5th Seminar assignment in ECON 4245, week 42 (15-19 Oct)

A. Brander and Lewis' model

1. Show that: (you need Leibniz' formula)

$$V_{iD_i}^i = V_{i\hat{z}_i}^i \frac{d\hat{z}_i}{dD_i}$$

- 2. What are the key elements/reasons for why some debt is good in Cournot duopoly?
 - a. First explain thoroughly in words.
 - b. Then show the most important equations/algebra.
 - c. In particular, discuss and explain:

$$\begin{split} Y_{D_{i}}^{i} &= \begin{bmatrix} \hat{z}_{i} \\ \int \\ Z \end{bmatrix} R_{i}^{i} (q_{i}, q_{j}, z_{i}) f(z_{i}) dz_{i} \end{bmatrix} \frac{dq_{i}}{dD_{i}} \\ &+ \begin{bmatrix} \overline{z} \\ \int \\ Z \end{bmatrix} R_{i}^{i} (q_{i}, q_{j}, z_{i}) f(z_{i}) dz_{i} \end{bmatrix} \frac{dq_{i}}{dD_{i}} \\ &+ \begin{bmatrix} \overline{z} \\ \int \\ Z \end{bmatrix} R_{j}^{i} (q_{i}, q_{j}, z_{i}) f(z_{i}) dz_{i} \end{bmatrix} \frac{dq_{j}}{dD_{i}} \end{split}$$

B. Benchmarking

- 1. Why might competition in product market reduce agency costs?
- 2. How can competitors be useful when investors design the wage scheme of their manager?

C. Signal

1. If a firm has a high debt/equity ratio, what does that tell you about the firm? (First think on your own, then have a look in e.g. Harris and Raviv.)

D. Behavioral corporate finance

- 1. Discuss pro et contra for behavioral assumptions in corporate finance.
- 2. Discuss weaknesses and strengths of the model by Landier and Thesmar.
 - a. which real-life phenomena does it capture and not capture?
 - b. find weird elements/assumptions/results in their model.
 - i. There is one crucial difference between Hart&Moore and L&T about verifiability, which?
 - ii. Does the human capital of the entrepreneur matter in the joint business of investor and entrepreneur in this model?
- 3. L&T say that entrepreneurs (on average) are more optimistic than the population average, due to self-selection. Explain what they mean by that.
- 4. The separating equilibrium, or separating menu of debt contracts if you like, is better (than pooling eq.) for all types of actors (given their subjective beliefs), why?