# Start program

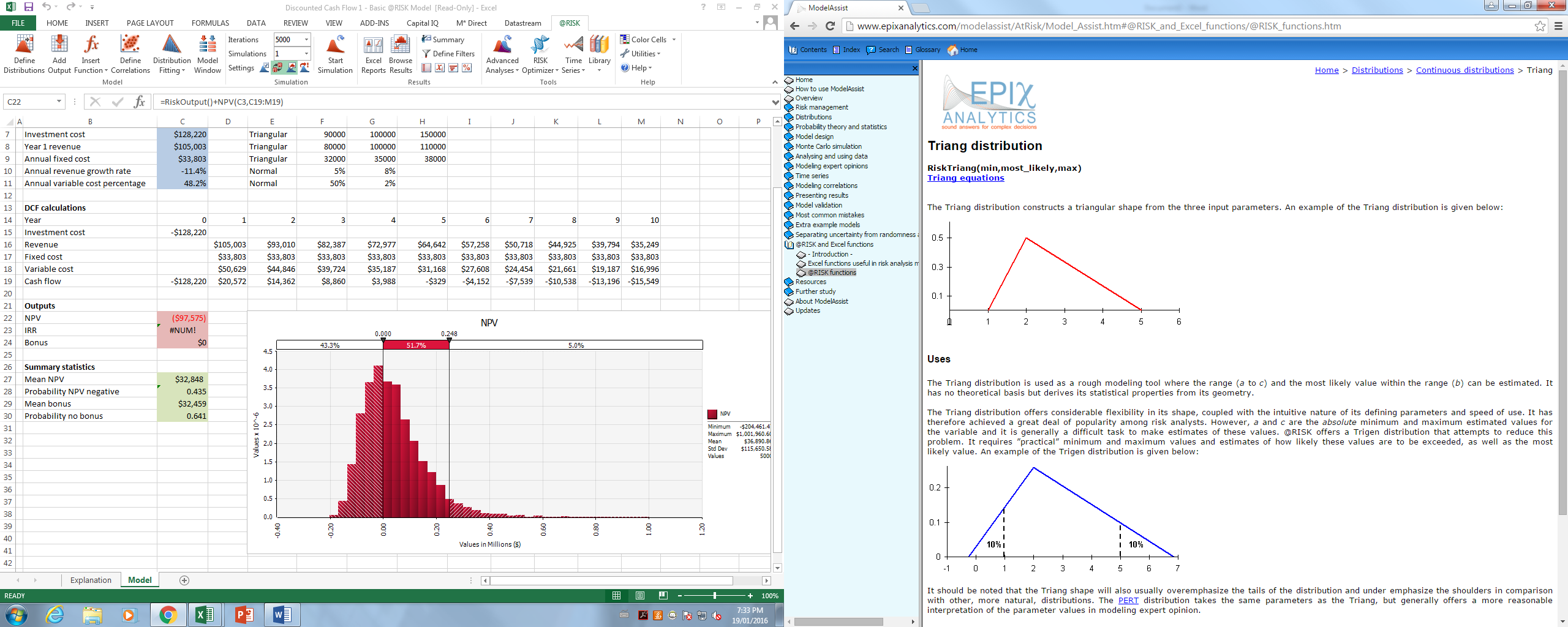
12th floor lab. Start -> Palisade -> @RISK

Help->Example Spreadsheet

Discounted Cash Flow: A sequence of discounted cash flow models for calculating the net present value (NPV) of an investment.

