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<th>Local broadcasting : commercial or public service?</th>
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<td><strong>Authors(s)</strong></td>
<td>Sheehan, John</td>
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<tr>
<td><strong>Publication date</strong></td>
<td>1983-11</td>
</tr>
<tr>
<td><strong>Series</strong></td>
<td>UCD Centre for Economic Research Policy Paper Series; No. 8</td>
</tr>
<tr>
<td><strong>Publisher</strong></td>
<td>University College Dublin. School of Economics</td>
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<tr>
<td><strong>Item record/more information</strong></td>
<td><a href="http://hdl.handle.net/10197/1356">http://hdl.handle.net/10197/1356</a></td>
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<td><strong>Notes</strong></td>
<td>A hard copy is available in UCD Library at GEN 330.08 IR/UNI</td>
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LOCAL BROADCASTING: COMMERCIAL OR PUBLIC SERVICE?

J. Sheehan

Policy Paper No. 8

November 1983


The Policy Paper series of the Centre for Economic Research consists of preliminary reports on policy-oriented research carried out by members or associates of the Department of Political Economy, University College Dublin. All opinions expressed are those of the contributors and do not necessarily reflect the views of other members of the Department. A list of other publications of the Centre is given at the end of this paper.
LOCAL BROADCASTING: COMMERCIAL OR PUBLIC SERVICE?

"It is occasionally indicated to us that we are apparently setting out to give the public what we think they need - and not what they want, but few know what they want, and very few what they need .... It is better to overestimate the mentality of the public than to underestimate it."

J.C.W. (later Lord) Reith, 1924.

I. SOME ECONOMIC ASPECTS OF BROADCASTING

The basic assumptions of consumer rationality and the value judgements concerning consumer sovereignty which economists take almost for granted are obviously not shared by all parties to discussions on public service broadcasting, as the above quote from Reith indicates. Others have found the Reithian assumptions difficult to accept. R.H. Coase, in his history of the British broadcasting monopoly, remarked that Reith's ideas about which demands ought or ought not be met "implies a philosophy which we now call totalitarian".\(^\text{(1)}\) P. Wiles in his review article on the Pilkington report has remarked of the BBC that it is "an institution once technically forced on us but no longer necessary on that account .... To have maintained democracy despite such an institution is a tour de force of which Britain has every reason to be proud".\(^\text{(2)}\)

However, it is pointless to dwell too long on these basic differences in outlook. Instead it is more worthwhile to consider some other economic aspects of broadcasting which are of relevance to the issues of monopoly versus competition, "public service" versus "commercial" broadcasting, the optimal degree of regulation for the industry, and the Government's proposals for local broadcasting. Four main aspects seem to be important:
(i) The public good nature of broadcasting.
(ii) The problem of externalities arising from interference.
(iii) The limited number of channels available.
(iv) Economies of scale in the production of broadcasting services.

Many of these issues are common to radio and television, and initially the discussion will not differentiate between them. Generally the forces limiting competition are stronger for television. However, the emergence of cable television opens up new possibilities. (3)

(i) Broadcasting as a public good: The public good nature of broadcasting is obvious; one (or any number of) extra receiver(s) does not diminish others' consumption, and the only price which can be charged (quite apart from optimality considerations) is zero. Two types of substitute for ordinary commercial charges have emerged: (a) receiver licences, which are a surrogate exclusion device, but which have increasingly come to resemble poll taxes in incidence and (b) advertising, which overcomes the free-rider problem by selling audiences to advertisers, and uses the advertising revenues to finance "free" programmes. (4)

