	43.8712%	40.4789%	39.3775%
<input type="checkbox"/>	Operating expenses:			
<input checked="" type="checkbox"/>	Research and development	2.1603%	2.2439%	2.7321%
<input checked="" type="checkbox"/>	Selling, general and administrative	6.4150%	7.0199%	8.4584%
<input type="checkbox"/>	Total operating expenses	8.5753%	9.2638%	11.1905%
<input type="checkbox"/>	Operating income	35.2960%	31.2151%	28.1870%
<input type="checkbox"/>	Other income/(expense), net	0.3335%	0.3834%	0.2376%
<input type="checkbox"/>	Income before provision for income taxes	35.6295%	31.5984%	28.4247%
<input type="checkbox"/>	Provision for income taxes	8.9644%	7.6518%	6.9406%
<input type="checkbox"/>	Net income	26.6651%	23.9466%	21.4841%
<input type="checkbox"/>	Earnings per share:			
<input type="checkbox"/>	Basic	0.0285%	0.0259%	0.0236%
<input type="checkbox"/>	Diluted	0.0282%	0.0256%	0.0232%

Select the statement for the scaling variable. Click on the cells to match dates between the base statement and the scaling statement. The scaling statement is shown below.

Statement: CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$)

Scale By: Net sales

Sep. 29, 2012	Sep. 24, 2011	Sep. 25, 2010
Sep. 29, 2012	Sep. 29, 2012	Sep. 29, 2010
Sep. 24, 2011	Sep. 24, 2011	Sep. 24, 2010
Sep. 25, 2010	Sep. 25, 2010	Sep. 25, 2010

A	B	C
CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$)	12 Months Ended	
In Millions, except Share data in Thousands, unless otherwise specified	Sep. 29, 2012	Sep. 24, 2011

AAPL

SEC Filings

Select Stock: APPLE INC (AAPL) AAPL ?

Filing Date: 24 July 2013 10-Q Search Tickers

Select Statement: Condensed Consolidated Statements of Operations (USD \$) Export to Excel

Financial Report Complete Filing Search SEC Filings

Net income	6900	8824	29525	33510
Earnings per share:				
Basic	7.51	9.42	31.67	35.89
Diluted	7.47	9.32	31.44	35.48
Shares used in computing earnings per share:				
Basic	918618	936596	932388	933672
Diluted	924265	947059	939172	944440



### Appendix 3: Porter's 5-Forces

Porter's 5-Forces was originally published in 1979. His analysis identified five forces, from industrial organization economics, that describe the relationship between "competitive intensity" and profitability. The 5-Forces are depicted as follows:



The worst case scenario (from a firm's perspective) occurs when the 5-Forces drive profitability towards the "pure competition" and normal profits. This is the case where profit margins shrink to industry averages. In Porter's original formulation three of the 5-Forces refer to external competition (new entrants, substitute products and competitive rivals) and the remaining two forces are identified as internal threats (customers and suppliers).

The major change between 1979 and today has been the rise of social media power. This has provided significant power to the mass of individual consumers who constantly chat about brands and products in their social networks. This chatter can have a profound impact upon both sales and profit margins (both good and bad impacts). Thus today social media has made internal threats much more significant than was the case in 1979. Today's management is usually aware of social media and this can influence their decision making. Similarly financial analysts also attempt to incorporate the impact of social media trends into their forecasts irrespective of whether management has or not. As a result, when making forecasts before just assuming the past is immediately relevant to the future, *analysts must first consider whether competitive intensity has changed to any degree and if so how will these changes affect future profitability.*

In practical terms the above assessment may result in you as an analyst applying a different year's %'s than what you estimate from the 2012 common size analysis.

For additional background reading see: [http://en.wikipedia.org/wiki/Porter\\_five\\_forces\\_analysis](http://en.wikipedia.org/wiki/Porter_five_forces_analysis)

#### Appendix 4: Extended Common Size Analysis Time Series Data

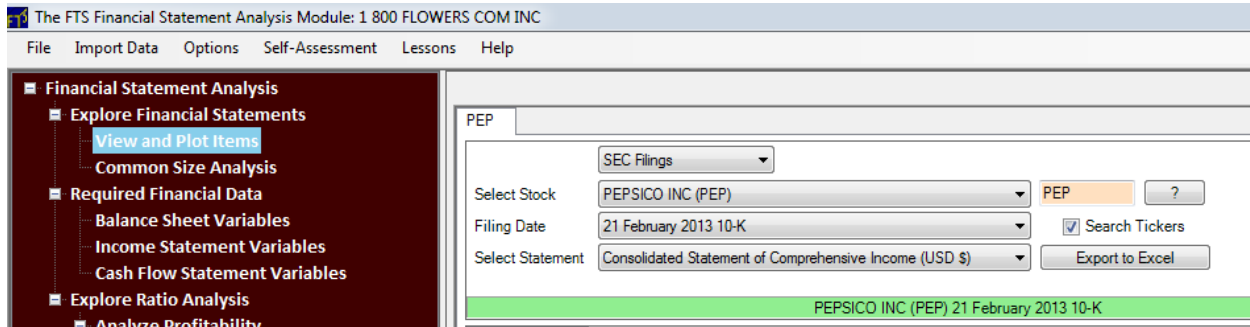
30 September 2012 CPS											
APPLE INC (AAPL) INCOME STATEMENT											
INCOME STATEMENT	9/30/2002	9/30/2003	9/30/2004	9/30/2005	9/30/2006	9/30/2007	9/30/2008	9/30/2009	9/30/2010	9/30/2011	9/30/2012
(FYE Ending):											
Sales (Net)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of Goods Sold	70.03%	70.68%	70.91%	69.79%	69.93%	64.80%	64.34%	58.27%	59.19%	57.84%	54.08%
Gross Profit	29.97%	29.32%	29.09%	30.21%	30.07%	35.20%	35.66%	41.73%	40.81%	42.16%	45.92%
Selling, General, & Admin Expenses	27.12%	27.11%	23.07%	17.18%	16.28%	15.60%	14.99%	12.78%	11.19%	9.26%	8.58%
Research and Development	7.78%	7.59%	5.91%	3.83%	3.69%	3.26%	3.41%	3.11%	2.73%	2.24%	2.16%
Operating Income Before Depreciation	2.86%	2.20%	6.03%	13.03%	13.79%	19.60%	20.66%	28.96%	29.62%	32.90%	37.34%
Depreciation, Depletion, & Amortiz	-5.73%	-5.79%	-4.10%	-2.64%	-2.60%	-2.02%	-2.07%	-1.51%	-1.30%	-0.56%	-0.11%
Operating Income After Depreciation	0.80%	0.40%	4.22%	11.84%	12.70%	18.37%	19.32%	27.36%	28.19%	31.22%	35.30%
Interest Revenue	2.06%	1.11%	0.77%	1.31%	2.04%	2.70%	2.01%	0.95%	0.48%	0.00%	0.00%
Interest Expense	0.19%	0.13%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Equity Income (Loss)	1.41%	1.63%	0.72%	1.18%	1.89%	2.50%	1.91%	0.76%	0.24%	0.38%	0.33%
Other EBT Items (Loss/Expense)	2.56%	1.53%	1.05%	1.31%	2.04%	2.70%	2.01%	0.95%	0.48%	0.00%	0.00%
Pretax Income	1.52%	1.48%	4.63%	13.03%	14.59%	20.86%	21.23%	28.12%	28.42%	31.60%	35.63%
Income Taxes / Federal	0.14%	0.29%	0.41%	2.18%	3.20%	5.08%	5.98%	5.05%	3.30%	3.59%	4.63%
Income Taxes - Foreign	0.51%	0.34%	0.56%	0.42%	0.52%	0.43%	0.85%	0.80%	0.43%	0.71%	0.77%
Income Taxes / State	0.03%	0.06%	0.06%	0.47%	0.29%	0.47%	0.65%	0.65%	1.00%	0.70%	0.76%
Income Taxes - Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income Taxes - Total	0.38%	0.39%	1.29%	3.45%	4.29%	6.30%	6.35%	8.93%	6.94%	7.65%	8.96%
Minority Interest	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Income from Continuing Operations	1.13%	1.10%	3.33%	9.58%	10.30%	14.56%	14.88%	19.19%	21.48%	23.95%	26.67%
Extraordinary Items	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Discontinued Operations	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Consolidated Net Income	1.13%	1.11%	3.33%	9.58%	10.30%	14.56%	14.88%	19.19%	21.48%	23.95%	26.67%
Net Income Attributable to NCI	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Net Income Attributable to Shareholders	1.13%	1.11%	3.33%	9.58%	10.30%	14.56%	14.88%	19.19%	21.48%	23.95%	26.67%
EARNINGS PER SHARE											
EPS - Primary, Excluding EI&DO	0.000031	0.000031	0.000089	0.000118	0.000122	0.000168	0.000169	0.000215	0.000236	0.000259	0.000285
EPS - Primary, Including EI&DO	0.000031	0.000031	0.000089	0.000118	0.000122	0.000168	0.000169	0.000215	0.000236	0.000259	0.000285
EPS - Fully Diluted, Excluding EI&DO	0.000031	0.000031	0.000086	0.000112	0.000118	0.000164	0.000165	0.000212	0.000232	0.000256	0.000282
EPS - Fully Diluted, Including EI&DO	0.000031	0.000031	0.000086	0.000112	0.000118	0.000164	0.000165	0.000212	0.000232	0.000256	0.000282

\*Note the common size percentages computed from Compustat data may not be exactly the same as the percentages computed from Apple's financial statements for some line items. The reason is that although sales, and major line items (such as net income, earnings before taxes etc.,) are the same, some in between line items such as Cost of Goods Sold may be different because some judgment is involved in deciding what costs are included in the line item. Welcome to real world!