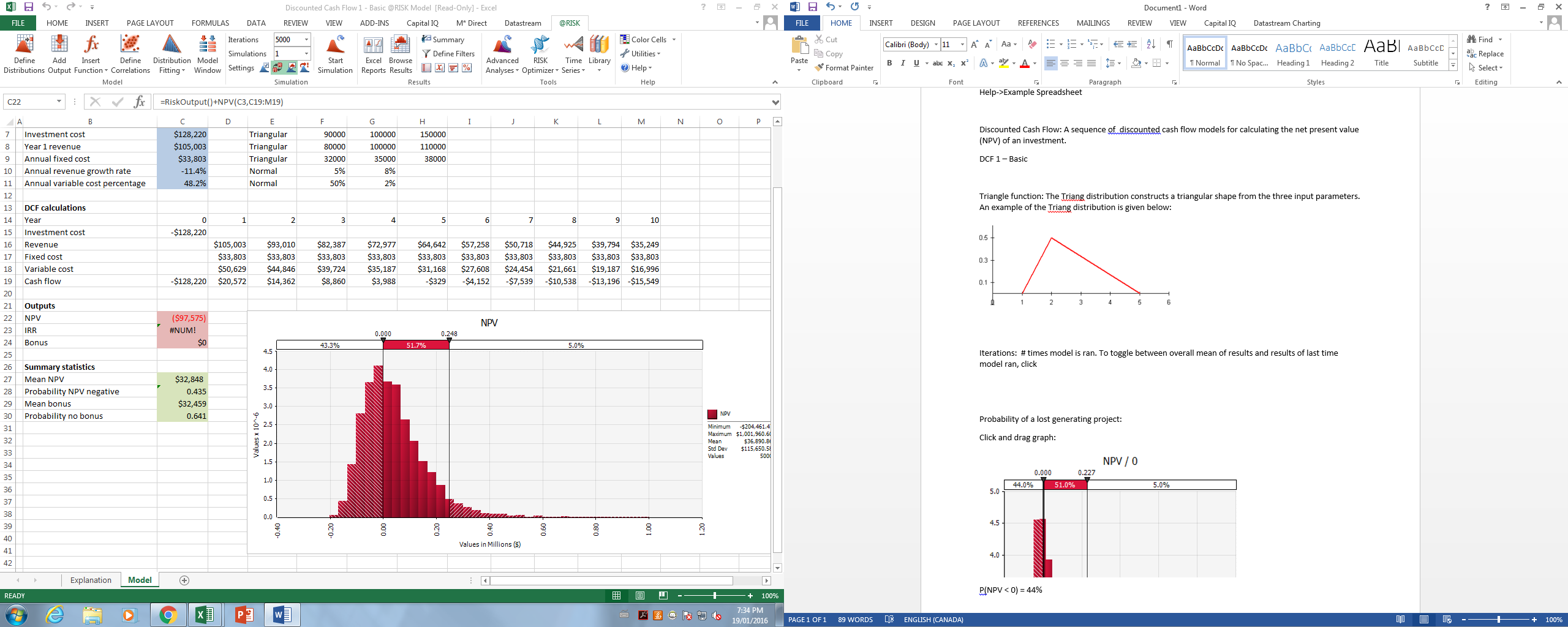
# DCF 1 – Basic

Triangle function: The Triang distribution constructs a triangular shape from the three input parameters. An example of the Triang distribution is given below:

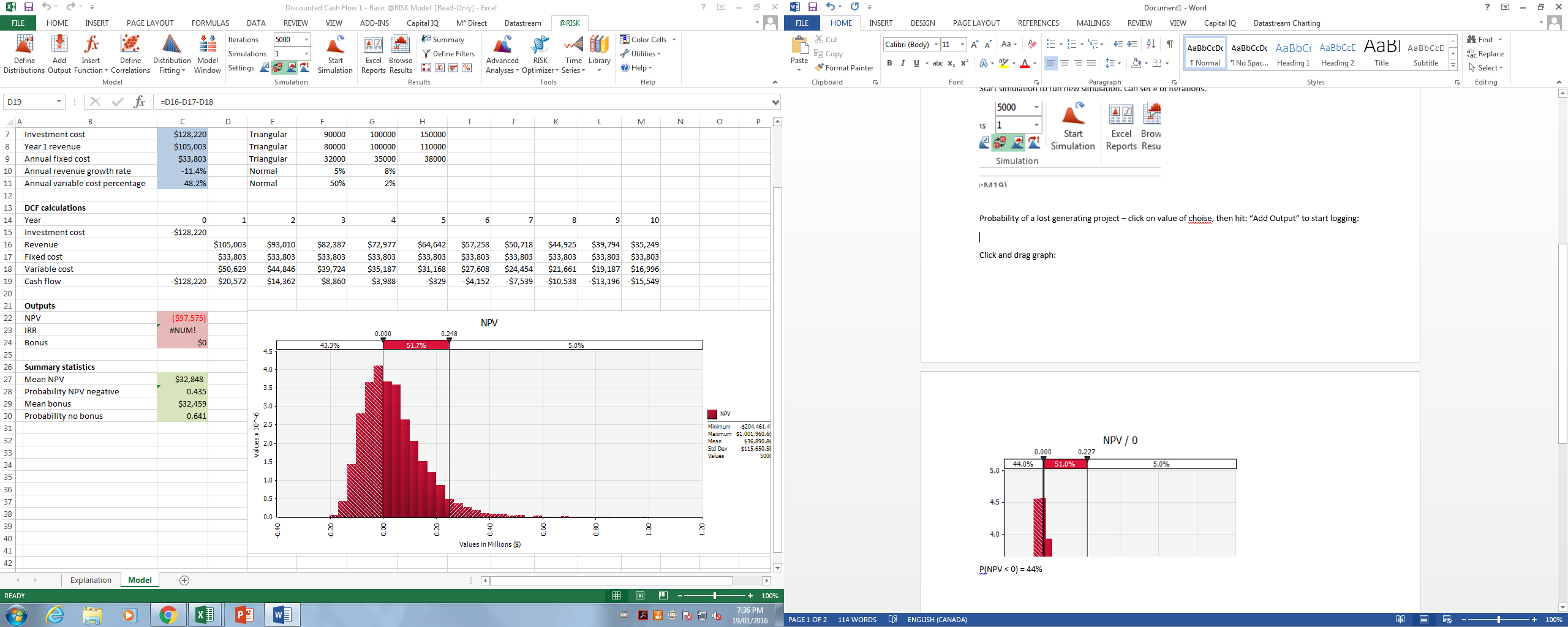


Iterations: # times model is ran. To toggle between overall mean of results and results of last time model ran, click dice button.

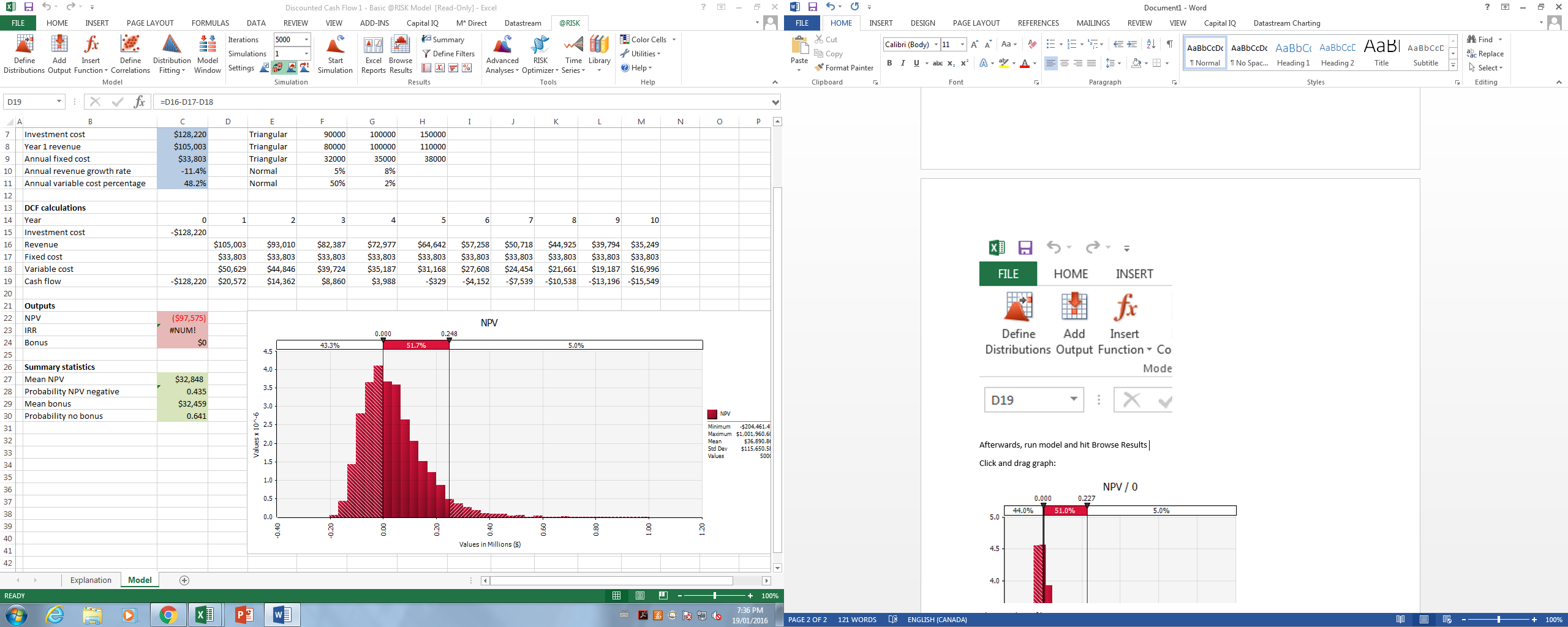
Start simulation to run new simulation. Can set # of iterations.



