

Capital Budgeting.

Pristine Tech, Inc. has been contacted by the Government to participate on a public contract to sell 4,800 voice recognition (VR) computer keyboards per year for four years at a price of \$180. Due to technological improvements, beyond that time they will be outdated and no sales will be possible. The equipment necessary for the production will cost \$3.1 million and will be fully depreciated on a straight-line basis. Production will require an investment in net working capital of \$395,000 to be returned at the end of the project, and the equipment can be sold for \$305,000 at the end of the fourth year. Fixed costs are \$570,000 per year, and variable costs are \$75 per unit. In addition to the contract, the company expects selling 11,400, 13,500, 17,900, and 10,400 additional units to companies in other countries over the next four years, respectively, at a price of \$162. The tax rate is 23 percent, and the required return is 10 percent.

Should the firm participate in the project, according to the net present value rule?

Capital Cost

The debt of JVC, Inc. consists of 10-year 5% coupon bonds, \$1,000 face value, issued 2 years ago at a 102% market price with flotation costs of \$5 per bond. These bonds are quoted at 95%. JVC, Inc. has an 80% debt-equity ratio, and there are also 500,000 common shares outstanding with \$1 face value and \$8 current market price. The firm has a 60% pay-out and the expected return of the stock market is 7%.

Additional information:

- Beta is 1.5 and dividends are expected to grow at a 3% constant rate forever.

- Tax rate is 30% and the risk-free rate is 2%.

- Net income of the last year is 0.6 million \$.

Calculate the cost of capital of JVC, Inc. Compute the cost of equity with both the dividend discount model (DDM) and the CAPM and for the cost of capital calculation use the value provided by the CAPM.