# Ameritrade hbs case essay sample 

Finance

## ASSIGN BUSTER

1. What is Ameritrade's capital structure?

Because there is no preferred stock or long term debt, Ameritrade is a 100\% equity firm.
2. What is Ameritrade's cost of equity capital?
$C A P M=(.0643)+(1.8264)(.188-.0559)=.2902=29.02 \%$

Return on Market=(899.470-757.12)/757.12=. 188

Beta calculation on Attached Excel Spreadsheet.
3. What is Ameritrade's cost of debt capital?

Because there is no interest expense in 1997, Ameritrade has no cost of debt.
4. What is Ameritrade's WACC?
$W A C C=(1)(.2902)=29.02 \%$
5. Ameritrade is considering 2 projects:
a. A $\$ 100 \mathrm{MN}$ improvement of technology project and
b. A $\$ 100 \mathrm{MN}$ marketing project

Assume the technology improvement project (a) reduces "" Commissions and Clearance" and " Communications" by half for the foreseeable future so the realized costs would be half of whatever growth they might have otherwise had. For example, entirely hypothetically, if you believed that Communications costs would have grown from 5, 623, 468 to 6, 500, 000 in the next year without the technology investment, the number after the
technology investment would be $\$ 6,500,000 * 50 \%$ or $\$ 3.75 \mathrm{MN}$. Assume the marketing project would increase revenues by \$5MN a year for the foreseeable future.

Do some sensitivity analysis of the NPV of each of these projects using different discount rates for the cash flows generated (try the discount rates from 2, 3 and 4 above as well as a few others). What is the appropriate discount rate for the technology project? What about the marketing project? Should they be undertaken? How sensitive is the decision to the discount rate (i. e. will small changes in the discount rate change the go/no-go decision)?

Growth Rate from $95-96=(2,530,642-2,516,796) / 2,516,796=.550144 \%$ Growth Rate from $96-97=(3,320,262-2,530,642) / 2,530,642=31.2 \%$ Because the historical growth rates are not reflective of the future since there was such a jump in the growth in 1997, we are going to assume that the future growth rate will be $\qquad$ .