Each "solution" produces its own type of inefficiency. Licences mean that consumer preferences as between different programme types cannot be revealed (which presumably doesn't matter in a Reithian world where consumer preferences don't count). Enforcement is difficult, as in any attempt to exact payment for public goods, and has broken down entirely for radio, leaving the curious case in the BBC where radio is cross-subsidized from TV licence revenue. To some extent this may be true of RTE Radio One which is probably the recipient of TV licence cross-subsidies. Advertiser-financed commercial broadcasting is inefficient in that it is unlikely to cater for minority tastes or to
take account of the intensity of consumer preferences (i.e. how much consumers are willing to pay for particular programmes). This problem arises essentially from the limited number of possible channels and programmes, together with the presumption that oligopolistic commercial broadcasters in order to maximize profits, will generally seek to maximize audiences for each programme, and in doing so will duplicate "majority" type programmes at the expense of minority ones. While the detailed assumptions about numbers of programmes, programme costs, audience incomes and consequent attractiveness to advertisers, and several other considerations can affect the precise outcome, it can quite plausibly be argued that monopoly can give a "superior" result in terms of consumer welfare, compared to advertiser-financed competition, as the monopolist will tend to maximize total audience, as opposed to audience-per-programme.

(ii) Externalities arising from interference: Analytically this problem is similar to problems of optimal pollution and congestion of public facilities such as roads. However as a public good problem it is quite distinct from that already discussed. If there were only one available frequency, the interference problem would be irrelevant, but the free-rider problem would remain.

Clearly the optimal supply of stations is where the marginal net benefit of the last station is zero. While easily stated in principle, empirical estimation of benefits and (especially) costs is difficult. Interference costs may vary with atmospheric conditions, and in certain circumstances interference is international and internalization of all costs (and benefits) is impossible at the national level. However there are a priori reasons for supposing that there exists a tendency to sub-optimal supply. Frequency allocation, whether at the national or international level is almost
entirely a matter for producer-oriented bodies, and is heavily influenced by engineering considerations. The broadcasting engineer's concept of desirable sound quality is likely to be extremely high, i.e. the optimal level of congestion or interference may be seen as zero. (6) Sound quality is also a function of production and transmission facilities, and the imposition of high technical specifications may also lead to a sub-optimal supply of stations. Given that a great deal of radio reception is on extremely low-quality receivers, in car radios, or is regarded as background accompaniment to domestic activities or work, the marginal benefits of high sound quality may be trivial (or imperceptible) and the marginal costs in terms of high outlay on studios and foregone programmes may be relatively high.

(iii) The limited number of available frequencies: Obviously, the laws of physics set certain absolute limitations, which have been drastically narrowed by the prior allocation of frequencies to defence, police and other public services. (Would these services be less lavish in their requirements if they had to bid for their share against commercial users?) Property rights in scarce (7) frequencies confer economic rents. A major public policy issue is the capture of these rents.

(It is important to clarify what is meant by the term "rent" in this context. "Economic rent" is any excess return to capital, labour or land, whether due to monopoly, licencing restrictions, or nature. Rent is thus a "surplus" in the sense that it is in principle possible to tax it away, without affecting investment or employment or production in the industry in question. Clearly, economic rent is different from the rent paid to property owners (which may contain a large element of interest). More important, rents are not necessarily reflected in the accounting or reported profits of a monopolist or someone granted a scarce resource such as broadcasting licence. Rents can be captured within an
organisation by inflated costs of various kinds, and (much the same thing) by union members in the form of wages and other rewards higher than the returns elsewhere in the economy to corresponding levels of skill).

Auctioning or tendering(8) mechanisms can capture the rents for the auctioneer (or the Exchequer). Administrative allocation of frequencies to broadcasters for a low or zero fee gives the rents ("licences to print money" in Lord Thompson's words) to the broadcaster. Public service broadcasting arrangements will generally confer at least potential economic rents on the broadcaster, but whether they ultimately accrue to consumers of high-cost programmes or to broadcasting trades unions is a matter on which I will not comment. One obvious possibility is a dual regime with the rents from auction/tender for purely commercial stations being used to finance "public service" stations or programmes. Even leaving the evident second-best problems aside, this is not an optimal solution on welfare theoretic grounds, whatever about its practical appeal. It is further examined below.