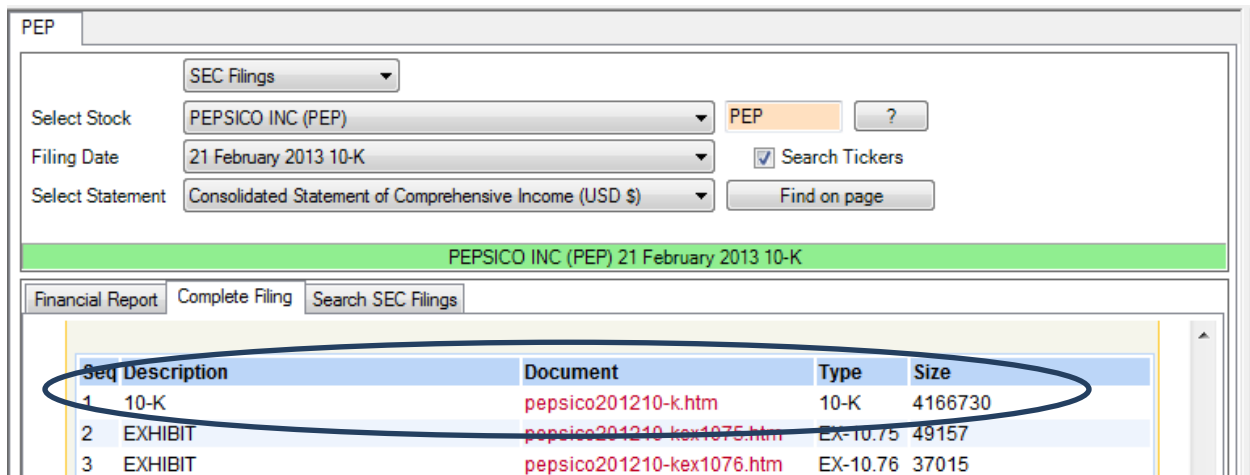
## Assignment 1.3: Reading and Interpreting Derivatives Accounting Reports

### Introduction

Using the FSA Module select View and Plot Items and find PepsiCo latest 10-K filings:



You can also access the 10-K filing as follows and clicking on the .htm hyperlink:



You can then click on the “Find on page” button to locate key words such as “hedge” and “derivative” so you can read about PepsiCo’s use of derivatives and hedging activities.

You can refer to this and the Statements: Consolidated Statement of Comprehensive Income (USD \$) for 21 February 2013 10-K and the Consolidated Statement of Income to answer the followings.

### Required:

1. What types of risks does PepsiCo use derivatives to hedge and rank the relative importance of each risk to PepsiCo based upon the relative size of PepsiCo’s derivative usage? Provide numerical support for your answer from PepsiCo’s latest 10-K report.
2. Can you infer from the 10-K statement’s footnote whether or not all of PepsiCo’s derivatives satisfy Accounting Hedge Accounting standards? Provide any evidence you find to support your answer to this question.

3. What are the unrealized gains and losses from PepsiCo's derivatives for the year covered in the latest 10-K report? Did all of these unrealized gains and losses pass through OCI or Accounting Income or both statements? (provide support for your answer including estimating how much passed through each statement)
4. Did PepsiCo have any realized gains and losses that were previously recognized as unrealized gains and losses in the OCI statement? If so by how much did the realized gains and or losses increase or reduce Accounting Income for the year covered in the latest 10-K? (Provide support for your answer)

## Assignment 2.1: Analyzing Accounting or Fundamental Growth

Coca-Cola (KO) and PepsiCo (PEP) are two popular international brands. In 2012 (and 2011 in brackets) Coca-Cola sold USD 48.017 (USD 46.542) billion and PepsiCo sells over USD 65.492 (USD 66.504) billion annually. The fundamental or accounting growth for Coke in 2012 was 0.137 and for PepsiCo was 0.134. That is, practically the same. The ROE for each company is also practically the same also for 2012 at 0.28 for Coke and 0.288 for PepsiCo as is their 2012 dividend payout ratio which is 0.51 for Coca-Cola and 0.534 for PepsiCo.

On the surface the two companies appear to be very similar in terms of performance levels in 2012.

### Additional Information:

KO	31 Dec 2011	31 Dec 2012
Average Total Assets	76,447.50	83,074.00
Sales	46,565.00	48,017.00
Consolidated Net Income	8,634.00	9,086.00
Net Income Attributable to NCI	62.00000	67.00000
Net Income Attributable to Shareholders	8,572.00	9,019.00
Average Shareholders Equity	31,319.00	32,212.50
Asset Turnover	0.6091	0.5780
Profit Margin	0.1841	0.1878
Return on Assets	0.1121	0.1086
Financial Leverage	2.4409	2.5789
Return on Equity	0.2737	0.2800

PEP	31 Dec 2011	31 Dec 2012
Average Total Assets	70,517.50	73,760.00
Sales	66,504.00	65,492.00
Consolidated Net Income	6,462.00	6,214.00
Net Income Attributable to NCI	19.00000	36.00000
Net Income Attributable to Shareholders	6,443.00	6,178.00
Average Shareholders Equity	20,876.00	21,441.00
Asset Turnover	0.9431	0.8879
Profit Margin	0.0969	0.0943
Return on Assets	0.0914	0.0838
Financial Leverage	3.3779	3.4401
Return on Equity	0.3086	0.2881

**Required:**

- i. Define accounting or fundamental growth, describe the major firm decisions made by management that drive this measure, and relate these decisions to the definition.
- ii. Given the information provided above for this question, compare Coca-Cola versus PepsiCo's fundamental growth with respect to the major decisions identified in part i.,. What differences arise between the stocks when viewed this way and provide a brief description of what these differences mean.
- iii. Suppose you are a financial analyst. Your task is to contrast and describe in your own words, using only the information provided above, how the *investment decisions* driving return on assets (ROA) are either different or the same for Coca-Cola versus PepsiCo in 2011 and 2012. To receive full credit, provide support for your answer.
- iv. By using the additional information provided in this part of the question provided below, now refine your answer to part iii.,. In addition, you should provide a brief comparison and evaluation of each management's performance in 2012 with respect to how well you assess that they are implementing their firm's business model.

KO	31 Dec 2011	31 Dec 2012
Sales	46,565.00	48,017.00
Cost of Sales	16,322.00	17,157.00
Gross Margin	30,243.00	30,860.00
SG&A	17,450.00	17,740.00
R&D	0.00000	0.00000
Lease Expense	0.00000	0.00000
Other Operating Expenses	1,864.00	1,896.00
EBIT	10,929.00	11,224.00

PEP	31 Dec 2011	31 Dec 2012
Sales	66,504.00	65,492.00
Cost of Sales	29,071.00	28,802.00
Gross Margin	37,433.00	36,690.00
SG&A	24,449.00	24,312.00
R&D	525.000	552.000
Lease Expense	0.00000	0.00000
Other Operating Expenses	2,084.00	2,056.00
EBIT	10,375.00	9,770.00

## **Assignment 2.2: Analyzing Profitability of Vodafone versus Ooredoo**

**Page Limit for Answer: Your answer should be well organized and be around 1-2 pages. It should not exceed 2-pages.**

### **Background Information**

Government regulators usually do not like monopolies because they result in consumers paying more for goods and services than would be the case if the industry was competitive. This is because basic economic theory predicts that prices and profits are higher in industries where there is monopoly power. Regulators create laws and contractual rights as a control against monopolies forming and or persisting.

For example, in the US the anti-trust laws are in place to promote competition. These anti-trust laws work towards prohibiting monopolies (if feasible), prohibiting the abuse of monopoly power, prohibiting takeovers that are designed to eliminate competition and similar activities. Sometimes corporations are broken up if they are judged to be too big and providing a threat to competitive markets. The overriding objective of these types of laws is to benefit consumers.

In Qatar, Vodafone Qatar was permitted to commence operations in 2009 in order to create competition for Qatar Telecom (or now Ooredoo). Now there are a few years of financial results available you can judge whether competition is having an impact upon financial performance.

### **Required:**

The financial analyses in the appendices provide the profitability and cash flow concepts introduced in class for both Ooredoo and Vodafone Qatar. In addition, the business descriptions for each company are provided in the third appendix. In this assignment you should apply any of these profitability and cash flow concepts to answer the following.

