

CHAPTER 2

Smart *Excel* Appendix

Appendix

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Use the Smart *Excel* spreadsheets and animated tutorials at the Smart Finance section of <http://www.cengage.co.uk/megginson>.

EXCEL PREREQUISITES

You need to be familiar with the following *Excel* features to use this appendix:

- Creating formulas in *Excel*
- Mathematical operators
- Order of mathematical operations
- Cell formats
- Relative, absolute, and mixed cell references

If this is new to you, be sure to complete the **Excel Prereqs** tab of the Chapter 2 *Excel* file before proceeding.

BUILDING FINANCIAL STATEMENTS IN EXCEL

Problem: You must perform a financial analysis of LVMH. Your first step is to build the balance sheet, income statement, statement of retained earnings, and statement of cash flows for LVMH, in *Excel*. Use the firm information provided in the text tables 2.1, 2.2 and 2.4.

To build historical financial statements in *Excel*, follow these steps:

1. Gather the historical financial statements.
2. In a blank *Excel* file, enter (or import) account labels.
3. Enter (or import) account values but not subtotals and totals.
4. Format the cells, as desired, to display appropriate format (euros, percent, etc.). See **Excel Prereqs** tab for instructions.

5. Build a formula for each subtotal and total. Why? To ensure that there are no errors in your account values. Then, check your totals against the historical information.
6. Apply final formatting (lines under subtotals and totals, euro signs, etc.), as desired.

Approach: Create historic financial statements in Excel, using formulas for all subtotals and totals.

Open the Chapter 2 *Excel* file located at the Smart Finance Web site. Open the **Build finstats** tab.

Apply the above steps to LVMH to create the balance sheet.

1. Available in the text tables **2.1, 2.2 and 2.4.**
2. Account labels have already been entered.
3. Begin with the balance sheet. Enter all account values for current assets. DO NOT enter the current asset subtotal values.
4. If necessary, format the cells. *Save time:* select a group of cells that should have similar formatting and format them all at once.
5. Build a formula to subtotal the current asset values in 2006. Your formula should be:

```
=sum(D15:D19)
```

Copy the formula across to 2005. Check your results against the historical information in Table 2.1.

6. Apply formatting, as desired (lines under subtotals and totals, euro signs, etc.).

Repeat these steps for the rest of the balance sheet. Make sure you match the historical balances from Table 2.1.

Apply the steps to complete the income statement. *Careful: Because values are entered in millions of euros, enter the number of shares in millions.*

Apply the steps to complete the statement of retained earnings. Complete 2006 only. Your ending balance of retained earnings must match the balance sheet value.

Apply the steps to complete the statement of cash flows for 2006. The net increase in cash and marketable securities must equal the change in the account value over the year.

Check your results against the solution provided in the Excel file. You can also create the cash flow statement directly from the balance sheet and income statement by creating formulas to pull through values (like net income and depreciation from the income statement) and to pick up changes in account values (like accounts receivable, inventory, fixed assets, accounts payable, and long-term debt) from the balance sheet.

Once you have built the financial statements in Excel, financial analysis is straightforward and efficient.

COMMON SIZE THE BALANCE SHEET AND INCOME STATEMENT

Problem: Continue your financial analysis of LVMH by common sizing the balance sheet and income statement you created.

Use common-size financial statements to evaluate a firm's performance over time and to compare with firms of different sizes. A common-size balance sheet restates

the balance sheet to show each account as a percent of total assets rather than as a dollar value. A common-size income statement restates the income statement to show each account as a percent of revenues rather than as a euro value.

Approach: Common size the balance sheet and income statement created above.

Open the Chapter 2 Excel file located at the Smart Finance Web site. Open the CommonSize tab.

Start by common sizing the balance sheet. Begin with Cash and cash equivalents in 2006, cell G15. You must create a formula to divide cash by total assets.

Tip: If you set up your formula carefully, you can create a single formula that can be copied across to 2005 and down through the entire balance sheet. You will need to use a mixed reference.

For instance, the formula in cell G15 should be
=D15/D\$31

This formula locks row 28 so that as you copy your formula down, each account is still divided by total assets. By leaving the column "unlocked," you can copy accurately across to 2005.

