EXERCISES

db.hun.leases.010 Analyzing Leases

This exercise has two parts: In Part 1, you will fill in the blank boxes in an Excel template. In Part 2, you will analyze the data and write a report with the summary of your analyses.

Part 1 Question

- Fill in the blank boxes (with red borders) in the "Part 1" sheet 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, download the Excel file posted with this exercise.
- Search the internet for information needed to fill in the blank boxes:
  - You will find this information in the companies' annual reports or Form 10-Ks (Form 20-Fs for international companies registered with the SEC). Search for inventory related footnotes to determine the companies' accounting cost methods for inventory.
  - Caterpillar Inc., Deere & Company, and CNH Global Inc. are in the capital goods industry. Walgreens Inc., Rite Aid Inc., and CVS Caremark are in the drug stores industry.
- This Excel file has three worksheets labeled Parts 1(a) through 1(c) (see the tabs at the bottom of the workbook).
- ***You must complete Parts 1(a), 1(b), and 1(c) sequentially. Data from 1(a) is used in 1(b). Data from 1(b) is used in 1(c). Accordingly, any errors in 1(a) and/or 1(b) will greatly distort the numbers and analyses based on 1(c).***
- Here are some things you will need to know for this exercise and where you can learn about them:
  - You need to know what operating and capital leases are, how to account for them, and how to capitalize operating leases onto balance sheets to adjust for significant off-balance sheet financing (under simplifying assumptions maintained in this exercise). To learn these things, watch *Capitalizing Operating Leases*, which is included in the videos section of the materials for this exercise.
  - You may want to know how to link cells in one Excel worksheet to cells in another worksheet or to distant cells in the same worksheet using Excel's "New Window" and "Arrange All" features. These skills are particularly useful for this exercise because the Excel file has large data templates in three related worksheets. To learn these skills, watch *Using Excel 2: Linking Cells Across Worksheets*, which is included in the videos section of the materials for this exercise.
- Here's an overview of the worksheets within the Excel file and how they are related:
  - **Part 1a: Present Value of Lease Obligations** This worksheet determines the amount to be capitalized at each balance sheet date by computing the present value of the minimum future operating lease commitments on that date, based

Search

This exercise helps you learn how to search for information.

Compute

This exercise helps you learn how to compute information.

Usage

This exercise helps you learn how to use accounting information.

Judgment

This exercise helps you learn how to analyze accounting judgments.

on lease footnote disclosures provided by the companies. There are 24 such computations: four year ends for six companies. You will complete one of these computations: the present value of Caterpillar's minimum future operating lease commitments at the end of fiscal 2011. ***Be sure to read the directions and hints at the top of the Part 1(a) worksheet.***

- **Part 1(b): Balance Sheets Adjusted for Capitalized Leases** This worksheet adjusts Caterpillar's balance sheets by capitalizing its operating leases using the numbers derived in Part 1(a). The resulting adjusted numbers are determined for four balance sheets. You will determine adjusted numbers for the balance sheets at the end of fiscal 2011 and 2010.

  The following assumptions simplify the adjustments considerably:

  - We have greatly simplified the process that should be followed when capitalizing the operating leases by ignoring income statement and cash flow statement effects, as discussed briefly in the accompanying video.
  - As a result, we only make three balance-sheet adjustments: increase property, plant, and equipment, long-term debt (or capital lease obligations if this line item is reported), and current-portion of long-term debt (or similar current liability) at the balance-sheet date based on numbers derived in Part 1(a).
  - It is possible to quantify estimates of the income statement and cash-flow statement effects and related adjustments to retained earnings and accumulated depreciation on balance sheets. However, the process is rather complicated and its benefits are modest relative to those associated with the adjustments in the worksheet. (Later, you will be asked about the general directions of the effects on cash-flow statements; but not asked to quantify the effects.)

- **Part 1(c): Ratios Before and After Adjustments** This worksheet derives ratios for each of the six companies using reported numbers and numbers adjusted for capitalizing the companies' operating leases. You will complete several of Caterpillar's measures and ratios using adjusted numbers derived in Part 1(b).