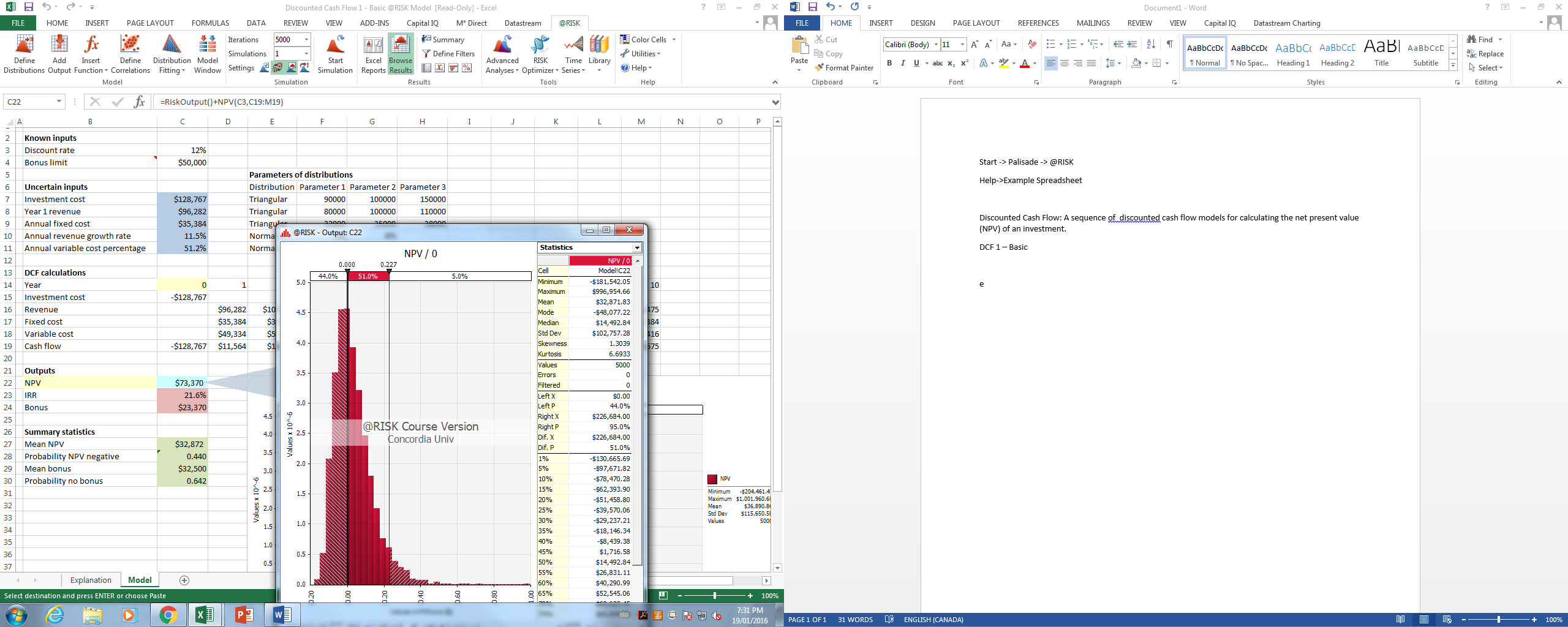
Probability of a lost generating project – click on value of choice, then hit: “Add Output” to start logging:



Afterwards, run model and hit Browse Results



Click and drag graph and :



P(NPV < 0) = 44%

Alternatively, use =RiskTarget(TARGET, Limit)

In this case, use =RiskTarget(CellOfNPV,0)

If

Can use results section to see results of simulations

# DCF 2

Unrealistic part of last one, assumed growth rates were constant everywhere. Rectified with this model.

Same as before, but new random distribution of growth rate.

# DCF3

Assuming that this year’s growth rate is correlated to last year’s growth rate. New model to inject this correlation. Assume g1 = g0+random(0,sigma)

Basically adding a noise term to growth

To see correlation of growth rate, click on result, scatter plot, then select growth rates to see.

Assignment for next class: Portfolio Analysis: A sequence of examples about portfolios of investments

Standard capital budgeting, 2 projects can have same expected value, but different risks.

Since risk is already captured in model distribution (using different standard distribution), therefore no need to adjust for risk. Therefore only use Risk Free rate. Distribution of results is scattered enough to already adjust for risk.

Normally, if just taking mean of CFs, need to adjust for risk. If means are equal, select project with less risk. But in this case, already taking distribution of results, therefore no need to readjust for risk.