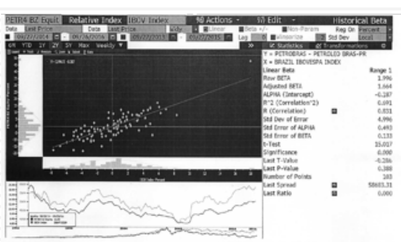
BETA AND COST OF CAPITAL TESTS

Start of session 6

Regression Betas

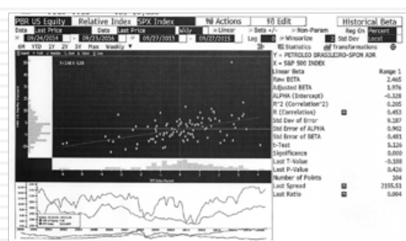
- Assume that you are trying to estimate the beta for Petrobras, for a valuation that you plan to do in US dollars. Which of the following regressions would you use and why?

Petrobras: Local listing vs Bovespa ($R)



Currency: $ R
Beta = 1.66
R squared = 69%
Std Error of Beta = 0.13

Petrobras: ADR vs S&P 500 (US $)



Currency: US $
Beta = 1.98
R squared = 21%
Std Error of Beta = 0.48

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Bottom up Betas

- We estimate "bottom up" betas as an alternative to regression betas. To obtain the bottom up beta for a firm, we average regression betas across "comparable" firms. Given a choice, which of the following is likely to yield the best bottom up beta estimate?
  a. A small sample of companies similar to yours
  b. A large sample of companies that may have differences from yours
  c. One company exactly like yours
- A comparable firm has to be a
  a. A firm in the same industry group
  b. A firm listed in the same market
  c. A firm with a similar market cap
  d. None of the above
  e. All of the above

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Cost of debt

1. You are assessing the cost of debt, to use in the cost of capital, for a firm. The firm has $ 1 billion in bank loans outstanding, carrying an interest rate of 4% and a remaining maturity of 8 years; the loans were taken a couple of years ago when interest rates were lower. The current risk free rate is 5% and you anticipate that your default spread to borrow long term is 2%. What is the pre-tax cost of debt for this firm?
   a) 4%
   b) 5%
   c) 7%
   d) 5.5%
   e) None of the above
2. The firm has a market value of equity of $ 1 billion and you are computing the debt to capital ratio (D/ (D+E) for the firm. What is the debt to capital ratio?
   a) 50%
   b) >50%
   c) <50%

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