# FTS FSA Module: Importing Morningstar Data

The FSA Module can read financial statement data that you download from Morningstar and Compustat/WRDS. Note that you must have a subscription from these sources and must download the data yourself. Instructions for downloading and processing Compustat files are in a separate help menu item

A note on standardized data: if you download company filings from a secondary source, such as Morningstar, the data is typically standardized. This means that the raw company filings are mapped into standard fields, and fields are aggregated. This has advantages and disadvantages. The advantage is that it is easy to compare companies. The disadvantage is that you lose important details about how a company chose to report its information and what it considered important to point out. By comparing the standardized statements with raw company filings, you can see if this makes any difference to your conclusions.

The functionality is in the Import Data menu item:
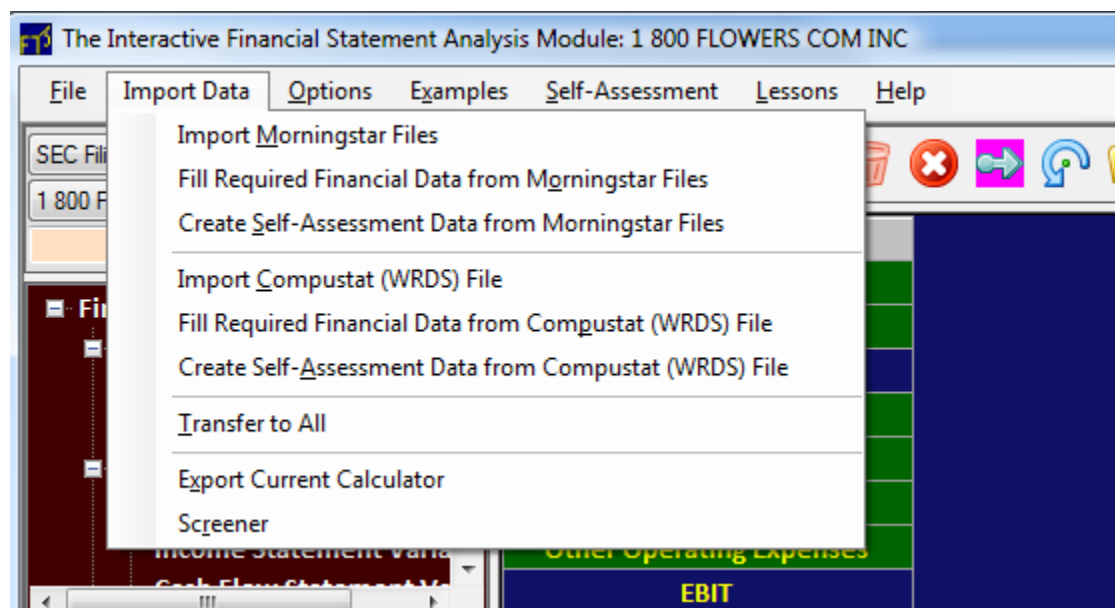

Importing Morningstar Files

If you have a subscription to Morningstar, you can download CSV files, each containing a financial statement: the balance sheet, the income statement, and the cash flow statement. Note that you will

have three files per company. You download these through the "Export" icon when viewing the statement in a web page:
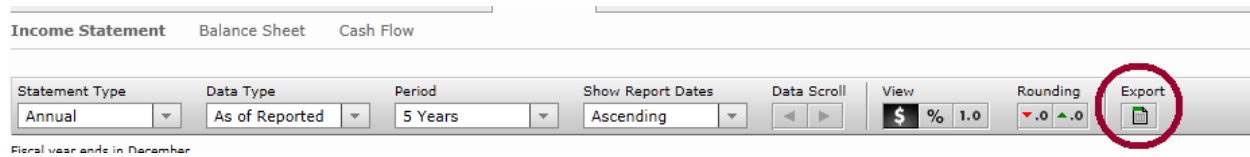
Save all the files you want to analyze in folders. **The folder structure is an important**, as explained below.

