

THE EFFECT OF MONOPOLY ON THE NEWS: A COMMENT

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A recent article in this journal (Trim, et. al., 1983) attempted to show that a decline in competition in the newspaper industry led to a significant decline in quantity and quality of local news. To do this, the authors compiled and compared several measures of local news coverage in Ottawa and in Winnipeg for two six-month periods, the first from July 1 to December 31, 1979 when each city had two major daily newspapers and the second from July 1 to December 31, 1981 when each city had only one major newspaper.

This note examines two aspects of the article -- the quantitative methods used to test for a decline in quantity and quality of news and the definition of competition used in the article. In each case, the analysis of the article could be improved. At present, the quantitative analysis is not statistically rigorous and the definition of competition is too narrow to provide an accurate picture of the extent of competition faced by newspapers in Canada.

QUANTITATIVE METHODS

Trim et al. used a 20% random sample for the two six-month periods, giving a sample of 180 newspaper issues which contained 537 stories dealing with City Hall. The data from the sample -- the number and various characteristics of

the City Hall stories -- were collected in seven tables. Comparisons were then made for aspects of news service before and after Ottawa and Winnipeg went from having two major dailies to having only one. To give one example, the Ottawa Citizen had 99 stories dealing with municipal news in the 1979 sample and 79 such stories in the 1981 sample. Almost all the before - and - after comparisons showed a decrease in the quantity and quality category used. From such comparisons, the conclusion was drawn that the decrease in competition had an adverse effect on local news coverage.

Unfortunately, the comparisons from the tables do not provide an adequate test of the hypothesis that changes in competition affect local news coverage. There are two reasons for this. The first is that the authors have not established that the differences in the tables are statistically significant. The second is that the authors have not tested whether the observed declines in the quantity and quality of local news are caused by the change in competition that is assumed to have occurred on August 27, 1980, when the Ottawa Journal and the Winnipeg Tribune stopped publishing or by a declining trend in local news coverage that may have taken place before the closures. Neither problem means that the analysis in Trim et al. is necessarily incorrect. Indeed, one purpose of this note is to show how their analysis could be improved.

Because the authors use a 20% sample, they are assuming that their results, based on this sample, hold for the entire population. In other words, they are assuming that the sample is representative of the whole; this is, of

course, a basic assumption in statistics. By this reasoning, the numbers in the tables represent the expected value from any 20% sample from the population. On average, this will be true, although the numbers from a different 20% sample will not be identical to those given in the seven tables.

To gauge how much confidence one has in a sample, one needs a measure of dispersion. To give an example, if one takes three samples to determine how many stories in the Ottawa **Citizen** in the last half of 1979 were devoted to municipal news and finds 99, 100, and 98 stories in the three samples, one would be confident that 99 stories was reasonably representative of the number of stories. On the other hand, if the three samples produce 99, 25 and 175 stories -- that is, there is a wide dispersion among the sample sizes -- one would be less confident that 99 stories was representative. The preceding is vague, leaving one wondering how much dispersion is too much. Fortunately, one can calculate the standard deviation as a measure of dispersion and use it to provide an exact test of statistical significance.

In the article, the authors could have recalculated the tables on a "per issue" basis and computed the standard deviation for each figure. With this information, they could have provided much sharper comparisons between the quantity and quality of news in 1979 and 1981. Such a test would not necessarily reverse the authors' conclusions. In fact, given the extent and magnitude of the differences in the tables, such a test would probably make their results much more rigorous.

Even if the declines in the tables could be shown to be statistically significant, however, this does not mean that the demise of the Winnipeg **Tribune** and the Ottawa **Journal** produced these declines. Other factors could have caused the declines, so one should guard against confusing correlation and causality. The authors point out, for example, that a change in the ownership of the Winnipeg **Free Press** in 1980 might have influenced the recorded results.

It is possible that several factors have led to a long - term decline in the newspaper coverage of local news. If this is correct, what the declines in the tables are picking up is simply part of this trend and not an indication of the effects of any decline in competition.

Ideally, one would need to construct a sophisticated statistical model to distinguish the separate effects of all the influences over time on local news coverage. As an easier alternative, the authors could have estimated the trend in local news coverage over time. If the trend was flat, or even increasing, over time a decline between 1979 and 1981 could be caused by the change in competition. If the trend has been down over time, it is still possible that the recent decline was steeper than the long - term trend. And there are statistical methods available to test for this.