(iv) Economies of scale: It is not intended to examine cost structures in detail here. There is a strong presumption of scale economies due to a large fixed element in production and transmission costs. The question is how large are these fixed costs? Regulation of sound quality can impose significant fixed costs in the form of expensive studio specifications. Another source is the obligation to transmit large amounts of documentary, current affairs, drama and news which are generally expensive to produce. Thus estimation of broadcasting costs using, say, United Kingdom data where the IBA imposes very stringent regulations,\(^{(9)}\) is likely to lead to high cost estimates and, as a corollary, very few viable stations. This is a separate matter from restrictive practices or X-inefficiency which are the usual charges laid against public service broadcasting. Another aspect of this question is
that part of the "cost" of broadcasting may really be the cost of generally subsidizing the arts, which should, if anything, be borne by a body such as the Arts Council rather than RTE.

II. THE GOVERNMENT PROPOSALS FOR LOCAL RADIO

It is proposed to set up a Local Radio Authority which would award contracts for between 20 and 30 local radio stations. Contracts would be for a 5-year duration and contractors would be subject to a variety of regulations administered by the Authority concerning programme content, advertising schedules and charges, as well as Ministerial powers to levy profits and to prohibit certain broadcast material. The location of the stations has not been decided, but it is implicit in much of the discussion that every community has a "right" to a station. The proposals are currently being considered by the Oireachtais committee on legislation.

Previous proposals for local radio were included in the Independent Local Radio Authority Bill of 1981, which in turn was modelled closely on the legislation governing independent local radio in the United Kingdom. The present (Nealon) proposals differ from previous proposals in some important respects:

(a) The Local Radio Authority will not (as far as we can see) have the task of ascertaining whether a "genuine demand" exists for radio services in an area before seeking bids.

(b) Broadcasting contractors, rather than the Authority, will own and operate transmission facilities, with obvious savings for the Public Capital Programme.

(c) The provisions against media monopoly are strengthened. Newspaper interests (whether singly or in combination) will be confined to minority (or non-controlling) participation in contracts. Also the participation of
the same individual in several contracts may be disallowed in certain circumstances.

(d) A specific right will be given to RTE to up to 25% participation in contracts, other than those serving small (<25,000) populations, in which cases RTE would simply have the right to accept offers of participation from contractors.

III. SOME COMMENTS ON THE PROPOSALS

Three of the above developments (a, b and c) are relatively uncontroversial from the economic point of view. In the first case it would seem to be reasonable that broadcasters have the most information on both the demand for advertising and the demand for broadcasting services in any area, and are therefore in the best position to initiate proposals. Second, (b) in the present financial situation any proposal which can save public spending with no corresponding loss of benefits would be generally welcome. Third (c), local or national media monopolies are a legitimate concern of public policy, and many would argue that insufficient attention has been given to monopolization generally by Irish commercial and industrial legislation. The fourth (relating to RTE) is more problematical because it raises the whole question of contract allocation procedures and the capture of rents. The stated objective of this provision is to protect RTE from loss of advertising revenue due to new entrants. Both the objective and the means to attain it may be questioned.

The first question is the apparent objective of protecting RTE (and local newspapers) from losses in advertising revenue. The model implicit in such policies seems to be that a fixed "pool" of advertising revenue exists. There is little evidence about the price elasticity of demand for advertising,\(^{(11)}\) but the UK experience with local radio is that it opens up new advertising markets, that is, it shifts the market demand curve. More
important, it is difficult to see why protectionism is justified in this instance and not in other similar situations. National newspapers were not protected from the effects of RTE television on their revenue and existing newspapers are not protected from recent entrants at national and at local levels. Finally, the "pirates" are already there and taking in advertising revenue, so legislating for protection at this stage may not be necessary, even in the narrowest of interests, if RTE and newspapers have survived so far.

If one concedes that RTE is somehow to maintain two national radio programmes(12) with a considerable "public service" element (i.e. its schedules are significantly weighted towards the arts, news, current affairs and various minority interests) the problem arises of how to finance such a service. It is fairly obvious that advertising revenue will cover only a fraction of the cost. Receiver licences are not practical for radio. Excise taxes on new radios would have to be so high as to drive what is left of the retail trade across the border. Straight Government subsidy from general taxation is politically unacceptable for various reasons. One possible solution, somewhat arbitrary and without much theoretical justification but worth considering, given the lack of any real alternatives, is to earmark the rents from the "commercial" sector to finance the "public service" sector, a solution which has already been referred to.