In the FSA module's "Import Data" menu, select "Import Morningstar Files" and in the resulting screen, click the large red button to find Morningstar CSV files:
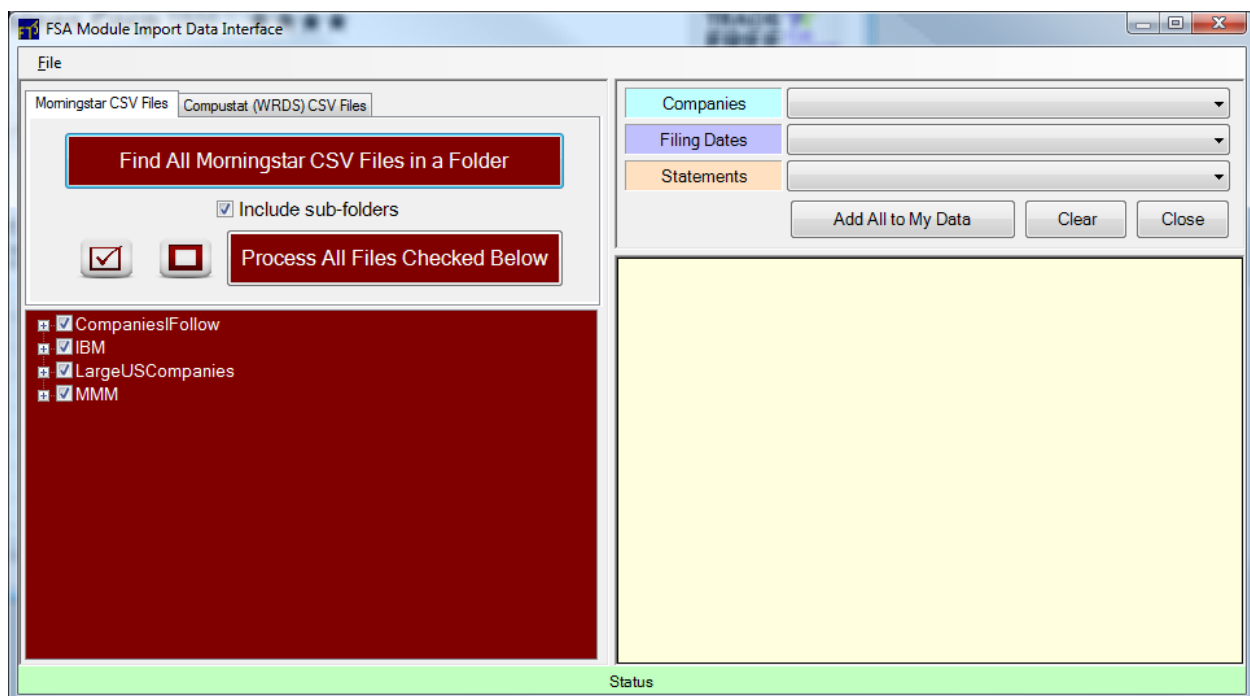
Note the importance of the folder structure: the FSA module will process all the CSV files you have saved in different folders and also sub-folders if you want.   By checking the folders you want to work with, you can group stocks according to your needs. In this example, we have two folders with specific US companies and two folders with a group of companies in each.

Check the folders you want to process (we will do the LargeUSCompanies folder) and click the button "Process All Files Checked Below" to get:

The statements that are read in are shown on the right. This gives you a visual check to see if everything was processed correctly. Once you are satisfied, just click "Add All to My Data" and the "Close."

