Quiz 1: Corporate Finance

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

1. You have been hired as corporate governance advisor by the Polish government and have been asked to review whether the following actions will increase or decrease stockholder power over managers. You can give a very short rationale for each answer (1/2 point each)

a. **Require** stockholders to own stock for more than a year before they can vote at stockholder meetings.

   Increase stockholder power     Decrease stockholder power

   *Rationale:*

   ______________________________________________________

b. **Not allow** companies to buy and hold their own stock for extended periods (i.e., hold treasury stock)

   Increase stockholder power     Decrease stockholder power

   *Rationale:*

   ______________________________________________________

c. **Require** hostile acquirers to pay stockholders at least a 30% premium over the current stock price in an acquisition.

   Increase stockholder power     Decrease stockholder power

   *Rationale:*

   ______________________________________________________

d. **Not allow** foreign investors to own stock in Polish companies.

   Increase stockholder power     Decrease stockholder power

   *Rationale:*
2. You have run a regression of monthly stock returns for Gym Place Holdings, a small play-set manufacturing company against the S&P 500 over the last 5 years. The results are summarized below:

\[
\text{Returns}_{\text{Gym Place}} = 0.05\% + 2.00 \times \text{Returns}_{\text{S&P 500}} \\
R^2 = 30\% \quad (0.32)
\]

a. If you know that this stock had a monthly Jensen’s alpha of 0.30\% during the period of the regression, what was the annualized riskfree rate during the last 5 years? (1.5 points)

b. Assume now that you have been asked to estimate a Euro cost of equity for Gym Place Holdings for its European holdings, primarily in France and Germany. The 10-year U.S. treasury bond rate is 3.9\%, the German government Euro bond rate is 4.4\% and Gym Place can borrow money at 6\% (in Euros). The risk premium (Equity over riskfree rate) over the last 10 years in European markets is only 2\% but the historical risk premium over the last 75 years in the United States is 4.53\%. Estimate a Euro cost of equity for Gym Place Holdings. (1.5 points)
3. You have been asked to estimate a beta for LaPlace Steel, a mid-sized steel company. The company has 30 million shares outstanding trading at $20 a share and $400 million in debt outstanding; the firm also has $400 million in cash and marketable securities (treasury bills and commercial paper). The average beta across steel companies is 1.32; the average debt to equity ratio for these companies is 20% and the corporate tax rate is 40%.

   a. Estimate the bottom-up unlevered beta for LaPlace Steel (including the cash). (2 points)

   b. Estimate the bottom-up levered beta for LaPlace Steel. (1 point)
c. Now assume that LaPlace Steel announces that it will pay a special cash dividend of $200 million to its stockholders and use the remaining cash to enter the chemical business. If the unlevered beta for chemical companies is 0.70, estimate the new levered beta for LaPlace Steel. (2 points)