Would these rents be sufficient to cover RTE's "public service" costs? At present there is no information on this point, but what can be said is that the Government proposals (like all other regulatory regimes for commercial broadcasting in Ireland and the UK) contain several provisions which dilute any rental income the Local Radio Authority might have available for public service broadcasting subsidies:

(i) Controls over programming schedules which inhibit the maximization of audiences and advertising revenues.
Programming controls which tend to increase costs by mandating more expensive programme types.

Various controls over advertising content which dilute revenues.

The strong probability that regulations will lead to "over-engineering".

The requirement to invest profits in "community development" which obviously diverts rents elsewhere, as does the power of the Minister to levy the "excessive" profits of any contractor.

One does not know how stringent these controls will be in practice, but it is fairly obvious that the less "commercial" and the more constrained is local radio the less surplus over and above a normal return to investment there will be, for any possible subsidization of public service broadcasting.

If one assumes that in addition to maximizing the rental income from highly profitable stations, an important concern is to encourage the maximum number of stations, then it is important that marginal stations are not subject to undue disincentives. Given the frequently expressed opinion that twenty to thirty stations may be an over-optimistic target, this is a matter of substantial importance. In particular proposals, such as those made by RTE, that a 15% levy on all commercial broadcasting advertising revenue be imposed (to compensate RTE) give rise to problems. Any levy which falls on stations which serve small populations and are on the margin of viability will severely restrict the scope for local broadcasting outside a few major urban centres. Reliance on an auction or tender mechanism on the other hand, puts the incidence of charges on those stations which can afford them. If one wants the maximum number of stations, then marginal stations should be subject to the minimum of specific charges.

Before looking at possible alternatives to the Government proposals it is necessary to discuss some aspects of what is meant by local
and commercial radio, and why the need for legislation has arisen in the first place. As Section I of this paper has argued, commercial advertiser-financed broadcasting may lead to market imperfections by duplication of certain programme types and the neglect of others. However, just as one regime does not cater for minorities (especially "highbrow" tastes), public service broadcasting may fail to cater for majority ("lowbrow") tastes. It was this failure of public service broadcasting which led to the emergence of "pirates" to meet market demand. "Pirates" were locally oriented for three reasons: (a) the activity was illegal and risky and unlikely to attract the large amounts of capital necessary for a national commercial station or network, (b) frequency availability was greater for low-power (and thus local) transmitters, (c) local advertising markets could not be catered for by RTE's national network (except by the offer of large discounts and loss of revenue to RTE). Thus it is possible that the unsatisfied demand was for commercial ("popular") radio rather than purely local or "community" radio. The initial response just happened to be local for largely technical and economic reasons.

If this interpretation is correct, then politicians and others have, to some extent, mis-identified what is being demanded. This immediately points to a solution, at once satisfying both the commercial radio interests, majority tastes, and RTE, because it is clear that commercial and public service broadcasting are largely complementary, whereas local community broadcasting (apart from its other problem aspects) is correctly seen by the existing public service broadcasting authority (RTE) as an encroachment into its domain, being to a great extent a local version of public-service broadcasting.

The solution is for the Government proposals to be amended to set up a Commercial Radio Authority, covering all commercial stations, both national and local. The controls on commercial contractors should be the minimum necessary to avoid interference, and other basic departures from public acceptability. Licence allocation
by tender should, if properly managed, yield considerable rents to the Commercial Radio Authority. These would provide a convenient source of income for public service radio.

In this way, RTE and commercial broadcasters would each be able to pursue their quite distinct objectives in their own way, and the conflicting considerations which burden RTE at present, and prospective local or "community" broadcasters also, would be avoided. There is no reason why RTE should not set up commercial subsidiaries to tender for commercial licences, if it felt it had the expertise to succeed. Also there is no reason why time could not be bought, by RTE or the Commercial Radio Authority, on commercial stations for "public service" programmes.

