## BFC3540 Week 1 Excel Spreadsheet – Introduction, Basic Excel Functions and Stock Valuation

## **Basic Excel Functions**

The aim of this exercise to be familiar with:

Copying formula using relative, absolute and mixed addressing.

Type	Cell Reference	Meaning
Relative	A10	When copied to another row and column, both the row
		and column in the cell reference are adjusted to reflect
		the new location.
Absolute	\$A\$10	Both column and row references remain the same when
		you copy this cell reference
Mixed	A\$10	The column reference changes when you copy this cell
		reference to another column because it is relative. The
		row reference does not change because it is absolute.
Mixed	\$A10	The row reference changes when you copy this cell
		reference to another row because it is relative. The
		column reference does not change because it is absolute.

- Transposing values using the TRANSPOSE function.
- Creating multiple what-if analyses using two-variable data table.

Download the Excel File from the Week 1 Spreadsheet Material Folder and save it to your disk.

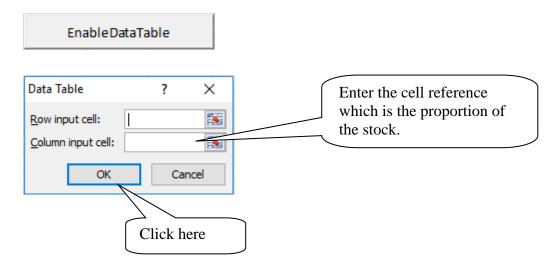
Open the Excel File. There are 6 worksheets (Name, Task 1, Task 2, Task 3, Task 4, and Task 5) in this workbook. The default worksheet when you open the file is **Name**.

i. **Problem 1** In the **Task 1** sheet, copy the blue cell across and down all the yellow cells. Look at the formulae in all the yellow cells carefully.

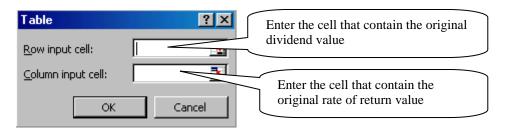
Note: Make sure you get the right answer no matter which method of referencing you are using. Even though Paul does the referencing incorrectly on YouTube, the expectation is that you do it correctly (He does things incorrectly on the video to show that it's dangerous to drag incorrect referencing across cells).

- ii. **Problem 1**: In the **Task 2** sheet, highlight the yellow range, type **=transpose**( highlight the green range and press **Shift+Ctrl+Enter** keys simultaneously.
- iii. Complete **Problem 2** in the **Task 2** worksheet.
- iv. **Problem 1**: In the **Task 3** sheet, you want to find the corresponding portfolio mean for each proportion of stocks. First, click the button Enable Data Range to permit using What if analysis on this worksheet (See below). Highlight the blue range, click **Data > What if analysis> Data Table** and you will be prompted to enter the row or column input cell as shown below. For a one-

variable data table, you only need to enter only one cell, depending on how you have set up your table.



- v. Go to the **Task 4** worksheet. This contains the dividend valuation model. What you are required to do is to analyse the effect of changing dividend and rate of return values on the share price. This can be done using a two-variable data table.
- vi. In a two-variable table, place a reference to the result cell in the upper-left corner of the table at the intersection of the row input values and the column input values. Highlight the entire yellow region, select **Data** > **What if analysis**> **Data Table** and you will be prompted to enter the row or column input cell as shown below.



- vii. Press **Ok** and you should get the answers.
- viii. Complete the **Task 5** worksheet on your own.