Part 2 Question

- Assess how your analyses of the six companies' financial position is improved by capitalizing the companies' operating leases and using the resulting numbers to analyze the DuPont Model factors and other ratios over the three year period. In addition, assess the validity of the assumptions behind the present value computations in Part 1(a) and discuss ways to improve the assumptions and gauge the sensitivity of your analyses to changing them.

Part 2 Guidance

- ***Limit your analyses to:***
  - Information in the three worksheets in Parts 1(a), 1(b), and 1(c).
  - Your understanding of the six companies' businesses and the ways they were likely impacted by the financial crisis. Your understanding of the companies' businesses should be informed by related excerpts from the Management Discussion and Analysis (MD&A) and can be informed by any other published sources you elect to use and cite.
  - Things you learned in previous exercises and related class discussions.
- ***Organize your response around the following:***

  (a) **Benefits of adjusting reported numbers–**

  Analysts use ratios to compare performance across time, industries, and companies within industries. These comparisons can sometimes be improved significantly by adjusting reported numbers so they are more comparable. In this exercise, we adjust the reported numbers so that all companies' operating leases are classified as capital leases, for analysis purposes. This adjustment takes into consideration the "off-balance sheet" benefits and obligations associated with operating leases.

Analysis Tip
Identifying patterns in the data is an important aspect of analysis; but it is not enough. You must also explain the patterns in terms of the underlying events and circumstances based on your understanding of the company's business.

(i) Identify ratios in the Part 1(c) worksheet that were significantly affected by capitalizing operating leases. In situations where these effects differed significantly for the two industries, explain reasons for the differences in terms of business differences in the industries and assess the extent to which these factors are likely to persist in the future.

(ii) Compare and contrast how analysts' conclusions might have changed, if at all, based on the adjusted ratios after capitalizing the companies' operating leases. Compare and contrast within the two industries and across industries. If the conclusions based on the ratios changed (because the ratios changed significantly), explain the changes in terms of changes occurring in the businesses. If the conclusions based on the ratios did not change, state this and explain the general types of events that *would* have changed the ratios, if these events had in fact happened.

Validity of Present Value Assumptions–

Two assumptions affect the present value computations in Part 1(a): the discount rate and the spreading of the "Thereafter" cash flows. This question focuses solely on the discount rate assumption.

The computations in Part 1(a) use the same 5% discount rate for all companies and years. We used a constant rate because we wanted to be sure everyone knew how to capitalize the operating leases, given a rate. However, the discount rate should reflect the risk that the lessor will not receive the expected benefits associated with the lease: the risk that the lessee will not make the scheduled payments or if the lessee fails to make these payments and must return the leased property to the lessor, the risk that the lessor can't release the property at payments equal to or greater than the current lease. You will learn about factors that should be considered when determining discount rates if you take finance courses. One of these factors is the interest rate on comparable debt issued by the lessee: debt secured by similar property to the leased property with comparable seniority in the event of bankruptcy.

(i) For which of the six companies in this exercise, if any, is the 5% discount rate most unrealistic in the sense that the rate should be higher (or lower)to compensate for additional (or less) risk? Substantiate your choice by comparing the interest rates the six companies are charged on comparable secured debt (by analyzing their debt footnotes). If they do not issue secured debt, compare interest rates on unsecured debt.

(ii) In your opinion, what rate would be more appropriate for the company you identified in (i)?

(iii) Briefly discuss the extent to which the financial leverage and turnover ratios would change if you recompute them using the rate you identified in question (ii). Would your conclusions about the company's financial position change significantly?

(c) **Statement of Cash Flows Effects–**

Suppose, as a junior analyst, your boss asks you to analyze the effect(s) of capitalizing operating leases on a Caterpillar's fiscal 2011 statement of cash flows. She knows the total lease payment will not change. After all, the lessor wants to get the same cash, regardless of the lessee's accounting methods. However, she thinks there might be some other effects. She wants to forecast what might change in fiscal 2012 and the direction of the change, if all the leases were classified as capital leases. She wants to meet with you tomorrow to discuss the effects, if any. To prepare for the meeting you decide to:

(i) Identify the line item(s), if any, on Caterpillar's fiscal 2011 statement of cash flows that would change if Caterpillar's had classified all its operating leases as capital leases. Determine if the line item(s) would increase or decrease. (Ignore taxes.)

(ii) Explain the changes, if any, in terms of the underlying entries that either increase or decrease the line item.