One of RTE's problems is that its "public service" mandate is deliberately non-commercial, yet in the case of radio it does not have the alternative to finance itself adequately. The same "social service" and commercial mixture of objectives has plagued other semi-state companies such as CIE and recently Aer Lingus and the ESB. The whole debate on local, commercial, community and other forms of radio is an opportunity to give broadcasters of all kinds fairly coherent objectives. Unless the present Government proposals are amended this opportunity will have been lost.


(3) Cable services do not have many of the public goods characteristics of broadcast services, and market imperfections arising out of limitations on the number of channels are overcome because with optic fibre technology the number of channels is essentially unlimited. Channels are not necessarily in joint supply so consumers can express preferences in a "pay-per-channel" scheme. Even within channels it is possible to overcome jointness-of-supply between programmes with "pay-per-view" - which advances in technology (notably interactive systems) have rendered more feasible. Thus the conditions for efficient markets appear to be much more promising with cable. A useful recent discussion of the issues in the light of the recent Hunt report in the UK is IEA Hobart Paper No. 96 "Choice by Cable" by C.G. Veljanovski and W.D. Bishop (I.E.A. February 1983).

(4) The ultimate incidence of broadcasting costs under a purely commercial (=advertising financed) regime is a complex question, but they are shared between the advertisers, their customers, and the viewers (who are compelled to endure advertisements along with their chosen programmes).

(5) Hotelling's classic article ("Stability in Competition", E.J. 1929) on product competition shows the conditions under which two firms will market products of "excessive sameness" despite diversity in consumer tastes. Steiner developed a simple model for broadcasting which confirms Hotelling's general results ("Program Patterns and Preferences, and the Workability of Competition in Radio Broadcasting, QJE 1952"). A review of the more recent literature which develops more complex models of the market for broadcasting and shows how various assumptions (especially regarding consumer preferences) influence programme structure, can be found in Ch. 3 "Theories of Program Choice" of B.M. Owen et al., *Television Economics*, Lexington Books 1974. Wiles (E.J. op. Cit) also analyses the influence of market structures on programme choice.

(6) Many economists will note the analogous difficulties of convincing town planners, local authority engineers (never mind environmental groups) that the optimal level of pollution is not necessarily zero.

(8) For a new enterprise such as commercial radio there are obvious information and collusion problems with tendering. However, these are neither permanent nor unsuperable.

(9) It would appear that about 250,000 population in a catchment area is needed to make a viable commercial station in the UK.

(10) The proposals have not been formally published, but were outlined at a Press Briefing on 11/8/83. A full report appears in the Irish Times of 12/8/1983.

(11) The interests of advertisers must also be considered. Some US evidence suggests that cross-media ownership leads to higher advertising prices (i.e. confers a degree of monopoly in advertising markets). See B.M. Owen "Newspaper and Television Station Joint Ownership" Antitrust Bulletin, Vol. 18, 1973.

(12) For simplicity I will assume that RTE television absorbs all TV licence and advertising revenue, leaving the finance of RTE radio as a separate issue, uncomplicated by cross-subsidization.

(13) Reading through the proposals there appears to be a strong implied fear that commercial radio is a licence to "print money" and furthermore that the profit motive in broadcasting is something which requires curbing at every turn. Why should profits from local radio be "invested in community development"? Why not apply this rule to newspapers, or to any other form of enterprise?

(14) Nowhere is any indication given (either in the Nealon proposals or the 1981 Bill) of what constitutes "excessive" profits other than that the Minister may deem profits to be excessive.

(15) RTE's own response (RTE Radio 2) was of course national, and probably entirely appropriate to market demands, except that RTE's over-riding "public service" obligations have inhibited its ability to meet the "pirates" on equal terms.

(16) Largely by ignoring the evident success of commercial-type "pirate" radio and dismissing it as "the worst type of trashy non-stop-pop", etc. Reithian value judgements seem to have an extraordinary degree of acceptance among politicians and newspaper editors.

(17) One cannot argue that this proposal is warranted on optimality grounds. The proposal is made because (a) it minimizes the more glaring conflicts over objectives in the market and (b) alternative mechanisms for subsidizing public service broadcasting (assuming we agree on the need for it) are so conspicuously lacking.

(18) This may need amending legislation, which should not prove difficult or controversial.