- i. Did Vodafone's entry into Qatar have an impact upon Ooredoo's profitability and cash flow performance? (Provide reasons in support of your answer)
- ii. Is the impact upon both company's profitability and cash flow performance consistent with what you would expect from increased competition in this industry? (Provide your major reasons in support or against for your answer)

## Appendix: Profitability Analysis

### Ooredoo QSC (135709)

135709	31 Dec 2002	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Sales	1,719.92	2,026.15	2,346.10	2,982.40	4,420.44	10,373.43	20,318.93	24,025.26	27,179.00	31,765.35	33,714.21
Cost of Sales	302.940	318.676	0.00000	0.00000	95.81300	932.538	1,511.29	1,147.63	8,857.88	10,270.62	10,754.52
Gross Margin	1,416.98	1,707.47	2,346.10	2,982.40	4,324.62	9,440.89	18,807.64	22,877.62	18,321.12	21,494.72	22,959.69
SG&A	329.858	390.835	693.489	1,073.79	1,558.97	4,217.61	8,592.99	11,885.50	6,047.57	6,959.15	7,693.93
R&D	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	943.120	1,137.63	1,652.62	1,908.61	2,263.96	5,223.28	10,214.65	10,992.12	5,956.13	7,520.87	7,481.52
EBIT	143.99900	179.00810	-0.00500	-0.00012	501.695	-0.00098	0.00293	-0.00098	6,317.42	7,014.71	7,784.23
Interest Expense	0.00000	0.00000	0.00000	0.00000	17.85700	977.418	1,594.96	1,920.73	2,355.48	2,542.71	2,362.67
Interest Revenue	49.99100	43.30100	44.19300	64.59400	111.19700	145.30000	325.451	475.209	587.972	696.447	587.629
Net Interest Expense	-49.99100	-43.30100	-44.19300	-64.59400	-93.34000	832.118	1,269.51	1,445.52	1,767.50	1,846.26	1,775.04
Equity Income (Loss)	13.09000	11.19300	124.50700	-378.646	141.48500	-202.966	-113.11200	1,359.16	1,032.81	1,876.02	574.538
Other EBT Items (Loss/Expense)	49.99000	43.30000	44.19000	64.59000	111.20000	145.30000	325.450	475.210	587.970	696.450	587.630
EBT	257.070	276.802	212.885	-249.462	847.720	-889.785	-1,057.17	388.846	6,170.70	7,740.92	7,171.36
Tax Expense	0.00000	0.00000	0.00000	0.00000	0.00000	-91.96800	256.339	617.102	545.550	910.996	975.547
Effective Tax Rate	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.58701	0.08841	0.11769	0.13603
NOPAT	143.99900	179.00810	-0.00500	-0.00012	501.695	91.96703	-256.336	0.00057	5,758.90	6,189.18	6,725.32
Operating Profit Margin	0.08372	0.08835	0.00000	0.00000	0.11349	0.00000	0.00000	0.00000	0.23244	0.22083	0.23089
Gross Profit Margin	0.82386	0.84272	1.00000	1.00000	0.97833	0.91010	0.92562	0.95223	0.67409	0.67667	0.68101
NOPAT Margin	0.08372	0.08835	0.00000	0.00000	0.11349	0.00887	-0.01262	0.00000	0.21189	0.19484	0.19948

### Vodafone Qatar QSC (292438)

292438	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Sales	0.02800	361.522	934.899	1,221.72	1,526.62
Cost of Sales	56.40900	247.570	475.042	560.743	689.421
Gross Margin	-56.38100	113.95200	459.857	660.981	837.197
SG&A	29.19200	207.202	278.358	115.58200	119.53300
R&D	0.00000	0.00000	0.00000	0.00000	0.00000
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	-86.33000	-542.520	-366.980	-55.08000	59.06000
EBIT	0.75700	449.270	548.479	600.479	658.604
Interest Expense	0.10300	18.22700	25.63500	27.64000	23.43100
Interest Revenue	11.84100	26.68000	5.39700	0.00000	0.49400
Net Interest Expense	-11.73800	-8.45300	20.23800	27.64000	22.93700
Equity Income (Loss)	-8.12300	19.41200	0.48100	-1.93400	-2.65200
Other EBT Items (Loss/Expense)	11.84000	26.68000	5.40000	0.00000	0.49000
EBT	16.21200	503.815	534.122	570.905	633.505
Tax Expense	0.00000	0.00000	0.00000	0.00000	0.00000
Effective Tax Rate	0.00000	0.00000	0.00000	0.00000	0.00000
NOPAT	0.75700	449.270	548.479	600.479	658.604
Operating Profit Margin	27.03585	1.24272	0.58667	0.49150	0.43141
Gross Profit Margin	-2,013.61	0.31520	0.49188	0.54102	0.54840
NOPAT Margin	27.03585	1.24272	0.58667	0.49150	0.43141



## Appendix: Cash Flow Analysis

### Ooredoo QSC (135709)

135709	31 Dec 2002	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Sales	1,719.92	2,026.15	2,346.10	2,982.40	4,420.44	10,373.43	20,318.93	24,025.26	27,179.00	31,765.35	33,714.21
Cost of Sales	302.940	318.676	0.00000	0.00000	95.81300	932.538	1,511.29	1,147.63	8,857.88	10,270.62	10,754.52
SG&A	329.858	390.835	693.489	1,073.79	1,558.97	4,217.61	8,592.99	11,885.50	6,047.57	6,959.15	7,693.93
R&D	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	943.120	1,137.63	1,652.62	1,908.61	2,263.96	5,223.28	10,214.65	10,992.12	5,956.13	7,520.87	7,481.52
EBIT	143.99900	179.00810	-0.00500	-0.00012	501.695	-0.00098	0.00293	-0.00098	6,317.42	7,014.71	7,784.23
Interest Expense	0.00000	0.00000	0.00000	0.00000	17.85700	977.418	1,594.96	1,920.73	2,355.48	2,542.71	2,362.67
Interest Revenue	49.99100	43.30100	44.19300	64.59400	111.19700	145.30000	325.451	475.209	587.972	696.447	587.629
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Other EBT Items (Loss/Expense)	49.99000	43.30000	44.19000	64.59000	111.20000	145.30000	325.450	475.210	587.970	696.450	587.630
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Tax Expense	0.00000	0.00000	0.00000	0.00000	0.00000	-91.96800	256.339	617.102	545.550	910.996	975.547
Effective Tax Rate	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.58701	0.08841	0.11769	0.13603
Cash Flow from Operations	1,200.60	899.639	1,629.29	1,507.51	2,204.71	6,562.55	5,620.49	9,968.13	10,195.40	7,937.15	11,816.82
Cash Flow from Operations Margin	0.6981	0.4440	0.6945	0.5055	0.4988	0.6326	0.2766	0.4149	0.3751	0.2499	0.3505
Capital Expenditures	259.173	374.997	589.805	1,022.81	1,028.20	2,062.23	5,663.33	8,392.98	6,941.78	6,574.86	7,315.72
Free Cash Flow to Firm	891.435	481.341	995.295	420.106	1,083.17	5,332.45	1,226.67	726.617	4,864.87	2,991.28	6,034.68
Free Cash Flow Margin	0.5183	0.2376	0.4242	0.1409	0.2450	0.5140	0.0604	0.0302	0.1790	0.0942	0.1790

### Vodafone Qatar QSC (292438)

292438	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Sales	0.02800	361.522	934.899	1,221.72	1,526.62
Cost of Sales	56.40900	247.570	475.042	560.743	689.421
SG&A	29.19200	207.202	278.358	115.58200	119.53300
R&D	0.00000	0.00000	0.00000	0.00000	0.00000
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	-86.33000	-542.520	-366.980	-55.08000	59.06000
EBIT	0.75700	449.270	548.479	600.479	658.604
Interest Expense	0.10300	18.22700	25.63500	27.64000	23.43100
Interest Revenue	11.84100	26.68000	5.39700	0.00000	0.49400
Net Interest Expense	-11.73800	-8.45300	20.23800	27.64000	22.93700
Equity Income (Loss)	-8.12300	19.41200	0.48100	-1.93400	-2.65200
Other EBT Items (Loss/Expense)	11.84000	26.68000	5.40000	0.00000	0.49000
EBT	16.21200	503.815	534.122	570.905	633.505
Tax Expense	0.00000	0.00000	0.00000	0.00000	0.00000
Effective Tax Rate	0.00000	0.00000	0.00000	0.00000	0.00000
Cash Flow from Operations	-99.71500	-147.86300	-28.52300	-19.57300	326.779
Cash Flow from Operations Margin	-3,561.2500	-0.4090	-0.0305	-0.0160	0.2141
Capital Expenditures	389.269	423.994	292.698	245.921	362.022
Free Cash Flow to Firm	-500.722	-580.310	-300.983	-237.854	-12.30600
Free Cash Flow Margin	-17,882.9300	-1.6052	-0.3219	-0.1947	-0.0081

## **Appendix: Additional Background Information (Business Descriptions)**

Ooredoo Q.S.C. together with its subsidiaries, provides mobile, fixed, broadband Internet, and corporate managed services. The company operates in six segments: Qtel, Asiacell, Wataniya, Indosat, Nawras, and Others. It offers domestic and international telecommunication services in Qatar; mobile telecommunication services in Iraq; and mobile telephone and pager systems and services in Kuwait, and the other parts of the Middle East and North African region. The company also provides telecommunication services, such as cellular services, fixed telecommunications, multimedia, data communication, and Internet services in Indonesia; and mobile and fixed telecommunication services in Oman. In addition, it offers landlines, mobile, home entertainment TV, broadband Internet, and Wi-Fi services. As of December 31, 2012, it had a customer base of 92.9 million subscribers. The company was formerly known as Qatar Telecom (Qtel) Q.S.C. and changed its name to Ooredoo Q.S.C. in March 2013. Ooredoo Q.S.C. was founded in 1987 and is headquartered in Doha, Qatar.

