Looking at Yield vs. Risk using QPP

Geoff Considine has written many articles that feature studies of the yield vs. risk of portfolios. This tutorial is designed to help you with the nuts and bolts of reproducing these studies or studying the yield vs. risk of your own portfolios. Use of QPP, Quantext Portfolio Planner, is essential to this process. If you are not a licensed user, you can email tryqpp@yahoo.com for a free trial of the program.

Note: Sometimes we get questions about unlocking the protection on the Excel Sheets. To do the yield vs. risk calculations you will not need to un-protect the Excel Sheets; Geoff does all of his calculations with the software, as is. We have locked the software for two reasons: so that no one accidentally messes up their version, and for proprietary protection.

INGREDIENT 1
Input the tickers and download the data for your portfolio the usual way. Define the allocations of the portfolio.

INGREDIENT 2
Typically, Geoff assumes that the *future yield* matches the *historical yield* (which is given in Historical Data on page 3 of QPP, yellowish box to the right side of page.) However, when Geoff runs the yield vs. risk analyses, he chooses to obtain the *current yield* from E*Trade's website and uses that.

He opens a separate Excel Workbook and compiles the **current yield** for each portfolio that he looks at. To do this, you need to find the sum of the product of yield and allocation for each ticker.

As an example: Let's look at a portfolio of 2 stocks, ABC and DEF. The current yield on ABC is 4%. The current yield on DEF is 6%. We have a portfolio that is 65% ABC and 35% DEF (by dollar amount, say $65,000 ABC and $35,000 DEF.)

Total Current Yield = (.65)*(.04) + (.35) *(.06) = .047

INGREDIENT 3
The measure of risk that Geoff uses is the *projected standard deviation* given in the turquoise box at the top of page 3 of QPP (labeled *Portfolio Stats*.) For each portfolio he looks at, he records this value as well as the current yield in that separate Excel Workbook.

DIRECTIONS for Streamlining the Process

Open QPP and your new, specially created Excel Workbook.

From the new Workbook, link over to QPP to get the projected volatility, as well as the tickers and allocations for each holding. To do this, in the new Workbook, put the cursor on the cell where you would like the Projected Standard Deviation to go. Type an = and then navigate to the appropriate cell inside of QPP. Click on it. In the new Workbook you should see that number appear. If you run QPP with a different portfolio or change the portfolio allocations, you will notice that the answer in your new Workbook will change. (This will happen automatically if you have Calculations set to Automatic. If it doesn't happen, hit F9 to run the calculations.)

Repeat the process for the tickers and allocations. You can do these as groups by completing the top ticker (or allocation), then looking at the formula by clicking on that cell (Cell), delete the $ that is in front of the row number. Highlight a different cell. Then highlight Cell again. This time, put the cursor over the bottom right corner of Cell and see the cursor turn into a little cross. Drag this cross down so that 20 cells in total are highlighted. Check to see that the tickers (or allocations) have been copied successfully.

FINAL STEP

Finally, optimize using Excel's Solver to get maximum yield for a given risk constraint.

We offer directions for using Solver with QPP at
http://quantext.com/OptimizerInstructions.pdf