

ECON 321, Assignment 12: Berry and Waldfogel (1999)

1. Read Section 1 carefully.
2. Read Section 2 – we already went over this in class so it should be familiar.
3. Read about the data in Section 3.
4. Read Section 4. Note the nested logit approach in equation 6. The term δ_j is the same as the \bar{v}_j we talked about in Assignment 10. The authors are adding some additional utility to the logit mean utility, where this additional utility is parameterized by σ . For low σ , additional stations take away market share from the “no-buy alternative,” hence they increase listening. For high σ , stations just steal business from each other. Equation 8 shows that other than the σ terms, the mean utility is just like in class. To confirm, write out equation 7 in its entirety, subbing in the definitions of D and δ_j . (You can ignore the market subscript k .)
5. The pricing equation is a little different from what we did in Assignment 10. In the end, they will estimate equation 13. Notice that parameter η is the inverse price elasticity of demand for advertising.
6. Finally, they need a distribution of fixed costs since this is an entry model, not just a fixed number of firms. That is equation 15, which turns out to be tricky to estimate. For our purposes, we can move along, nothing to see here!
7. Read Section 5. Some of this is a discussion of whether to use simple regressions or simultaneous estimation. Simultaneous seems better to me, just look at the last column of Table 3. The coefficient estimates refer to the listening equation, the pricing equation, and the fixed cost equation in that order. Controlling for the other variables, do more peo-

ple listen to radio in the northeast or the south? Is radio advertising more expensive in the northeast or the south?

8. Read Section 6 on Policy Simulations, and especially look at Table 4. There are 135 markets in the sample. What is the aggregate revenue minus aggregate costs and what is the welfare in the average market? How is it that the welfare is greater so much greater than the aggregate revenue minus aggregate costs?