Review of "The Effect of Ownership and Market Structure on News Operations" by Pedro Almoguera.

Prepared by Phillip Leslie

This study provides estimates for the effects of various ownership measures on the amount of news content provided by daily newspapers. The main ownership measures of interest are whether the newspaper is co-owned with other newspapers in the same market, whether co-owned with other newspapers in other markets, whether co-owned with a local television station, and whether co-owned with a local radio station.

Data

The dataset is a cross-section of 134 daily newspapers (there are abut 2,000 newspapers in the US). A market is defined as a MSA which is smaller than a DMA. For each newspaper, the amount of news and advertising in the "general news" section is observed for 14 randomly chosen days in 2005 (with the constraint that each day of the week is included twice).

The data come from multiple sources and is mainly well explained. The sample is focused on larger markets ("top 60 DMAs"). Hence, the data is surely not representative of all newspapers in the US, but as a result is more pertinent to the largest markets.

It was unclear how exactly the identity of which newspapers compete in which markets is assigned. On page 5 Almoguera describes an example concerning the Winchester Star and Washington Post, in which he explains that the Winchester Star is a *monopolist* in Winchester. But of course the Winchester star competes against national papers in Winchester, so the example is either confusing, or worse still, the assignment of newspapers to markets is erroneous. Regardless, the choice of MSA for market definition seems reasonable (which is the main point of the example).

The data covers news and advertising content in the "general news" section of each newspaper. As Almoguera notes, this is a potentially troublesome definition, since it can arbitrarily exclude valid news content in other parts of the newspaper. This is a difficult issue and there is no obviously right approach. The approach taken in this study is an acceptable starting point, although it would be good if there were some robustness checks on this issue. Hence, it remains a significant caveat to the research, leaving a real question over the usefulness of the data, but not necessarily invalidating the results.

The data does not include a source of exogenous variation in ownership structure. This is a generic issue for studies that seek to estimate the causal

impact of ownership changes. Without exogenous variation to identify a causal effect, it is less clear whether the analysis uncovers a causal effect or a mere correlation.

Also, as the author notes, the data provides no information on news quality—all news is treated equally and is measured according to page space. It's hard to imagine a good solution to distinguishing different types of news, but in principle such distinctions could be important for any conclusions.

Methodology and Assumptions

The method applied is OLS on cross-sectional data. Two different dependent variables are analyzed: the log of the absolute amount of news content, and the so-called newshole: news/(news+advertising).

Table IV.4 shows mean values for these two dependent variables, conditional only the alternate values for the radio co-ownership and tv co-ownership variables. This is a useful table since it provides basic evidence that neither of these co-ownership variables seem to have a big impact on news content (relative to the variation over days of the week, say). It would be nice to see a comparison of all newspaper observables according to the same co-ownership variables. Even though all such variables are included in the regression analysis (and are therefore controlled for), if there were significant differences in observables for newspapers that are co-owned with a radio station compared to newspapers that are not, that would suggest there are unobservable differences as well (that are not controlled for).

Explanatory variables include various ownership variables for a given newspaper, and market-level variables including HHI and local demographics. A couple of features of the data lend itself to the inclusion of various fixed-effects to help control for other factors that may also impact news content. An observation is a combination of a newspaper, market, and day. In principle, it is possible to include fixed effects for each of these dimensions: a newspaper dummy, a market dummy and a day-of-week dummy. Although in each case this has consequences for whether other included variables can be still be identified.

The results using newspaper fixed effects are shown in Table IV.5. The coefficients of interest are identified by within-newspaper variation in ownership structure. That is, for a few newspapers there were changes in ownership structure sometime during 2005 that is spanned by the days that have been randomly chosen for the analysis. The author dismisses these estimates since many coefficients are unstable depending on the choice of which newspaper to exclude. However, there is reasonably stable estimates for a couple of coefficients of interest: eg. if a newspaper is co-owned with other newspapers (either in the same market or in other markets) this seems to have significant negative effect on the amount of news content. Futhermore, the estimates that

control for newspaper fixed effects are a-priori the most likely to identify true causal effects here, because without them newspaper-specific unobservables are a likely sources of bias. Hence, certain of the estimates shown in Table IV.5 are noteworthy.

Table IV.6 contains the main results of the study. The results for three specifications are shown, in each case using the dependent variable that measures the absolute amount of news content. It is a sensible choice to show the results for these three specifications. Although it would be preferable to include market dummies in the aggregate regression (column 3).

Table IV.9 is intended to be the analog of Table IV.6, instead using the newshole variable on the left-hand-side. But the estimates shown columns 1 and 3 are identical in the two tables—this must be typo, albeit an especially careless one.

The author should report the number of observations in each specification for set of regression results shown in the tables.

Conclusions

The main stated finding is that co-ownership between multiple newspapers in the same market causes a reduction in the amount of news content. It is also noted that the other ownership variables do not seem to impact newspapers' news volume in significant ways.

However, if Table IV.9 column (2) is correct, and it seems it may be, the same variable has a positive and significant effect on the newshole (the fraction of news contained in the newspaper). These estimates are at odds with each other.

It also unclear what to make of the conclusion that the other ownership-related variables seem to have no significant impact. In some cases the standard errors are quite large, and in others they are small – "no significant effect" may simply be due to a lack of precision in the estimates.