Back on the main screen, you will see:
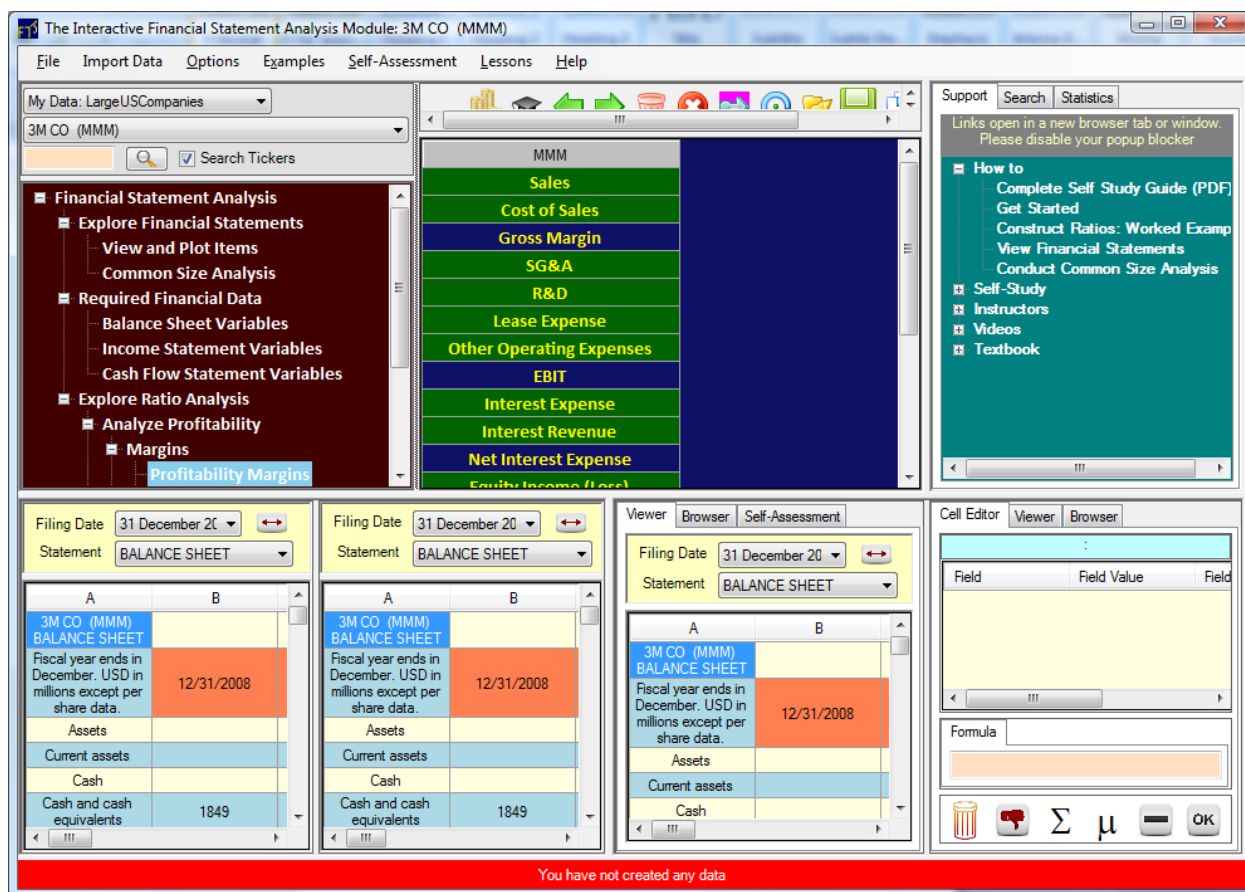
At the top left, you can see that the folder name is listed. If you have multiple folders, the companies in each are kept separately.

Now, you can work with this data rather than the raw SEC filings, except that you can do more:

- You can automatically fill the financial data required for the FSA modules from the Morningstar files.
- You can create a self-assessment data set from the Morningstar files, so you learn how to calculate ratios
- You can have the FSA module automatically calculate everything; this is helpful once you have learned how to construct ratios yourself for a few companies, but now want to compare companies.

