



Navigating Accounting®

DuPont and Financial Reporting Environment: How Do I Use the Numbers?

Industry Comparisons 01

Comparing and contrasting return on equity (ROE) and the DuPont Model components of ROE across industries and time; and incorporating earnings releases, conference calls and analyst reports into analyses.

Search



This exercise requires you to search for information.

Compute



This exercise requires you to compute information.

Usage



This exercise helps you learn how accounting reports are used by investors, creditors, and other stakeholders.

Judgement



This exercise helps you learn how to use judgement.

Part 1 Question

- Fill in the blank boxes (with red borders) in the data template in the Excel file for this exercise following the guidance below.

Part 1 Guidance

- If you have not already done so, go to NavigatingAccounting.com and then click your way to the materials for this exercise:
 - Click “Analyzing Financial Statements Across Time and Industries”
 - Industry Comparisons Exercises: Series 01
 - Click “Exercise 4: DuPont Model and Financial Reporting Environment”
- Download the Excel and Word files.
- In contrast to previous graded assignments, you can complete the data template using information already in the template. Thus, there is no need to search through 10-Ks.

Part 2 Question

- Compare and contrast return on equity (ROE) and the DuPont components of ROE (profit margin, asset turnover, financial leverage, and taxes) for the five companies in the data template during the five years in the template, ignoring fiscal-year-end differences.

Part 2 Guidance

- Limit your analyses of the companies’ return on equity (ROE) to:**
 - The DuPont model ratios in the data template. This model is explained below.
 - Your understanding of the companies’ businesses and the ways they were likely impacted by the financial crisis during this period. Your understanding of the companies’ businesses should be informed by related excerpts from the Management Discussion and Analysis (MD&A) section of the 10K.
 - Things you learned about the companies in previous exercises and related class discussions.

DuPont Model

The Dupont Model decomposes ROE into four factors that suggest more specific actions managers can take to increase ROE. These factors also offer insights for analysts and others evaluating a company’s performance:

Dupont Model							
ROE =	Profit Margin	×	Asset Turnover	×	Financial Leverage	×	Income Tax Factor

- Profit margin** (pretax profit divided by sales) measures pretax profit per sales dollar. Everything else equal, the more profit a company can earn on each dollar of sales, the higher its ROE. To get a better understanding of the factors that determine profit margins, managers and other users often split profit margin into: gross-margin percent, other operating expenses as a percent of sales, and non-operating income as a percent of sales. These, in turn, can be further split into individual income-statement line items as a percent of sales. Common size income statements, which are created by dividing each income statement item by net revenues, facilitate this analysis.

- **Asset turnover** (sales divided by average assets) measures how efficiently a company uses assets to generate sales — how well the entity uses its inputs (assets) to generate outputs (revenues). Managers and other users can combine income statement and balance sheet information to further analyze efficiency. For example, they can measure receivables turnover (sales divided by average receivables), inventory turnover (cost of sales divided by average inventories) and PP&E turnover (sales divided by average PP&E).
- **Financial leverage** (assets divided by owners' equity) measures the extent to which owners are using creditors' money to generate ROE. Everything else equal, increasing financial leverage increases ROE. However, increasing financial leverage increases the owners' risk because creditors must be paid regardless of whether the company has operating income or losses. When profit margins are negative, increasing financial leverage makes ROE more negative.
- **Income tax factor** (1 minus the tax rate, where the tax rate is the tax expense divided by pretax income) isolates the extent to which income taxes affect ROE.

The Dupont model suggests that performance can be improved by increasing profit margin, asset turnover rate, or financial leverage or by decreasing the tax rate. To various degrees, depending on the circumstances, management's actions can influence these factors and thus ROE.

Part 3 Question

- Compare and contrast what you have learned thus far about the companies' financial positions at the end of fiscal 2008, financial performances during fiscal 2008, and expected future performance (at the end of fiscal 2008) to what you learned from earnings releases, conference calls and analyst reports detailed below, ignoring fiscal-year-end differences.

Part 3 Guidance

- **Organize your responses with the following titles and guidance:**
 - (a) **Fourth quarter earnings releases:** What, if anything, did you learn from the five companies' fourth quarter earnings releases that significantly improved your understanding about their financial positions at the end of fiscal 2008, financial performances during fiscal 2008, and expected future performances. Focus on things you learned that you did not already know after completing previous exercises and question 2 of this assignment.
 - Limit your analysis to the fourth quarter release for the most recent year in the data template. For example, for Southwest Airlines, this is the quarter that ended December 31, 2008.
 - Start by discussing new things you learned that are common to all companies. For example, you learned U.S. companies issue four quarterly reports each year and thus investors already know profits for three of the four quarters when annual profits are reported.
 - Next discuss significant things you learned that do not apply to all companies. For example, performance indicators discussed by Southwest that would only be relevant for airlines.
 - **Locating earnings releases:** Most companies post their quarterly earnings releases 2-4 weeks after the end of the fiscal year to the investor relations sections of their web sites under captions like "Earnings Releases." At the same time they file a form 8-K with the SEC. Thus, if you can't find a release at a company's web site, search for a form 8-K with this information under their

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SEC filings. As you do so, keep in mind companies must file form 8-Ks within four business days of significant events such as earnings releases. Accordingly, you may need to check a few 8-Ks within 2-4 weeks of the fiscal year end to find an earnings release.