Vodafone Qatar Q.S.C. provides cellular mobile telecommunication and fixed line services in Qatar. It offers roaming, broadband, postpaid, prepaid, mobile Internet, and Blackberry business services. The company also sells mobile related equipment and accessories; and provides money transfer services. Vodafone Qatar Q.S.C. was incorporated in 2008 and is based in Doha, Qatar.

### Assignment 2.3: How Should Vodafone Spend Verizon's \$130 billion?

September 2, 2013 Verizon and Vodafone agree to a \$130 billion deal (see appendix 1). Refer to the following news article:

## How should Vodafone spend Verizon's \$130 billion?



Text Size - +

Published: Monday, 2 Sep 2013 | 7:32 AM ET

By: Catherine Boyle | Staff Writer, CNBC.com



Daniel Berehulak | Getty Images

The long-anticipated sale of Vodafone's stake in its wireless joint venture with **Verizon** is expected to leave the European telecoms giant with tens of billions of dollars to spend. So what will be top of chief executive Vittorio Colao's shopping list after the second-biggest M&A deal of all time?

For starters, **Vodafone** shareholders are hoping for a hefty special dividend or share buyback program, which should be announced alongside the final details of the expected \$130 billion cash-and-shares deal. An announcement is expected late Monday or early Tuesday.

(Read more: [Largest ever loan supporting Verizon deal](#))

The potential for distributing cash to shareholders is one of the major factors which has seen Vodafone's share price shoot up in recent days.

[http://www.cnbc.com/id/101002583?\\_\\_source=yahoo%7Cfinance%7Cheadline%7Cheadline%7Cstory&par=yahoo&doc=101002583%7CHow+should+Vodafone+spend](http://www.cnbc.com/id/101002583?__source=yahoo%7Cfinance%7Cheadline%7Cheadline%7Cstory&par=yahoo&doc=101002583%7CHow+should+Vodafone+spend)

Assume the cost of equity capital from the capital markets for Verizon is 6.4% and for Vodafone is 7.7%. This is the cost of capital raised from issuing stocks (not debt).

**Required: Answer concisely within 2-pages and the question provides a lot more information than what is needed for the answers**

**Aside:** An important part of the assignment is being able to cut through a lot of extraneous information to focus upon what is relevant to the questions asked.

1. In the Reuters article (see appendix 1) it is observed that:  
“The deal in cash and stock will give Verizon full access to the profits from the United States' largest mobile operator, handing it fresh firepower to invest in superfast mobile networks and fend off challengers in a market expected to become more competitive.”  
Refer to the financial data provided in appendix 2 – is the financial data provided in appendix 2 consistent with the observation made in the Reuters article? Provide specific support for your answer.
2. In the above CNBC article it is noted that “For starters Vodafone shareholders are hoping for a hefty special dividend or share buyback program, which should be announced alongside the final details of the expected \$130 billion cash-and-shares deal.”  
Refer to the financial data provided in appendix 2 – is the financial data consistent with the observation made above in the CNBC article? Provide specific in support for your answer.
3. Refer to the initial stock price reaction subsequent to the story released after the close of trading on August 29, 2013, in appendix 3. Is the market reaction for both Vodafone and Verizon consistent with you would expect given your answers to parts 1. and 2. above? Again provide brief reasons in support of your answer.

## Appendix 1: Verizon/Vodafone deal

# Verizon and Vodafone agree \$130 billion Wireless deal



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By Kate Holton and Sinead Carew  
LONDON/SAN DIEGO | Mon Sep 2, 2013 4:16pm EDT

(Reuters) - Verizon Communications agreed on Monday to pay \$130 billion to buy Vodafone out of its U.S. wireless business, signing history's third largest corporate deal to bring an end to an often fractious 14-year marriage.

The deal in cash and stock will give Verizon full access to the profits from the United States' largest mobile operator, handing it fresh firepower to invest in superfast mobile networks and fend off challengers in a market expected to become more competitive.

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### Related Video



**Verizon & Vodafone seal \$130bn deal**

<http://www.reuters.com/article/2013/09/02/us-vodafone-verizon-idUSBRE97S08C20130902>

## Appendix 2: Financial Results

### Verizon – Profitability Margins

VZ	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Sales	67,752.00	71,283.00	75,112.00	88,144.00	93,469.00	97,354.00	107,808.00	106,800.00	110,875.00	115,846.00
Cost of Sales	21,682.00	23,168.00	25,469.00	34,969.00	37,515.00	38,902.00	42,622.00	42,008.00	45,875.00	45,916.00
Gross Margin	46,070.00	48,115.00	49,643.00	53,175.00	55,954.00	58,452.00	65,186.00	64,792.00	65,000.00	69,930.00
SG&A	18,781.00	20,264.00	21,048.00	24,416.00	24,865.00	25,776.00	29,491.00	29,873.00	35,624.00	39,331.00
R&D	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	13,617.00	13,910.00	14,047.00	14,545.00	14,377.00	14,565.00	16,215.00	16,303.00	16,496.00	16,460.00
EBIT	13,672.00	13,941.00	14,548.00	14,214.00	16,712.00	18,111.00	19,480.00	18,616.00	12,880.00	14,139.00
Interest Expense	2,941.00	2,561.00	2,532.00	2,785.00	2,230.00	2,566.00	3,774.00	3,487.00	3,269.00	2,977.00
Interest Revenue	96.00000	116.00000	120.00000	201.000	168.00000	362.000	75.00000	92.00000	68.00000	57.00000
Net Interest Expense	2,845.00	2,445.00	2,412.00	2,584.00	2,062.00	2,204.00	3,699.00	3,395.00	3,201.00	2,920.00
Equity Income (Loss)	2,376.00	1,977.00	1,384.00	1,630.00	1,225.00	1,644.00	1,572.00	1,526.00	972.000	814.000
Other EBT Items (Loss/Expense)	6,859.00	952.000	-132.00000	1,068.00	1,330.00	1,637.00	5,785.00	4,063.00	168.00000	2,136.00
EBT	20,062.00	14,425.00	13,388.00	14,328.00	17,205.00	19,188.00	23,138.00	20,810.00	10,819.00	14,169.00
Tax Expense	1,252.00	2,851.00	3,210.00	2,674.00	3,982.00	3,331.00	1,210.00	2,467.00	285.000	-660.000
Effective Tax Rate	0.06241	0.19764	0.23977	0.18663	0.23144	0.17360	0.05229	0.11855	0.02634	0.00000
NOPAT	12,818.78	11,185.66	11,059.87	11,561.28	12,844.10	14,966.97	18,461.29	16,409.10	12,540.71	14,799.00
Operating Profit Margin	0.20179	0.19557	0.19368	0.16126	0.17880	0.18603	0.18069	0.17431	0.11617	0.12205
Gross Profit Margin	0.67998	0.67499	0.66092	0.60327	0.59864	0.60041	0.60465	0.60667	0.58625	0.60365
NOPAT Margin	0.18920	0.15692	0.14725	0.13116	0.13742	0.15374	0.17124	0.15364	0.11311	0.12775

### Vodafone – Profitability Margins

VOD	31 Mar 2004	31 Mar 2005	31 Mar 2006	31 Mar 2007	31 Mar 2008	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Sales	61,748.56	64,470.41	51,048.45	61,228.22	70,441.57	58,654.31	67,535.18	73,634.64	74,197.58	67,525.29
Cost of Sales	28,247.68	29,867.59	19,542.78	26,799.16	31,730.28	27,210.04	32,693.94	36,810.90	37,863.67	34,647.64
Gross Margin	33,500.88	34,602.82	31,505.68	34,429.06	38,711.30	31,444.27	34,841.24	36,823.74	36,333.91	32,877.65
SG&A	10,407.04	10,275.07	9,178.29	10,970.45	12,685.36	10,737.87	12,618.05	13,427.36	13,270.75	12,848.72
R&D	314.640	413.647	358.296	437.007	464.607	400.400	460.136	460.578	485.944	466.425
Lease Expense	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Operating Expenses	31,986.56	33,337.32	9,788.78	9,624.00	11,267.71	9,343.62	11,551.99	12,178.83	12,076.67	11,232.19
EBIT	-9,207.36	-9,423.22	12,180.31	13,397.60	14,293.62	10,962.38	10,211.07	10,756.97	10,500.55	8,330.32
Interest Expense	2,415.92	2,308.11	1,132.28	2,748.03	3,689.06	2,213.64	1,917.99	1,965.88	2,627.94	2,291.10
Interest Revenue	1,054.32	1,167.28	613.973	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Net Interest Expense	1,361.60	1,140.84	518.311	2,748.03	3,689.06	2,213.64	1,917.99	1,965.88	2,627.94	2,291.10
Equity Income (Loss)	2,106.80	3,420.62	4,017.78	7,494.08	6,770.56	5,678.53	8,068.32	16,320.82	8,400.12	9,886.09
Other EBT Items (Loss/Expense)	824.320	1,737.70	41,513.61	22,834.60	-496.380	8,437.00	3,189.06	9,869.52	1,008.65	10,979.98
EBT	-7,637.84	-5,405.74	57,193.40	40,978.26	16,878.74	22,864.27	19,550.46	34,981.42	17,281.38	26,905.28
Tax Expense	5,803.36	4,223.36	4,139.53	4,769.68	4,457.45	1,585.87	85.04200	2,612.61	4,069.78	3,922.83
Effective Tax Rate	0.00000	0.00000	0.07238	0.11640	0.26409	0.06936	0.00435	0.07469	0.23550	0.14580
NOPAT	-15,010.72	-13,646.58	11,298.73	11,838.19	10,518.87	10,202.03	10,166.65	9,953.57	8,027.66	7,115.75
Operating Profit Margin	-0.14911	-0.14616	0.23860	0.21881	0.20291	0.18690	0.15120	0.14609	0.14152	0.12337
Gross Profit Margin	0.54254	0.53672	0.61717	0.56231	0.54955	0.53609	0.51590	0.50009	0.48969	0.48689
NOPAT Margin	-0.24309	-0.21167	0.22133	0.19335	0.14933	0.17393	0.15054	0.13518	0.10819	0.10538



