Review of Section II of Study 4 of the FCC Media Ownership Studies: "Ownership Structure, Market Characteristics and the Quantity of News and Public Affairs Programming: An Empirical Analysis of Radio Airplay."

This study examines how ownership structure affects radio station airplay. A count data model and data from more than 1,000 radio stations at 2005 are used to estimate the relationship between ownership characteristics, such as the number of stations the parent owns in the market, distance between the station and the parent and in-market cross media ownership, and the quantity of radio station informational programming. The methodology and assumptions are reasonable and generally consistent with accepted theory and econometric practices. However, I would like to see a much stronger justification for the important ownership variables of interest in the model and a clearer description of their expected signs. This would also help make the results discussion clearer.

In summary, the study uses a unique dataset and standard econometric techniques to document additional evidence on how ownership and market characteristics affect the news and public affairs programming decisions of radio stations. The impacts of ownership characteristics are generally weak, both in terms of statistical and economic significance, and the conclusions reflect these findings. The dataset would have to be augmented by other measures of market concentration if the study really wanted to make concrete conclusions about economies of scope and market power effects. For example, does it necessary follow that a "large owner" with many in-market stations has more market share and market power than a "small owner" with a single in-market station? More importantly, "number of in-market stations" and "total number of stations" may be endogenous when they depend on the unobserved preferences of radio listeners. Ultimately, more discussion and/or evidence is required to make causal claims.

Below are ordered comments related to the specific sections of the paper.

1. Background

The economic question is clearly stated; how does ownership consolidation affect airplay? The introduction provides a succinct, intuitive description of Sweeting's (2005) theoretical model to motivate several empirically testable predictions related to informational (as opposed to musical) content in radio. However, these prediction s need to be developed in more detail in the context of the data and empirical model described in Section's 2 and 3.

2. Data

The dataset is unique and potentially provides a very rich source of information for researchers. The general description of the data is clear and thorough. However, it would be useful see how selected characteristics of the sample of 1,128 radio stations compare with the gross sample of 13,241 stations. Furthermore, the coding of the "quantity of news" variable results in the loss of an additional 89 stations from the sample of 1,128. How do these 89 stations compare with the 1,039 remaining stations?

The study notes on page 11 that missing information reduces the sample size further from 1,039 to 1,013. What are the potential implications, if any, of dropping these low-power FM stations from the sample?

It is not clear why the variable "(great circle) distance between the station and the parent" is important, and why it is measured continuously. Furthermore, it would be interesting to see the correlation between "distance between the station and the parent" and "in-market stations owned by parent."

3. Method

This section provides a nice description of hurdle and zero-inflated count models and why they are appropriate for the task at hand.

4. Specification and Results

The study provides a solid justification of the choice of the zero-inflated negative binomial model (page 15, para. 2) on economic and econometric grounds. The model is appropriate as it separates the effects of covariates on the likelihood that information programming was aired and the expected quantity of such programming. This is important because the two effects can work in opposite directions and would be not be observed in a simpler model that estimated quantities only.

I am not sure why the study presents results from both the non-audited and audited datasets? Because the FCC-audited data more specifically identifies the subject mater of the broadcast (page 8, para. 3), these data should be of higher quality. All estimations and discussion of results should be based on these data only. Moreover, when these results are examined in Table's II-7, II-9, II-11 and II-13, it appears that that most of the ownership characteristics have no direct affect upon the quantity of news, local news, public affairs and local public affairs programming, in terms of statistical and economic significance.

5. Conclusions

The impacts of ownership characteristics are generally weak, both in terms of statistical and economic significance, and the conclusions reflect these findings. The dataset would have to be augmented by other measures of market concentration if the study really wanted to make concrete conclusions about economies of scope and market power effects. For example, does it necessary follow that a "large owner" with many in-market stations has more market share and market power than a "small owner" with a single in-market station? More importantly, "number of in-market stations" and "total number of stations" may be endogenous when they depend on the unobserved preferences of radio listeners. Ultimately, more discussion and/or evidence is required to make causal claims.