

ECON 321, Class 22: BP Chapter 22, Two-Sided Platforms

1. Read the introduction to 22.3 and skim section 22.3.1.
2. Read Section 22.3.2 carefully. Note that u and π are the per-member payoffs of buyers and sellers respectively.

Do the analysis in Mathematica. You can just start with the demand expressions n_s^i and n_b^i that are stated at the bottom of page 668 (the next formula *after* equation (22.7)). Remember there are two platforms, so you will actually have 4 demand curves. You should be able then to write the profit functions and take the first order conditions. You can just let $C_s = C_b = 0$, since marginal costs are not that important in a lot of network industries. Remember that $\tau_s \tau_b > u\pi$ by assumption – you can use numerical values for these if you're having trouble getting Mathematica to solve everything. You should be able to get the equilibrium membership fees and the profits of the platforms.

3. Continue reading, especially the part on multihoming which is a very important concept.