## Verizon – Cash Flow Margins

VZ	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Cash Flow from Operations	22,482.00	21,820.00	22,012.00	24,106.00	25,739.00	26,620.00	31,565.00	33,363.00	29,780.00	31,486.00
Cash Flow from Operations Margin	0.3318	0.3061	0.2931	0.2735	0.2754	0.2734	0.2928	0.3124	0.2686	0.2718
Capital Expenditures	11,884.00	13,259.00	15,324.00	17,101.00	17,538.00	17,238.00	17,047.00	16,458.00	16,244.00	16,175.00
Free Cash Flow to Firm	13,265.45	10,522.76	8,521.68	9,106.75	9,785.76	11,203.39	18,023.56	19,897.53	16,652.68	18,231.00
Free Cash Flow Margin	0.1958	0.1476	0.1135	0.1033	0.1047	0.1151	0.1672	0.1863	0.1502	0.1574
Net Proceeds from short-term debt	-1,453.00	-860.000	2,059.00	7,464.00	-3,254.00	2,482.00	-3,516.00	-102.00000	223.000	-14,424.00
Proceeds from new long-term debt	4,653.00	514.000	1,487.00	3,983.00	3,402.00	21,598.00	12,040.00	0.00000	11,060.00	4,489.00
Payments to settle long-term debt	10,759.00	5,198.00	3,919.00	11,233.00	5,503.00	4,146.00	19,260.00	8,136.00	11,805.00	6,403.00
Net Borrowings	13,959.00	4,852.00	7,465.00	22,680.00	5,651.00	28,226.00	27,784.00	8,034.00	23,088.00	-3,532.00
Free Cash Flow to Equity	24,557.00	13,413.00	14,153.00	29,685.00	13,852.00	37,608.00	42,302.00	24,939.00	36,624.00	11,779.00
Free Cash Flow to Equity Margin	0.3625	0.1882	0.1884	0.3368	0.1482	0.3863	0.3924	0.2335	0.3303	0.1017

## Vodafone – Cash Flow Margins

VOD	31 Mar 2004	31 Mar 2005	31 Mar 2006	31 Mar 2007	31 Mar 2008	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Cash Flow from Operations	23,645.84	24,036.87	22,118.68	21,887.75	20,796.13	17,464.59	19,838.99	19,249.58	20,388.87	16,247.39
Cash Flow from Operations Margin	0.3829	0.3728	0.4333	0.3575	0.2952	0.2978	0.2938	0.2614	0.2748	0.2406
Capital Expenditures	8,294.72	9,236.23	7,793.80	7,151.56	7,648.15	7,441.72	7,351.54	6,980.88	7,612.06	7,089.06
Free Cash Flow to Firm	16,712.72	15,941.47	14,805.67	17,164.36	15,862.81	12,082.97	14,397.10	14,087.75	14,785.87	11,115.40
Free Cash Flow Margin	0.2707	0.2473	0.2900	0.2803	0.2252	0.2060	0.2132	0.1913	0.1993	0.1646
Net Proceeds from short-term debt	75.44000	0.00000	-111.32000	-259.840	-4,713.58	-1,485.77	-1,240.70	-4,185.32	-5,332.60	-510.480
Proceeds from new long-term debt	515.200	0.00000	9,141.76	10,137.78	3,397.19	8,838.83	6,403.94	7,800.93	2,624.74	8,237.64
Payments to settle long-term debt	0.00000	4,098.70	2,466.33	3,860.23	7,638.22	3,902.47	7,872.42	6,521.91	5,626.72	2,613.20
Net Borrowings	590.640	4,098.70	11,496.77	13,738.16	6,321.83	11,255.53	13,035.66	10,137.52	2,918.86	10,340.36
Free Cash Flow to Equity	15,941.76	18,899.33	25,821.64	28,474.36	19,469.81	21,278.40	25,523.11	22,406.21	15,695.67	19,498.70
Free Cash Flow to Equity Margin	0.2582	0.2931	0.5058	0.4651	0.2764	0.3628	0.3779	0.3043	0.2115	0.2888

## Verizon --- General Return Ratios

VZ	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Consolidated Net Income	4,660.00	10,240.00	10,442.00	10,235.00	10,574.00	12,583.00	10,358.00	10,217.00	10,198.00	10,557.00
Net Income Attributable to NCI	1,583.00	2,409.00	3,045.00	4,038.00	5,053.00	6,155.00	6,707.00	7,668.00	7,794.00	9,682.00
Net Income Attributable to Shareholders	3,077.00	7,831.00	7,397.00	6,197.00	5,521.00	6,428.00	3,651.00	2,549.00	2,404.00	875.000
Average Total Assets	165,968.00	165,963.00	167,044.00	178,467.00	187,881.50	194,655.50	214,801.50	223,628.00	225,233.00	227,841.50
Return on Assets	0.01854	0.04719	0.04428	0.03472	0.02939	0.03302	0.01700	0.01140	0.01067	0.00384
Average Shareholders Equity	33,466.00	35,513.00	38,620.00	44,107.50	49,558.00	46,143.50	41,656.00	40,087.50	37,269.50	34,563.50
Return on Equity	0.09194	0.22051	0.19153	0.14050	0.11140	0.13930	0.08765	0.06359	0.06450	0.02532

## Vodafone – General Return Ratios

VOD	31 Mar 2004	31 Mar 2005	31 Mar 2006	31 Mar 2007	31 Mar 2008	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Consolidated Net Income	-15,089.84	-13,104.49	-37,953.27	-10,427.14	13,414.04	4,404.40	13,087.30	12,629.78	11,194.30	1,022.49
Net Income Attributable to NCI	1,497.76	1,137.06	165.23300	253.937	190.60800	2.86000	-41.00200	-157.27000	73.53100	370.709
Net Income Attributable to Shareholders	-16,587.60	-14,241.55	-38,118.50	-10,681.08	13,223.43	4,401.54	13,128.30	12,787.05	11,120.77	651.781
Average Total Assets	270,717.40	261,819.50	236,678.50	218,108.20	234,237.80	235,527.10	228,378.50	240,537.60	232,895.00	219,956.70
Return on Assets	-0.06127	-0.05439	-0.16106	-0.04897	0.05645	0.01869	0.05748	0.05316	0.04775	0.00296
Average Shareholders Equity	205,940.20	196,765.10	168,084.80	140,300.50	143,487.90	139,083.00	130,232.10	138,880.40	131,744.40	115,787.80
Return on Equity	-0.08055	-0.07238	-0.22678	-0.07613	0.09216	0.03165	0.10081	0.09207	0.08441	0.00563

## Verizon – Return on Invested Capital

VZ	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
Consolidated Net Income	4,660.00	10,240.00	10,442.00	10,235.00	10,574.00	12,583.00	10,358.00	10,217.00	10,198.00	10,557.00
Net Income Attributable to NCI	1,583.00	2,409.00	3,045.00	4,038.00	5,053.00	6,155.00	6,707.00	7,668.00	7,794.00	9,682.00
Net Income Attributable to Shareholders	3,077.00	7,831.00	7,397.00	6,197.00	5,521.00	6,428.00	3,651.00	2,549.00	2,404.00	875.000
Dividends Paid	4,239.00	4,262.00	4,427.00	4,719.00	4,773.00	4,994.00	5,271.00	5,412.00	5,555.00	5,230.00
Income Net of Dividends	-1,162.00	3,569.00	2,970.00	1,478.00	748.000	1,434.00	-1,620.00	-2,863.00	-3,151.00	-4,355.00
Average Short-term borrowings	787.000	405.500	1,119.50	2,895.50	1,983.00	938.500	1,293.50	550.000	967.000	1,217.00
Average Long-term Debt due within 1-year	5,180.00	4,374.50	4,247.50	4,532.50	3,351.50	3,035.00	4,805.50	6,823.50	5,228.50	3,392.00
Average Long-term Debt	39,413.00	37,543.50	33,771.50	30,257.50	28,424.50	37,581.00	51,005.00	50,151.50	47,777.50	48,960.50
Average Lease Obligations	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Shareholders Equity	33,466.00	35,513.00	38,620.00	44,107.50	49,558.00	46,143.50	41,656.00	40,087.50	37,269.50	34,563.50
Invested Capital	78,846.00	77,836.50	77,758.50	81,793.00	83,317.00	87,698.00	98,760.00	97,612.50	91,242.50	88,133.00
Return on Invested Capital	-0.0147	0.0459	0.0382	0.0181	0.0090	0.0164	-0.0164	-0.0293	-0.0345	-0.0494

