



# RISK TESTS



# Estimating a risk free rate

You have been asked to estimate the risk free rate for a Swiss multinational, which gets 10% of its revenues in Switzerland (in Swiss Francs), 30% of its revenues in the EU (in Euros), 40% of its revenues in the US (in US \$) and 20% of its revenues in India (in Indian rupees). The risk free rates are 0.5% in Swiss Francs, 1% in Euros, 2.5% in US \$ and 6% in Indian Rupees. What risk free rate will you use in your valuation?

- a. The simple average of the risk free rates
- b. The weighted average of the risk free rates
- c. The Swiss franc rate, since it is a Swiss company
- d. The lowest of the rates, since it has to be risk free
- e. The highest of the rates, to be conservative
- f. None of the above

# Historical Premiums

- The historical risk premium is the difference between the realized annual return from investing in stocks and the realized annual return from investing in a riskless security (T. Bill, T. Bond) over a past time period.
- To estimate this risk premium, how long a time period should you use?
  - a. Just one year (last year)
  - b. Last 5 years (to reflect current conditions)
  - c. As long a time period as you can get the historical data for
  - d. Should match the time period on your riskfree rate
  - e. Should match the time period used to estimate your beta
- Assume that next year turns out to be a terrible year for stocks. If that occurs, you should expect to see the historical risk premium next year :
  - a. Go up
  - b. Go down

# Forward Looking Premiums

- Assume that you were looking at an investment, where you were guaranteed a cash flow of \$ 1 (with certainty) every year in perpetuity. How much would you pay for this investment right now?
  
- Now assume that you were looking at an investment, where you expect to generate a cash flow of \$ 1, with about the same uncertainty as you would face on an average risk stock, in perpetuity. How much would you pay for this investment?