Quiz A for 4:00 Class: 11/14/12

Use the following information to set up the calculations required to determine a) the portfolio of J.C. Penny (JCP) stock and risk-free bonds required to duplicate a call on JCP that expires on 5/17/13 (184 days from today) with a strike price of $26 and to b) determine the beta of the call. You plan to hold the call for 93 days through 2/15/13.

Information on market values per share of:
JCP assets = 25; JCP stock = 17.40; JCP bonds = 7.60; this call = 3.05; an equivalent put = 2.70

Information on book values per share of:
JCP assets = 30; JCP stock = 20; JCP bonds = 10

Information on standard deviation of returns on:
JCP assets = 40%; JCP stock = 59%; JCP bonds = 24%; this call = 110%; an equivalent put = 130%

Information on betas on:
JCP assets = 1.5; JCP stock = 1.83; JCP bonds = 0.7

Information on required returns on:
JCP assets = 11.5%; JCP stock = 13.8%; JCP bonds = 5.9%

Information on expected dividends on JCP stock: 1/6 (53 days) = 0.20; 4/5 (142 days) = 0.21; 7/6 (234 days) = 0.22

Information on returns on Treasury returns (all < 1%) maturing on: 1/3 = 0.056%; 2/14 = 0.091%; 4/4 = 0.127%; 5/2 = 0.132%; 5/16 = 0.142%; 7/6 = 0.157%

Wall Street Journal Questions are on the back of this page.