## Vodafone – Return on Invested Capital

VOD	31 Mar 2004	31 Mar 2005	31 Mar 2006	31 Mar 2007	31 Mar 2008	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
Consolidated Net Income	-15,089.84	-13,104.49	-37,953.27	-10,427.14	13,414.04	4,404.40	13,087.30	12,629.78	11,194.30	1,022.49
Net Income Attributable to NCI	1,497.76	1,137.06	165.23300	253.937	190.60800	2.86000	-41.00200	-157.27000	73.53100	370.709
Net Income Attributable to Shareholders	-16,587.60	-14,241.55	-38,118.50	-10,681.08	13,223.43	4,401.54	13,128.30	12,787.05	11,120.77	651.781
Dividends Paid	2,314.72	3,760.60	4,781.34	13,476.35	7,262.96	5,738.59	6,285.49	7,170.25	10,618.83	7,301.76
Income Net of Dividends	-18,902.32	-18,002.15	-42,899.84	-24,157.43	5,960.47	-1,337.05	6,842.82	5,616.80	501.934	-6,649.98
Average Short-term borrowings	77.28000	83.02700	60.04050	38.29150	69.29750	1,970.72	6,497.33	7,603.93	4,886.52	4,954.47
Average Long-term Debt due within 1-year	3,702.08	2,176.86	3,308.72	7,701.39	9,170.98	9,409.58	8,859.90	8,820.71	7,254.92	6,182.36
Average Long-term Debt	22,492.16	22,213.40	25,533.96	32,084.32	40,015.38	45,198.23	44,440.81	44,508.38	45,436.43	44,780.22
Average Lease Obligations	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Shareholders Equity	205,940.20	196,765.10	168,084.80	140,300.50	143,487.90	139,083.00	130,232.10	138,880.40	131,744.40	115,787.80
Invested Capital	232,211.70	221,238.30	196,987.50	180,124.50	192,743.50	195,661.60	190,030.20	199,813.40	189,322.30	171,704.80
Return on Invested Capital	-0.0814	-0.0814	-0.2178	-0.1341	0.0309	-0.0068	0.0360	0.0281	0.0027	-0.0387

## Verizon – Return on Capital Employed

VZ	31 Dec 2003	31 Dec 2004	31 Dec 2005	31 Dec 2006	31 Dec 2007	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
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EBIT	13,672.00	13,941.00	14,548.00	14,214.00	16,712.00	18,111.00	19,480.00	18,616.00	12,880.00	14,139.00
Interest Expense	2,941.00	2,561.00	2,532.00	2,785.00	2,230.00	2,566.00	3,774.00	3,487.00	3,269.00	2,977.00
Interest Revenue	96.00000	116.00000	120.00000	201.000	168.00000	362.000	75.00000	92.00000	68.00000	57.00000
Net Interest Expense	2,845.00	2,445.00	2,412.00	2,584.00	2,062.00	2,204.00	3,699.00	3,395.00	3,201.00	2,920.00
Equity Income (Loss)	2,376.00	1,977.00	1,384.00	1,630.00	1,225.00	1,644.00	1,572.00	1,526.00	972.000	814.000
Other EBT Items (Loss/Expense)	6,859.00	952.000	-132.00000	1,068.00	1,330.00	1,637.00	5,785.00	4,063.00	168.00000	2,136.00
EBT	20,062.00	14,425.00	13,388.00	14,328.00	17,205.00	19,188.00	23,138.00	20,810.00	10,819.00	14,169.00
Tax Expense	1,252.00	2,851.00	3,210.00	2,674.00	3,982.00	3,331.00	1,210.00	2,467.00	285.000	-660.000
Effective Tax Rate	0.06241	0.19764	0.23977	0.18663	0.23144	0.17360	0.05229	0.11855	0.02634	0.00000
NOPAT	12,818.78	11,185.66	11,059.87	11,561.28	12,844.10	14,966.97	18,461.29	16,409.10	12,540.71	14,799.00
Average Total Assets	165,968.00	165,963.00	167,044.00	178,467.00	187,881.50	194,655.50	214,801.50	223,628.00	225,233.00	227,841.50
Average Short-term Security Investments	2,172.00	2,214.50	2,377.50	2,466.00	2,339.00	1,376.50	499.500	517.500	568.500	531.000
Average Long-term Security Investments	3,960.00	3,859.50	4,044.00	3,780.50	3,188.00	5,505.50	5,443.00	2,749.50	2,194.50	1,729.50
Average Current Liabilities	26,570.00	24,849.50	24,096.00	28,671.50	28,510.50	25,323.50	27,521.00	29,866.50	30,679.00	28,858.50
Capital Employed	133,266.00	135,039.50	136,526.50	143,549.00	153,844.00	162,450.00	181,338.00	190,494.50	191,791.00	196,722.50
Return on Capital Employed	0.0962	0.0828	0.0810	0.0805	0.0835	0.0921	0.1018	0.0861	0.0654	0.0752



## Vodafone – Return on Capital Employed

VOD	31 Mar 2004	31 Mar 2005	31 Mar 2006	31 Mar 2007	31 Mar 2008	31 Mar 2009	31 Mar 2010	31 Mar 2011	31 Mar 2012	31 Mar 2013
EBIT	-9,207.36	-9,423.22	12,180.31	13,397.60	14,293.62	10,962.38	10,211.07	10,756.97	10,500.55	8,330.32
Interest Expense	2,415.92	2,308.11	1,132.28	2,748.03	3,689.06	2,213.64	1,917.99	1,965.88	2,627.94	2,291.10
Interest Revenue	1,054.32	1,167.28	613.973	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Net Interest Expense	1,361.60	1,140.84	518.311	2,748.03	3,689.06	2,213.64	1,917.99	1,965.88	2,627.94	2,291.10
Equity Income (Loss)	2,106.80	3,420.62	4,017.78	7,494.08	6,770.56	5,678.53	8,068.32	16,320.82	8,400.12	9,886.09
Other EBT Items (Loss/Expense)	824.320	1,737.70	41,513.61	22,834.60	-496.380	8,437.00	3,189.06	9,869.52	1,008.65	10,979.98
EBT	-7,637.84	-5,405.74	57,193.40	40,978.26	16,878.74	22,864.27	19,550.46	34,981.42	17,281.38	26,905.28
Tax Expense	5,803.36	4,223.36	4,139.53	4,769.68	4,457.45	1,585.87	85.04200	2,612.61	4,069.78	3,922.83
Effective Tax Rate	0.00000	0.00000	0.07238	0.11640	0.26409	0.06936	0.00435	0.07469	0.23550	0.14580
NOPAT	-15,010.72	-13,646.58	11,298.73	11,838.19	10,518.87	10,202.03	10,166.65	9,953.57	8,027.66	7,115.75
Average Total Assets	270,717.40	261,819.50	236,678.50	218,108.20	234,237.80	235,527.10	228,378.50	240,537.60	232,895.00	219,956.70
Average Short-term Security Investments	8,061.04	4,801.15	2,371.66	8,150.23	6,549.20	0.00000	294.609	835.426	1,598.23	5,121.54
Average Long-term Security Investments	1,930.16	1,769.71	2,703.95	7,767.41	13,295.85	12,818.14	11,713.84	8,884.71	3,477.20	2,154.17
Average Current Liabilities	27,647.84	27,835.98	27,502.07	32,137.61	40,461.30	41,795.80	41,710.23	43,453.11	40,926.96	42,921.29
Capital Employed	233,078.30	227,412.70	204,100.90	170,053.00	173,931.50	180,913.10	174,659.80	187,364.40	186,892.70	169,759.70
Return on Capital Employed	-0.0644	-0.0600	0.0554	0.0696	0.0605	0.0564	0.0582	0.0531	0.0430	0.0419

### Appendix 3: Stock market reaction to the Verizon/Vodafone deal



### Assignment 3.1: Match the Business

The point has been often made in class that a firm's business model is a major driver of a firm's Balance Sheet (or Statement of Financial Position) and Income Statement. In particular, different business models generate different working capital behavior. In this question your task as an analyst is reversed. Given the ratio analysis for working capital from five different business models your task is to identify which ratios go with which firm and provide brief reasons in support of your answer.

#### Brief Business Description for the Five Companies

A: This company designs, manufactures, and sells highly specialized integrated digital technology platforms worldwide.

B: This company provides workforce (i.e., hiring) solutions and services.

C: This company owns and operates a chain of natural and organic foods supermarkets.

D: This company franchises and operates restaurants worldwide offering various food and beverage items including breakfast menus.

E: This company engages in the manufacture, marketing, and sale of nonalcoholic beverages worldwide.