(b) **Fourth quarter earnings conference calls:** This question pertains to Nordstrom and Caterpillar only. It presumes you have access to fourth quarter earnings conference call transcripts. What, if anything, did you learn from the companies' fourth quarter earnings conference calls that significantly improved your understanding about their financial positions at the end of fiscal 2008, financial performances during fiscal 2008, and expected future performances. Focus on things you learned that you did not already know after completing previous exercises and questions 2 and 3(a) of this assignment.

- Limit your analysis to the fourth quarter conference calls for the most recent year in the data template for Nordstrom and Caterpillar, which have ticker symbols JWN and CAT, respectively. These conference calls took place on the same days as the earnings releases in question 3(a).
- Start by discussing new things you learned that are common to both companies.
- Next discuss significant things you learned that do not apply to both companies. Are there performance indicators or other items analysts seem to place particular importance on for the company (Nordstrom or Caterpillar)?

(c) **Analyst reports:** This question pertains to Nordstrom and Caterpillar only. It presumes you have access to the analyst reports identified below. What, if anything, did you learn from the analyst reports (below) that significantly improved your understanding about the companies' financial positions at the end of fiscal 2008, financial performances during fiscal 2008, and expected future performances. Focus on things you learned that you did not already know after completing previous assignments and questions 2, 3(a), and 3(b) of this assignment.

- Limit your analysis to the following analyst reports for Nordstrom and Caterpillar, which were distributed shortly after the earnings releases in question 3(a).
 - > Nordstrom: Deutsche Bank, February 23, 2009
 - > Nordstrom: Morgan Stanley, February 24, 2009
 - > Caterpillar: Wells Fargo (Wachovia), January 27, 2009
 - > Caterpillar: J. P. Morgan, January 27, 2009
- Start by discussing new things you learned that are common to both companies.
- Next discuss significant things you learned that do not apply to both companies. Are there performance indicators or other items analysts seem to place particular importance on for the company (Nordstrom or Caterpillar)?

(d) **Stock market's reaction:** This question pertains to Nordstrom and Caterpillar only. Compare and contrast the stock market reaction to the combined information released by the two companies and analysts in parts (a) - (c) and by the media.

• **Organize your analysis as follows:**

- First, read the following media reports released shortly after earnings were released: (Limit your analyses of media reports to these articles.)
 - > http://seattletimes.nwsourc.com/cgi-bin/PrintStory.pl?document_id=2008777991&zsection_id=2003907475&slug=nordstrom24&dte=20090224

Tip: Use the PDF to hyperlink to these articles.

- > http://www.bloomberg.com/apps/news?pid=20601087&sid=as5ZsAC_60pQ&refer=home
- Second, examine the companies stock prices a few days before and after the earnings releases following the directions below, for the following intervals:
 - > Nordstrom: 2/10/2009 - 3/03/2009
 - > Caterpillar: 1/20/2009 - 2/05/2009

Using BigCharts to chart prices over short intervals:

- > Go to www.bigcharts.com
- > At the top, enter the ticker symbol (JWN or CAT)
- > To the right of the ticker symbol, click “Advanced Chart”
- > On the left side under “Time Frame,” select “Custom” at the bottom of the “Time” drop down menu
- > On the left under “Custom Time Frame,” enter the beginning and ending dates
- > Under the ticker symbol near the top left, click “Draw Chart”
- Third, study the price charts to assess the extent to which the stock market’s expectations changed a few days prior to the earnings release. The market’s reaction to earnings releases depend on its expectations immediately before the releases, which are often reflected in analyst reports released shortly before earnings releases. What information, if any, in the following analyst reports is consistent with stock price movement 2-3 days before the earnings release:
 - > Nordstrom: Buckingham Research Group, February 20, 2009
 - > Caterpillar: J. P. Morgan, January 25, 2009
- Fourth, study the price charts to assess the extent to which the stock market was surprised by the information released by companies, analysts, and the media on or shortly after the earnings release. The stock market reacts to information releases to the extent it learns something new from the releases.