Peer Review Evaluation
FCC Media Ownership Study #7
Radio Station Ownership Structure and the Provision of Programming: Evidence from 2005-2009
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Reviewer: Michael J. Mazzeo

I. Introduction

The purpose of this evaluation is to assess the study entitled, "Radio Station Ownership Structure and the Provision of Programming: Evidence from 2005-2009," which was commissioned by the FCC as part of its comprehensive review of its broadcast ownership policies. The goal is this particular study – in the words of its author – is to "assess recent evidence on the relationship between ownership structure and the provision of radio programming to minority (African-American and Hispanic) audiences."

In particular, this review considers the following issues:

1. *Methodology:* whether the methodology and assumptions employed as reasonable, technically correct, and consistent with accepted theory and empirical practices.

2. *Data:* whether the data used are reasonable and of sufficient quality for purposes of the analysis.

3. *Conclusions:* whether the conclusions follow from the analysis.

The structure of this review report follows these issues in order. Note that, consistent with the guidelines contained the OMB Bulletin outlining the requirements for this review, no policy advice is provided and policy implications of the study are not evaluated.

II. Methodology

The introduction to the study lays out the theoretical foundation on which the analysis is based. Providing this underlying theory is the first critical step in establishing an appropriate methodology. The author provides three possible economic mechanisms through which a connection between ownership structure and minority-focused programming could be related: (1) cost reductions associated with owning more stations allows for more varied offerings, including those targeted at minorities; (2) internalization of business stealing does the same; and (3) minority owners would find offering minority programming more profitable or otherwise appealing. The paper proceeds in proposing various empirical tests that would illuminate one of the three possible mechanisms.

Unfortunately, the data do not exist to permit a detailed investigation of the profits of radio station owners, including the costs and/or demand information necessary to closely track any one of these three economic mechanisms in a structural way. The author, instead, builds up a series of reduced-form empirical exercises that provide evidence consistent (or not) with each of the mechanisms. This methodological approach is wholly appropriate given the circumstances, and is standard in the literature. Indeed, previous studies of this question using earlier data were performed using similar methodologies (by this author), and are influential studies in the empirical industrial organization literature.

Using this approach, the following empirical questions become the focus of the study:

- How does minority radio ownership affect the availability of minority-targeted programming?
- How does ownership structure affect the availability of minority-targeted programming?
- How does minority ownership and ownership structure affect radio listening?

Each of these questions is addressed in the study by examining cross-sectional relationships in a series of independent geographic radio markets. Unfortunately, this methodological approach is somewhat limited insofar as it does not readily allow for causal inference. For example, suppose there is an observed association between large-group ownership and minority-targeted programming. Establishing that this association exists in the data does not necessarily imply that large-group ownership is *causing* more minority-targeted programming to be offered. Instead, the causation could be reversed or a third factor that is not being investigating could be simultaneously causing both large-group ownership and minority-targeted programming to be present. From a methodological perspective, separating correlation from causation is very important for using research to inform policy.

One approach to solving this issue is to exploit an experiment in the data that produces a change one of the variables of interest but should not have any independent effect on the other. If there are changes in that second variable, then, they can be assumed to have been caused by changes to the first variable. Previous studies in the radio industry have exploited this approach, in particular (in previous work by this author) the changes in ownership structure that followed the implementation of the Telecommunications Act of 1996. The author acknowledges throughout the study that the lack of a similar experiment in the time period under study limits causal inference and is careful to not conclude more than the reduced-form correlation analysis will theoretically permit.

Finally, an instrumental variable approach is presented with market size suggested as a factor that can be an instrument for local taste for station variety. While there may be some debate regarding the extent to which different sized markets have similar levels of underlying interest in radio programming (individuals in larger markets typically have longer commutes, during which they likely listen to the radio in “drive-time”), attempting to establish more of a causal link through an instrumental variable approach is helpful to the author’s conclusions.

III. Data

The study attempts to address the methodological challenge described above, in part, through a very careful analysis of detailed data on the radio industry. Tables 1 through 5 of the paper that summarize the data used in the study are very well organized and give a nice visual overview of the key pieces of the economic argument about ownership, minority status and listening patterns. In particular, the author utilizes information on the ownership of individual radio stations – whether they are part of larger ownership groups and if they are owned by minorities – and on listening metrics for those stations. In some cases (though not all), listening data is broken down by minority status. This is critical for establishing the correlations between ownership structure and minority listening. Minority-targeted programming is defined using these data, as the stations (or "type" of station, by defined radio "formats") with the greatest share of minority listening. This is important because the data on minority listening are not available for all the markets studied. This is a clever strategy for overcoming the data limitation that minority listening is only available for a subset of the markets.

I found the availability of the data regarding minority ownership of radio stations to be somewhat more troubling. Table 1 presents the information that is available and that the author uses in the study. There is no data available at all for 2009 and the data for 2005 and 2007 appear to be very different – the detail in 2007 regarding minority status is more detailed, but the level of station coverage is much less (6382 stations versus 8236). Furthermore, several of the large radio station ownership groups that own dozens or hundreds of stations are publicly traded companies. It seems odd to label these as being owned by any particular race (though I believe they can be safely labeled as *not* being minority owned). Again, the author is very clear not to overreach in the study's conclusions, given these data limitations. Furthermore, separate analyses are done using the 2005 and 2007. The fact that the same general correlation patterns are present suggest that the differences in the data available in the two years are not, in itself, causing difficulties in interpretation.

IV. Conclusions

The study ends with a list of seven concluding statements that the author is able to make, based on the available data and the study's empirical analyses. The items strike exactly the correct balance in terms of not making inferences that are not supported by the methodology. The appropriate caveats are given regarding the lack of an identifying "experiment" to establish causality (see especially conclusion #7). The one item that I would have re-emphasized in the conclusion is that the questionable data on station ownership somewhat clouds conclusions that come from that analysis.

V. Summary

The reviewed study makes the best possible use of the data and provides a useful update on the relationship between ownership and the availability of radio programming for minority audiences. The study's methodologies are based in economic theory and are consistent with standard practice in the empirical industrial organization literature. The author is very careful about identification and uses a variety of techniques to establish that the observed patterns in the data represent causal relationships. In reporting conclusions, the study is very careful to indicate where the empirical approach is not able to make causal statements that are valid, due to the lack of an identifying experiment over the relevant time period.