#### Five Working Capital Analyses

##### Working Capital 1

	31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
<b>Days to Sell Inventory</b>	<b>22.4067</b>	<b>23.1869</b>	<b>20.6450</b>	<b>19.1369</b>	<b>17.9086</b>
<b>Days to Collect Receivables</b>	<b>8.8495</b>	<b>5.0025</b>	<b>4.8246</b>	<b>5.5729</b>	<b>5.8002</b>
<b>Days to Pay Payables</b>	<b>14.8827</b>	<b>13.5451</b>	<b>13.1149</b>	<b>13.0459</b>	<b>12.1898</b>
<b>Operating Cycle</b>	<b>31.25613</b>	<b>28.18942</b>	<b>25.46956</b>	<b>24.70984</b>	<b>23.70878</b>
<b>Cash Conversion Cycle</b>	<b>16.37346</b>	<b>14.64436</b>	<b>12.35470</b>	<b>11.66396</b>	<b>11.51898</b>

##### Working Capital 2

<b>Days to Sell Inventory</b>	<b>107.0944</b>	<b>115.5482</b>	<b>119.7226</b>	<b>102.4939</b>	<b>124.1889</b>
<b>Days to Collect Receivables</b>	<b>20.8205</b>	<b>20.7038</b>	<b>21.5036</b>	<b>22.1370</b>	<b>26.4097</b>
<b>Days to Pay Payables</b>	<b>71.5217</b>	<b>73.9238</b>	<b>74.6567</b>	<b>68.4685</b>	<b>84.0912</b>
<b>Operating Cycle</b>	<b>127.91490</b>	<b>136.25200</b>	<b>141.22610</b>	<b>124.63090</b>	<b>150.59850</b>
<b>Cash Conversion Cycle</b>	<b>56.39320</b>	<b>62.32813</b>	<b>66.56949</b>	<b>56.16241</b>	<b>66.50733</b>

## Working Capital 3

31 Dec 2008	31 Dec 2009	31 Dec 2010	31 Dec 2011	31 Dec 2012
-------------	-------------	-------------	-------------	-------------

<b>Days to Sell Inventory</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
<b>Days to Collect Receivables</b>	<b>68.6594</b>	<b>76.2432</b>	<b>66.8894</b>	<b>66.5562</b>	<b>73.7864</b>
<b>Days to Pay Payables</b>	<b>20.0442</b>	<b>25.6938</b>	<b>26.5708</b>	<b>26.9257</b>	<b>30.2163</b>
<b>Operating Cycle</b>	<b>68.65935</b>	<b>76.24316</b>	<b>66.88942</b>	<b>66.55619</b>	<b>73.78638</b>
<b>Cash Conversion Cycle</b>	<b>48.61513</b>	<b>50.54940</b>	<b>40.31861</b>	<b>39.63049</b>	<b>43.57011</b>

## Working Capital 4

<b>Days to Sell Inventory</b>	<b>78.0246</b>	<b>82.8567</b>	<b>82.0365</b>	<b>64.2026</b>	<b>67.6091</b>
<b>Days to Collect Receivables</b>	<b>36.6040</b>	<b>40.3279</b>	<b>42.5499</b>	<b>36.6450</b>	<b>36.7873</b>
<b>Days to Pay Payables</b>	<b>48.6879</b>	<b>50.7249</b>	<b>54.0516</b>	<b>45.3846</b>	<b>44.0481</b>
<b>Operating Cycle</b>	<b>114.62860</b>	<b>123.18450</b>	<b>124.58640</b>	<b>100.84760</b>	<b>104.39650</b>
<b>Cash Conversion Cycle</b>	<b>65.94066</b>	<b>72.45967</b>	<b>70.53477</b>	<b>55.46301</b>	<b>60.34842</b>

## Working Capital 5

<b>Days to Sell Inventory</b>	<b>3.1495</b>	<b>3.1058</b>	<b>2.9794</b>	<b>2.7601</b>	<b>2.8359</b>
<b>Days to Collect Receivables</b>	<b>15.4008</b>	<b>15.9803</b>	<b>16.9768</b>	<b>16.9877</b>	<b>17.9408</b>
<b>Days to Pay Payables</b>	<b>16.5521</b>	<b>17.9246</b>	<b>21.7824</b>	<b>23.1957</b>	<b>25.0079</b>
<b>Operating Cycle</b>	<b>18.55023</b>	<b>19.08614</b>	<b>19.95618</b>	<b>19.74771</b>	<b>20.77670</b>
<b>Cash Conversion Cycle</b>	<b>1.99814</b>	<b>1.16156</b>	<b>-1.82624</b>	<b>-3.44800</b>	<b>-4.23122</b>

Required:

- i. Refer to the above information to this question which provides the analysis of Working Capital results for five companies in random order and business descriptions. Your task is to match the five working capitals to the five business descriptions above. To receive full credit you must provide brief reasons in support of each answer using two of the five working capital line items provided.

## Assignment 3.2: Shift of business operations strategy in the beverage industry and the impact upon working capital management

Due Date September 18, 2013 and page limit not to exceed 2-pages. Complete this assignment using the FSA Module.

February 25, 2010 Coca Cola announced plans to buy North America bottler's operations which marked a major shift in their operating strategy.

### Coke to buy top bottler's North America operations

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By Martine Geller  
NEW YORK | Thu Feb 25, 2010 3:42pm EST

(Reuters) - Coca-Cola Co <KO.N will take over the North American operations of its top bottler, Coca-Cola Enterprises Inc (CCE.N), in a strategic reversal that would level the field after a similar deal by PepsiCo.

In return for taking control of the North American business, Coke will relinquish its 34 percent stake in CCE, worth \$3.2 billion based on Wednesday's closing price. It will also assume \$8.88 billion in CCE debt.

The deal will help the world's largest soft drinks maker cut costs and increase flexibility in distributing its beverages, which range from Diet Coke and Sprite to vitaminwater and Minute Maid.

Coke's announcement on Thursday comes just as PepsiCo Inc (PEP.N) is due to close this week on the \$7.8 billion purchase of its largest bottlers, Pepsi Bottling Group Inc PBG.N and PepsiAmericas Inc PAS.N.

"Coke couldn't sit back while Pepsi delivered \$800 million (plus) in synergies for reinvestment and then transformed its U.S. business model," said ConsumerEdge Research analyst Bill Pecoriello.

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**Required:**

4. Read the above article from Reuters plus the background articles in the appendix. Consider operating strategies broken up into real strategies and financial strategies. Briefly summarize the real operating strategies for Coca Cola (KO), PepsiCo (PEP) and Doctor Pepper Snapple (DPS).
5. Given your answer to 1. what are some of the major financial implications for working capital management that you would predict for these three stocks.
6. By applying the FSA Modules working capital management calculator, using the Compustat data file introduced in the cluster session, compare the actual working capital management results for the three stocks since 2009.
7. Discuss whether your answers to 2. and 3. are consistent or inconsistent identifying any strengths and weaknesses associated with each of the three company's working capital performance.

**Additional Information:**

By using [www.yahoo.com/finance](http://www.yahoo.com/finance) stock charts (or equivalent ), plot the current 5-year stock price performance for KO (Coca Cola), PEP (PesiCo) and DPS (Doctor Pepper Snapple Group Inc) on the same chart to compare the market's reaction and performance given the changes in operating strategy that have unfolded in the non-alcoholic beverage industry since 2009.

## Appendix 1: Additional Background Information

### PepsiCo buys bottlers for \$7.8bn

By Rory Harrington , 05-Aug-2009

Related tags: [Bottlers](#)

Related topics: [Processing](#)

PepsiCo Inc has agreed the takeover of two of its bottle makers in a deal worth \$7.8bn that will see the consolidation of 80 per cent of its North American beverage volume.

The world's second largest soft drinks manufacturer said yesterday the acquisition of Pepsi Bottling Group Inc and PepsiAmericas Inc would net the company annual savings of \$300m by 2012. The buyout would result in speedier decision-making and help bring products to market more quickly, said Pepsi.

The agreement was reached after a previous bid worth \$6bn had been rejected earlier this year.

#### Changing market dynamics

The company said the previous arrangement – with a separation of bottling and distribution from product development and marketing – had been effective but needed to be adapted to suit changing market dynamics.

*"While the existing model has served the system very well, it is clear that the changing dynamics of the North American liquid refreshment beverage business demand that we create a more flexible, efficient and competitive system that can drive growth across the full range of PepsiCo beverage brands,"* said PepsiCo Chairman and Chief Executive Officer Indra Nooyi.

He added: *"The fully integrated beverage business will enable us to bring innovative products and packages to market faster, streamline our manufacturing and distribution systems and react more quickly to changes in the marketplace, much like we do with our food business."*

#### Greater control

One analyst said the advantage of owning their bottling operations meant Pepsi could now control how its products were distributed, priced and even displayed in retail outlets.