All this functionality is in the "Import Data" menu:"
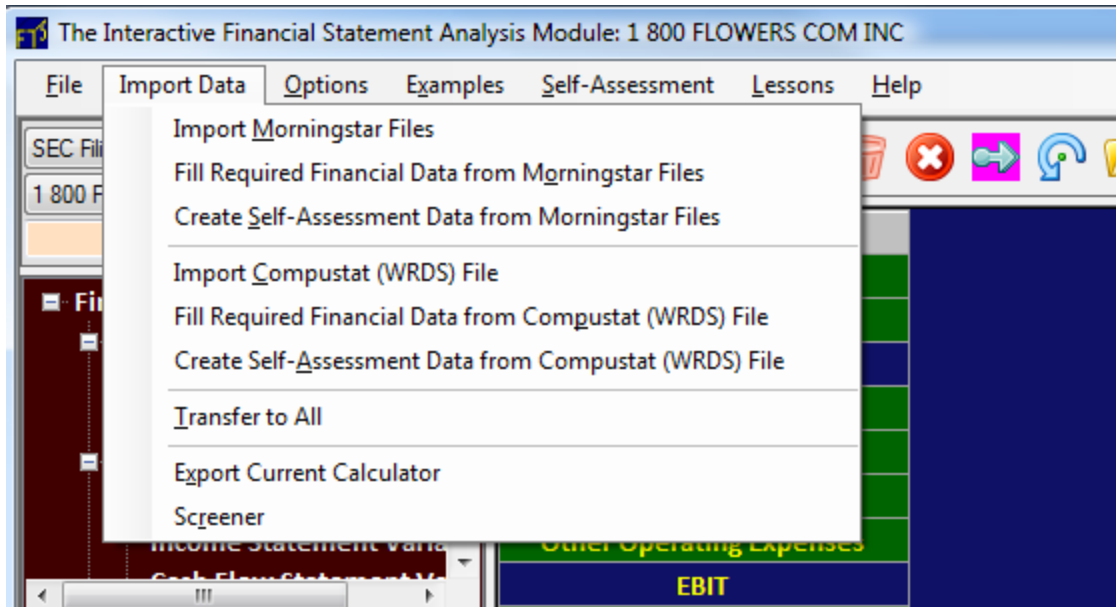
"Fill Required Financial Data…" is the first step. After that, if you want all calculators filled for you, select "Transfer to All."

Self Assessment is an important way to learn what actually goes into ratios. Once you create the self-assessment data set, you can teach yourself exactly what is required for different types of analysis; we show next below you use this capability.

Self Assessment

As shown above, you can create a self-assessment data set from either Morningstar files or Compustat/WRDS files.

5.5 Learning through Self-Assessment

One of the main tasks in constructing the performance measures is to understand "what goes where," i.e. how to extract information from the financial statements and put it into the correct fields in the calculators

In the FSA Module, the calculators associated with each topic provide the common language. So the main task is to learn what information reported by the companies is transferred into which field in a calculator. As you do this, you start to see what is important to the company.

Once you have worked with several different types of companies and gained experience, you will start to recognize the patterns. The best way to demonstrate this is by example. So lets create a self-assessment dataset from our Morningstar files, and then study "Return on Assers, Return on Equity."

