Professor Robert A. Miller
Carnegie Mellon University
Trade and Investment Strategy
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ASSIGNMENT 4

Question 1 *(5 points)*

Consider the landing games that this class and previous years' classes played. The data set accompanying this assignment shows for each trader and each session in the classes:

a) their valuation for each gate (up to two).
b) the number of gates they own when the session begins.
c) the total number of orders they submitted.
d) the total number of market orders they submitted.
e) how many transactions they made.
f) whether they owned more than two gates at the end of the session, which can be computed from the number of gates they own at the end of the session
g) whether this is the last completed session they played.
h) their initial wealth
i) their final wealth
j) cash at the end of the session

1. Define profits as final wealth (which includes cash) less initial wealth, that is i) minus h). Regress profits on the set of possible regressors b) through g) omitting f). Display the regression results. Are any of the coefficients significant? Do any of them have a substantial quantitative impact? Did the traders improve their performance with experience? How much variation in profits is explained by this set of explanatory variables?

Question 2 *(5 points)*

2. Notice that the regression above does not include a), the valuation of each gate. Traders with very high valuations might make profits by buying gates, those with

very low valuations might make profits selling gates, but those with middling valuations do not stand to gain much from trading. Construct two new variables defined as:

a) the mean valuation of the traders' valuations *for each session.*
b) the absolute deviation of a trader's individual valuation from the mean valuation *for each trader in every game played*.
c) Show the distribution of this second variable over all the sessions.
d) the total number of gates available in each session (by adding up the number of gates owned by the traders).

Question 3 *(5 points)*

3. Now add the two variables b) and d) constructed in part 2 of this question to the regression run in part 1 and run the regression again. Display your results. How do the other coefficient estimates change? Is there any support for the hypothesis that those traders with very low valuations can profit from selling their gates, those with very high valuations can profit from buying very high valuations, but those with valuations around the mean valuation cannot typically benefit much?