#### RELATED NEWS:

[PepsiCo merges newly acquired bottlers](#)

[Coca-Cola opens new \\$83m bottling plant in China](#)

[Europe depresses Pepsi Bottling Group sales](#)

[Coke unveils plan to buy most of its largest bottler](#)

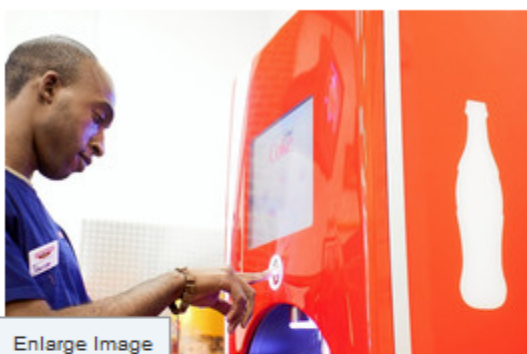
[PepsiCo accepts Dr Pepper firewall to close bottling deal](#)

<http://www.foodproductiondaily.com/Processing/PepsiCo-buys-bottlers-for-7.8bn>

# Coca-Cola, Dr Pepper Reach Distribution Deal

By PAUL ZIOBRO And VALERIE BAUERLEIN

[Coca-Cola Co.](#) CCE +0.23% agreed to pay \$715 million for the rights to distribute some of [Dr Pepper Snapple Group Inc.'s](#) DPS -0.09% most popular brands.



David Walter Banks/LUCEO for The Wall Street Journal

A man in Atlanta uses Coke's new vending machine, which employs a touch-screen and new technology.

As part of the deal, Dr Pepper and Diet Dr Pepper will be the only non-Coke brands distributed on Coke's new high-tech Freestyle machine, a touch-screen fountain which dispenses more than 100 different flavors. Dr Pepper Snapple values that access at an additional \$115 million to \$135 million, sweetening the overall deal value.

Atlanta-based Coke has also agreed to include some Dr Pepper brands in sales to local fountain customers, such as

small restaurant chains. Dr Pepper Snapple's biggest brands sell briskly in bottles and cans but have struggled to gain valuable space on soda fountains controlled by their rivals. "Fountain is one of the greatest ways to increase sampling of our brands," spokesman Greg Artkop said.

Dr Pepper Snapple, based in Plano, Texas, has a unique bottling arrangement, relying on independent and in-house distribution for some of its sales volume, but the balance of its distribution is handled by rivals in the Coke and Pepsi bottling systems.

Coke and [PepsiCo Inc.](#) PEP +0.06% have both moved to buy their biggest independent bottlers in the past year, triggering change-of-control agreements for distribution of Dr Pepper Snapple.

[online.wsj.com/article/SB10001424052748703303904575292341015388912.html](http://online.wsj.com/article/SB10001424052748703303904575292341015388912.html)



#### **Assignment 4.1: Analyzing Risk**

Refer to the data in the appendix and answer the following. Answer parts i-iv. using only the data contained in appendix 1. Answer part v. using data contained in both appendices.

- i. Refer to the two stocks in appendix 1 to Assignment 3.1 define liquidity risk and then evaluate and rank the two stocks in terms of their liquidity risk.
- ii. Refer to the two stocks in appendix 1 to Assignment 3.1 define coverage risk and then evaluate and rank the two stocks in terms of their coverage risk.
- iii. Refer to the two stocks in appendix 1 to Assignment 3.1 define solvency risk and then evaluate and rank the two stocks in terms of their solvency risk.
- iv. The credit rating for these two stocks are “AA” and “A.” Which rating is associated with which stock? Provide support for your answer based upon your answers to parts i.-iii. above.
- v. In the light of your answers to parts i-iv. critically evaluate the results from Altman analysis provided in appendix 2. You should identify information that you relied upon in parts i-iv. and contrast this to the information that the Altman Model is relying upon.
- vi. Given your answer to part v. do you agree with the Altman ratings provided (why or why not)?

Appendix 1 to Assignment 4.1:

<b>Stock A (Millions)</b>	<b>31-Jan-13</b>
Accounts Receivable	6,857.00
Cash & Cash Equivalents	784
Current Assets	16,388.00
Current Liabilities	14,031.00
Debt to Equity Ratio	1.0658
EBITDA to Interest Coverage	9.6483
Ending Financial Leverage	2.9087
Financial Receivables	0
Free Cash Flow to Interest Coverage	3.3121
Interest Coverage	6.8373
Inventory	7,903.00
Long-term Debt	14,654.00
Long-term Debt due within 1-year	2,024.00
Shareholders' Equity	16,558.00
Short-term borrowings	970
Short-term Security Investments	0
Total Assets	48,163.00
Total Debt	17,648.00

<b>Stock B</b>	<b>31-Jan-13</b>
Accounts Receivable	6,768.00
Cash & Cash Equivalents	7,781.00
Current Assets	59,940.00
Current Liabilities	71,818.00
Debt to Equity Ratio	1.0658
EBITDA to Interest Coverage	16.0762
Ending Financial Leverage	2.9087
Financial Receivables	0
Free Cash Flow to Interest Coverage	6.6312
Interest Coverage	12.1001
Inventory	43,803.00
Long-term Debt	41,417.00
Long-term Debt due within 1-year	5,914.00
Shareholders' Equity	76,343.00
Short-term borrowings	6,805.00
Short-term Security Investments	0
Total Assets	203,105.00
Total Debt	54,136.00

Appendix 2: Assignment 4.1

Stock A

<b>Total Assets</b>	<b>48,163.00</b>
<b>Current Liabilities</b>	<b>14,031.00</b>
<b>Current Assets</b>	<b>16,388.00</b>
<b>Net Working Capital</b>	<b>2,357.00</b>
<b>Retained Earnings</b>	<b>13,155.00</b>
<b>Sales</b>	<b>73,301.00</b>
<b>Cost of Sales</b>	<b>51,035.00</b>
<b>Gross Margin</b>	<b>22,266.00</b>
<b>SG&amp;A</b>	<b>14,914.00</b>
<b>Lease Expense</b>	<b>0.00000</b>
<b>Other Operating Expenses</b>	<b>2,142.00</b>
<b>EBIT</b>	<b>5,210.00</b>
<b>Shareholders Equity</b>	<b>16,558.00</b>
<b>Total Liabilities plus Equity</b>	<b>48,163.00</b>
<b>Total Liabilities</b>	<b>31,605.00</b>
<b>Z-Score</b>	<b>2.63285</b>
<b>Implied Rating</b>	<b>BBB</b>
<b>Net Working Capital/Total Assets</b>	<b>0.04894</b>
<b>Retained Earnings/Total Assets</b>	<b>0.27314</b>
<b>EBIT/Total Assets</b>	<b>0.10817</b>
<b>Shareholders Equity/Total Liabilities</b>	<b>0.52390</b>
<b>Sales/Total Assets</b>	<b>1.52194</b>

Stock B

<b>Total Assets</b>	<b>203,105.00</b>
<b>Current Liabilities</b>	<b>71,818.00</b>
<b>Current Assets</b>	<b>59,940.00</b>
<b>Net Working Capital</b>	<b>-11,878.00</b>
<b>Retained Earnings</b>	<b>72,978.00</b>
<b>Sales</b>	<b>467,231.00</b>
<b>Cost of Sales</b>	<b>343,987.00</b>
<b>Gross Margin</b>	<b>123,244.00</b>
<b>SG&amp;A</b>	<b>88,873.00</b>
<b>Lease Expense</b>	<b>0.00000</b>
<b>Other Operating Expenses</b>	<b>8,501.00</b>
<b>EBIT</b>	<b>25,870.00</b>
<b>Shareholders Equity</b>	<b>76,343.00</b>
<b>Total Liabilities plus Equity</b>	<b>203,105.00</b>
<b>Total Liabilities</b>	<b>120,848.00</b>
<b>Z-Score</b>	<b>3.53036</b>
<b>Implied Rating</b>	<b>AA</b>
<b>Net Working Capital/Total Assets</b>	<b>-0.05848</b>
<b>Retained Earnings/Total Assets</b>	<b>0.35931</b>
<b>EBIT/Total Assets</b>	<b>0.12737</b>
<b>Shareholders Equity/Total Liabilities</b>	<b>0.63173</b>
<b>Sales/Total Assets</b>	<b>2.30044</b>

## Assignment 4.2: Activity Analysis

Complete this assignment using the FSA Module.

### **Required:**

Intel produces chips that require a heavy investment in both physical and human capacity, IBM produces solutions for clients that emphasize human capacity, and Wal-Mart pursues an everyday low-price retail strategy

Which type of business model should be more sensitive to changes in the business cycle?

The business cycle refers to systematic economy-wide fluctuations over time, in the production of goods and services, and economic activity in general.

### **Required:**

Compute the Degree of Operating Leverage for Intel, IBM and Wal-Mart

Compute the Degree of Financial Leverage for Intel, IBM and Wal-Mart

Compute the Degree of Total Leverage for Intel, IBM and Wal-Mart

For credit show full working and screen shots if relevant. For Intel and Wal-Mart you can build upon the analysis provided in the lecture and for IBM you are providing an equivalent analysis. You must use either the Compustat annual data provided on the Blackboard or Morningstar annual financial data that you can download in .CSV form from [www.morningstar.com](http://www.morningstar.com) to complete this assignment with the FSA Module. State which data source you are using.

- I. Based upon your answers to 1., how sensitive would you assess Intel, IBM and Wal-Mart to be to the business cycle? Provide a ranking of your assessed sensitivity to the business cycle along with arguments in support of this assessment and rankings.
- II. What is the current Break-Even Margin for Intel, IBM and Wal-Mart? (Again show support for your answer to receive credit).