Check: If you are correct you will get 100 percent in 2006 and 2005 for total assets and total liabilities and stockholders' equity.

Clean up: The formula above allows you to common size quickly, but you are left with zeroes in rows that were blank. Now delete the zeros, resulting in blank rows such as rows 21 and 22.

After deleting the zeroes in the blank rows, this is part of the solution:

Assets	2006	2005
<i>Current assets</i>		
Inventories and work in progress	15%	15%
Accounts receivable	5%	5%
Income tax	2%	1%
Other current assets	6%	4%
Cash and cash equivalents	4%	5%
<i>Total current assets</i>	32%	30%
<i>Fixed assets</i>		
Brands and other intangibles	29%	30%
Goodwill	16%	16%
Property, Plant & Equipment net	18%	18%
Investments in associates	0%	0%
Non-current financial assets	2%	2%
Othe non-current assets	2%	2%
Deferred tax	1%	1%
<i>Total fixed assets</i>	68%	70%
Total assets	100%	100%
Assets		
	2006	2005
<i>Current assets</i>		

Inventories and work in progress	15%	15%
Accounts receivable	5%	5%
Income tax	2%	1%
Other current assets	6%	4%
Cash and cash equivalents	4%	5%
<i>Total current assets</i>	32%	30%

Fixed assets

Brands and other intangibles	29%	30%
Goodwill	16%	16%
Property, Plant & Equipment net	18%	18%
Investments in associates	0%	0%
Non-current financial assets	2%	2%
Othe non-current assets	2%	2%
Deferred tax	1%	1%
<i>Total fixed assets</i>	68%	70%
Total assets	100%	100%

Apply it

What does the common-size balance sheet tell you? Accounts receivable is a greater percent of total assets in 2006 than in 2005, whereas net property, plant, and equipment is a similar percent of total assets.

Next, common size the income statement. Start with 2006 Revenues and create a single formula that allows you to copy across to 2005 and down throughout the income statement.

The formula in cell G65 should be

=D65/D\$65

Copy across for 2005 and down throughout the income statement. Part of the solution is:

	2006	2005
<i>Revenue</i>		100%
Cost of goods sold	36%	36%
<i>Gross profit</i>	64%	64%

Marketing and sales expenses	35%	35%
General and administrative expenses	8%	9%
<i>Operating profit</i>	21%	20%
Other income and expenditure	1%	2%
<i>Earnings before interest and taxes (EBIT)</i>	20%	18%
Net finance charges	0%	1%
Income tax	5%	5%
<i>Net profit or income after taxes</i>	14%	12%
Minority interest	2%	2%
<i>Income to shareholders</i>	12%	10%

Apply it

What does the common-size income statement sheet tell you? While the gross profit margin increased from 64.05% to 64.19%, the operating and net profit margins improved from 18.13% to 19.94%

CALCULATE FINANCIAL RATIOS

Problem: Complete your financial analysis of LVMH by calculating the key financial ratios introduced in the chapter.

Approach: Use the balance sheet and income statement created above to calculate financial ratios.

Open the Chapter 2 *Excel* file located at the Smart Finance Web site. Open the Ratios tab.

This tab includes the completed balance sheet and income statements to facilitate ratio calculation. The ratio labels are already entered.

Begin with the liquidity ratios. Create a formula to calculate the current ratio in 2006. It is

=G20/G35

Your result should be 1.10.

Tip: You may have to reformat cells so that ratios appear properly.

Tip: To save time, DO NOT copy the current ratio across for 2005 now. Complete all the 2006 ratios and then, select and copy all the ratios across for 2005 at once.

Solutions to sample ratios appear below.

Profitability ratios	2006	2005
Gross profit margin	64,19%	64,05%
Operating profit margin	19,94%	18,13%
Net profit margin	12,28%	10,35%
Return on total assets	6,53%	5,13%
Return on common	16,21%	13,61%

equity

Apply it

What do the financial ratios tell you? All profitability ratios improved. Net profit margin along with return on total assets and return on common equity improved very significantly.