## BETA AND COST OF CAPITAL TESTS

Start of session 6

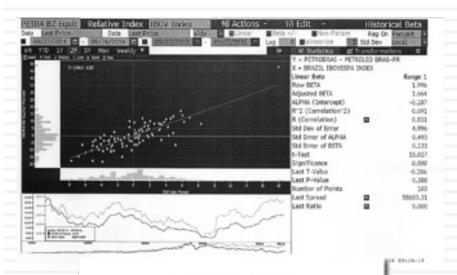
## Do you have a problem with betas?

- There are many who take issue with betas, but for very different reasons. If you don't like or trust betas, what's your main reason?
  - a. I don't think we should adjust discount rates for risk at all.
  - b. I don't like using an estimate of risk based upon past prices, when I am doing intrinsic valuation.
  - I am okay with using prices, but I don't like to assume that the marginal investor is diversified (leading us to focus only on risks that cannot be diversified)
  - I am okay with both prices and the diversified investor arguments, but I don't like the fact that regression betas are backward looking and noisy.

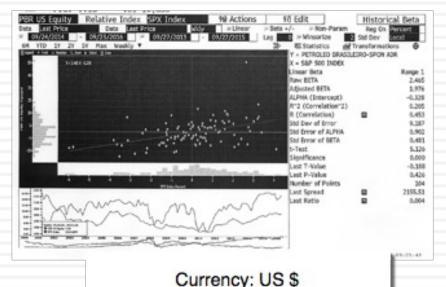
## Regression Betas

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 \$)



Beta = 1.98
R squared = 21%
Std Error of Beta = 0.48