The simplest test the authors could have used would have been to calculate the quantity and quality measures for an earlier year -- say, 1977 -- and see if the change between 1977 and 1979 was much different from the change between 1979 and 1981. This simple test, which will be

biased if there is anything unusual about local news coverage in 1977, increases the data requirements and the calculations required for the study. But it is a minimum addition to the work the authors have presented.

There are thus two improvements that could be made to the quantitative work of Trim et al. The first is that they could have provided estimates of the standard deviations associated with their quantity and quality measures. The second is that they could have checked to see if the observed declines between 1979 and 1981 were part of long - term declines or were caused by a recent influence.

THE DEFINITION OF COMPETITION IN THE NEWSPAPER INDUSTRY.

The definition of competition in the newspaper industry that is used by Trim et al. is extremely narrow. They think that Toronto is the only city in Canada with competition among newspapers, because "only in Toronto are the papers close enough in terms of circulation that the competition may be viewed as significant" (p. 33). In Winnipeg, on the other hand, the Winnipeg **Free Press** does not face significant competition from the new Winnipeg **Sun**, because the circulation of the **Sun** is just over one - fifth that of the **Free Press** (p. 37). In other words, Trim et al. assume that a newspaper faces significant competition only from other newspapers of roughly the same size. This is incorrect, although it is a very common error made when people talk about competition in the newspaper industry.

From an economic viewpoint, competition concerns the battle for the marginal consumer and exists among all firms that produce, or could produce, substitute goods. The concepts of "marginal" and "substitutability" are basic to economics but are generally unfamiliar to non-economists, so they should be explained.

The marginal consumer is the last consumer to buy a product. This consumer is close to being indifferent about whether to buy the product, so a slight change in the price or quality of the product or of substitutes for the product will cause the consumer to switch from the product. Some consumers - called the intra-marginal consumers -- are not as sensitive to price and quality changes as the marginal consumer. This is why producers compete for the marginal consumer and why competition can be fierce between a large producer and a small one. It does not matter if one newspaper has a circulation of 500,000 and another has a circulation of 50,000; each is after the consumer who is at the margin, who is, at present, undecided which newspaper to select. Small companies can, of course, compete until they are large, in fact, the desire to grow on the part of small companies may make them more significant competitors for large companies than companies of equal size. The experience of the Sun newspapers is an example of this.

The selection process by consumers, moreover, is not restricted to equivalent goods. Trim et al. imply that before the end of August 1980 The Ottawa resident decided between the **Journal** and the **Citizen** and the Winnipeg resident between the **Tribune** and the **Free Press**. Actually, the choice was much broader. What one

considers a close substitute for a newspaper depends on how one views the newspaper. It may be seen as a source of local, national or international news, or it may be a source of opinion and information or entertainment and diversion. Different people have different views of any particular newspaper, but it is safe to say that there are many substitutes for any newspaper besides other local newspapers. Daily newspapers from other cities, weekly newspapers, radio programs, television newscasts and regular entertainment guides are only a few of the possible substitutes.

SUMMARY AND CONCLUSIONS

Trim et al. have attempted to show that a lessening of competition in the newspaper industry affects the news. To do this they examined changes in the quantity and quality of municipal news in two Canadian cities that went from having two major daily newspapers to having one. Unfortunately, the definition of competition used was too narrow and the quantitative methods used were not statistically rigorous.

As it stands, the article discussed in this note does not establish a link between newspaper competition and the nature of the news. What it does is present an analysis of the coverage of local news by newspapers. The authors argue -- convincingly -- that people need information about local government to make intelligent political decisions. One would like to know if local news from all sources has declined in recent years and, if it has, the cause of the decline. Trim et al. have provided a stimulating start -- but only a start -- to this study.

FOOTNOTE

The views in this comment are those of the author and not those of the Library of Parliament. I would like to thank Willaim Neil and Basil Zafirion for comments on previous drafts.

REFERENCE

Trim, Katharine, with Gary Pizante and James Yaraskavitch. The Effect of Monopoly on the News: A Before and After Study of Two Canadian One Newspaper Towns, **Canadian Journal of Communication**, 1983, 9 (3), 33 - 56.

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