- **Step 1:** read in Morningstar files
- **Step 2:** Create Self-Assessment Data ..., click Yes when asked if you want to enable self-assessment mode:
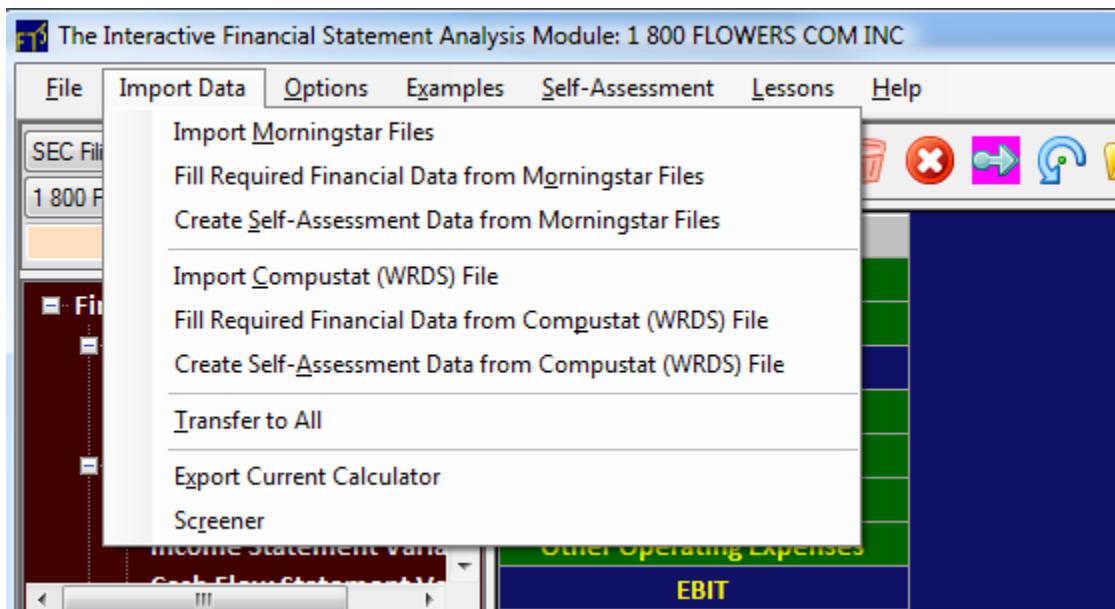
- **Step 3:** Click on the "Return on Assers, Return on Equity" calculator

We have selected Coca Cola for this example, and we will work through the "Return on Assets, Return on Equity" calculator. You can already see the step-by-step guidance in the Self-Assessment tab: it tells you exactly what entries are required from the financial statements to conduct a profitability analysis of Coca Cola.

- **Your goal is follow the step-by-step instructions by filling in the entries into the red cells. Every time you correctly fill in a red cell, it becomes green. Once all entries are green, you have successfully completed the construction, and can move on to interpreting the results.**
- **Once you have some experience, you can reduce the amount of help you get from the Self-Assessment menu by selecting the strength of the hint:**

- You can test yourself by repeating the exercise with no hints.

- This exercise does the analysis over three years; this allows us to interpret the results at the end of the construction.

We will use "Strong Hints" in this write-up. The first calculator field is "Consolidated Net Income." Morningstar uses the term Revenue. So the hint tells you to drag and drop the number 5807 into the calculator cell across from Consolidated Net Income for the construction date 31 Dec 2008.

Once you do that, you see that cell turn green, and the next instruction:

The next calculator field is "Net Income Attributable to NCI." NCI stands for Non Controlling Interests; this is subtracted from the net income to obtain Net Income Attributable to Shareholders. You do not have to drag-drop a value for this field, so it is already green.

So it has moved on to the field is "Average Total Assets" and this information is in the balance sheet, as noted in the hint. So switch to the balance sheet, and drop the Total assets of Coca Cola on Dec 31, 2008 into the calculator cell next to Average Total Assets:

You get the idea. Just follow the hints.

There is however one thing you should know: averages, like the "Average Total Assets" are typically the average of two years (e.g. 2008 and 2009). When you are working with 2008, there is no previous year in our data, so you just use one value. In 2009, though, you will have to take the average. Here is what happened after we dropped in the 2009 value into the Average Total Assets cell:

Now you have to be careful in reading the hint: you have to drop the 2008 total assets into the 2009 column. T*wo items have to be dropped into the same cell*. After you do that, you will see a different hint:

Look at the Cell Editor: it has two values. The formula shows the first value only. Click the μ **button**, as noted by the hint, to average the two entries. After you click μ, you should see:

Look at the cell formula to verify that the average has been calculated.

After Average Total Assets, we need to repeat the same exercise with Average Shareholders' Equity:

Once you finish calculating everything, you will see:

Once you have completed a construction with strong hints, see if you can repeat it with medium hints and with no hints for the same company. Then, pick a second company, and start with no hints and see how far you can go; you can always get more help from the Self-Assessment menu. As you do this, you will quickly become familiar with ratio construction.