Review

Elements of Broadcasting Economics

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Elements of Broadcasting Economics covers the main economic aspects of the commercial broadcasting industry. Topics include the determinants of advertising expenditure and competition between media for advertising through to the structure of the commercial radio industry and its financial performance.

This extensive report contains more than 200 pages of text, tables and appendices integrating data from the ABA, Commercial Economic Advisory Service of Australia (CEASA) and other sources.

An important aspect of this report is the emphasis given to the development of economic theory in the early chapters. Broadcasting economics is an area that attracts few researchers and therefore the contribution that the BTCE can make is all the more important. I anticipate this initial work will provide a bridge for applying more general theoretical work to the broadcasting context.

A welcome development is the range of econometric work (statistical procedures applied to economics) in the report. The substantial body of data that has become available over the last ten years on the broadcasting industry provides opportunities to develop and test theory on the economic characteristics of the industry. Accordingly, this review pays particular attention to examples of the econometric work that appear in the report.

Summary of the main content of the report

The chapter 'Advertising and Media Competition' includes topics such as the nature of advertising and the distribution and changes in shares of advertising expenditure between media. Conclusions are that competition between media for national advertising is low and any change in share has came mainly from television gaining share at the expense of other media (except commercial radio). Television has diluted the print media's previously large share of non-national advertising and increased its own dominance of national advertising.

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Competition between different media is measured through an application of niche theory. The concepts of niche breadth and overlap are used to describe the extent of competition between media. Breadth and overlap are described using indices of advertising spread across product groups for each medium and comparative shares of advertising expenditure across product groups for each medium.

Measures of competition based on market share provide an insight into the state of media markets. Further analysis of production costs and how they affect the behaviour of firms to supplement work on market share is necessary. For example, increasing economies of scale in newspaper production through increased concentration of ownership may provide the basis for monopolistic pricing behaviour, where maximising revenue does not lead to a maximum profit. This could go some way to explaining a decreased share of press advertising revenue.

Advertising Expenditure

One topic that has attracted attention from media analysts is the relationship between advertising expenditure and the wider economy. A number of models of this relationship are explored with the conclusion that advertising expenditure is correlated with national measures of gross operating surplus and private final consumption expenditure. Correlation with household disposable income and retail sales was inconclusive.

The models used were either static (relate variables in the same time period) or had limited dynamics (usually only a lagged variable). Among the results for the estimation of these models was that most of the parameters for the lagged variables had negative signs with some testing significant, which is countrary to what would be expected. The parameters for the static models had positive signs and again some tested significant, in line with expectations. The report expresses some reservations about these results and suggests differencing the data as an alternative approach.

As these series are non-stationary (have a trend), differencing would be necessary to produce a stationary series for estimation purposes. This could be achieved through starting from a more general dynamic model that may produce a stronger result. A vector autoregressive model (VAR) would be able to specify the dynamics of the data and eliminating the need to make adjustments for autocorrelation which appeared to be a problem in many of the models used. Different VAR models could incorporate one of the income/economic activity variables and a dummy variable for colour television (this appears to have a significant impact).

Public Good

An earlier version of 'Broadcasters' Market Behaviour' was reviewed in *ABA Update* (No 9/July 1993). The public good aspect of broadcasting services is discussed - public goods are not traded in a market because effectively they are not scarce. Public goods consumption by one person does not reduce what can be consumed by another. Presence of this characteristic limits the efficient operation of markets and often underpins government involvement in the provision of goods and services.

'Provision of Broadcasting Services' discusses the extent of under supply of commercial radio services. Indicators include the value placed on broadcasting licences, anticipated demand for subscription services and the demand for community licences. Average service costs and revenue, derived from ABA figures, are also used as indicators of the extent to which additional services could be accommodated. It also concludes that there is likely to be excess demand for services from consumers.

Public broadcasters are also a means for providing a public good. The general objectives of the ABC and SBS are covered along with a discussion of their cost efficiency and performance as well as detailed information on their staffing and programming costs.

There is a brief description of community radio and the growth in the number of services in this sector.

Commercial Radio

The ownership structure of the industry is related to different measures of output and costs. The largest radio groups increased their potential audience and substantially increased their revenue share over the period although concentration did not appear to increase. Between 1986 and 1991 there was an observable split in the industry with larger media groups consolidating nearly 60 per cent of potential reach. A gradual decline in potential audience of media groups when ranked from largest to smallest reach had become more pronounced by 1991.

The report does not find strong evidence for economies of scale through networking. This is attributed to the cost of sustaining widely dispersed services. However, it suggests economies of scale may result from locating services in adjacent licence areas. Conclusive evidence on economies of scale may require a more detailed examination of network costs.

The examination of the financial performance of commercial radio makes use of averages to highlight the large differences in financial characteristics between categories of services.

The report notes that early in the 1980s, capital city FM services experienced concurrent growth in average revenue above that of capital city AM services. As capital city AM services converted to FM both these measures declined to near the level of average AM services.

Profit before interest and tax (PBIT) divided by total assets, is used as a measure of the profit rate which varied between 9 per cent and 2 per cent in 1991-92 for different capital city groups. However substantial intangible assets in the balance sheets of licensees poses a problem for the measurement of a profit rate. Radio licences are around fifty per cent of total assets and are revalued to reflect expected earnings from the service. They are therefore related to the current level of PBIT through a common relationship to cash flow (many licences are valued on discounted cash flow and PBIT would have a similar trend to cash flow). To this extent, changes in the level of PBIT will cause an adjustment in total assets. A fall in PBIT would therefore lead to a reduction in total assets, with the effect that the profit rate would not fall as much as if total assets were fixed at historical cost.

Alternative measures include a ratio of PBIT to revenue, or gross operating surplus to total product, though these also have limitations in how well they describe the rate of profit or rate of return.

As stated above, there are some welcome developments contained in this publication that point to a greater emphasis on the application of general theory to broadcasting economics and systematic testing of those applications using econometric techniques.

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important to recognise the negative consequences of industry change for the established regulatory order.

The way forward, however, is to go back to the constant, underlying concerns driving our regulatory intentions, and to look for new opportunities for promoting these public interests in the new, emerging communications environment.