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Making a Crisis out of a Drama: Should we Continue Public Financial Support for the British Theatre?

Alan Collins and Chris Hand[1]

Abstract
Following a brief review of some economic theory relevant to the analysis of not-for-profit theatre arts enterprises, the arguments relating to the merits of continuing subsidies to the British theatre arts are considered with respect to both production and consumption benefit perspectives. These are framed around the populist assertions typically levelled against and by advocates of continued subsidy. It is concluded that there is no compelling economic case for maintaining such subsidies.

1. Introduction

Controversy over the public funding of British not-for-profit theatre[2] arts continues to occupy the attentions of arts professionals, politicians, journalists, and economists. It is a subject that provokes strong reactions despite the relatively small amount of money involved. According to Lord Gowrie (Hore-Ruthven 1995), then Chairman of the Arts Council of England, the Arts Council budget equals 0.06 per cent of total public expenditure. If all other cultural funds are included the figure is £0.75 billion short of one per cent. By contrast, the theatre in the German city of Berlin gets more state aid (£224 million) than all the arts received in England (Staunton 1996). Continuing attention has been drawn to an increasing number of threatened or actual theatre closures (Billington 1996, Coveney 1996), and regarding national opera, to suggestions from the current Culture Minister (Chris Smith) that the Royal Opera and the English National Opera should merge facilities. Government support for the arts in England over recent years is set out in Table 1. Whilst there has been a recent decline (1992/93 to 1996/97), this has masked changing regional priorities such that many regional theatres have had a growth in real subsidy from the Arts Council over the period 1986-1995 (Feist *et al* 1996, p.11).

Overlaying this debate is controversy over the nature of the distribution of National Lottery 'good causes' disbursements for the arts. These were initially only permitted to support capital projects[3], yet distributed in a sector dogged by inadequate revenue streams. Furthermore, accusations of elitism continue to be levelled against the subsidised theatre, particularly by those who advocate more independent commercial solutions to cover revenue shortfalls on 'serious' or 'legitimate' theatre. Examples include increasing commercial sponsorship, cross-subsidisation from extended traditional pantomime seasons (Cameron 1993), or the recent case of the Royal National Theatre. They were noted as declaring to stage a revival of the musical 'Guys and Dolls' at the Olivier Theatre, instead of the originally planned diet of classical, renaissance, and Shakespearean plays, for primarily commercial, as opposed to artistic reasons (Billington 1996).

Table 1: Government support for the arts in England (£m, 1993/94 prices)

Year	Grant	Year	Grant
1979/80	125.0	1988/89	165.9
1980/81	119.0	1989/90	161.0
1981/82	123.2	1990/91	168.1
1982/83	130.4	1991/92	175.2
1983/84	128.6	1992/93	191.6
1984/85	130.0	1993/94	189.6
1985/86	129.2	1994/95	182.4
1986/87	169.0	1995/96	181.5
1987/88	164.5	1996/97	177.1

Source: National Campaign for the Arts

An optimal level of subsidy for a given number of performances could, in principle, be determined. The level of subsidy that maximised social welfare could be defined at the point of intersection of the marginal social cost and marginal social benefit curves, but such computation would inevitably be frustrated by heavily subjective judgements, particularly pertaining to the nature and extent of the external consumption benefits. Alternative valuations of the benefits would be likely to lead to markedly different outcomes. In order to fully justify a level of public financial support, the not-for-profit theatre arts would have to demonstrate social welfare enhancement by a comparable or greater amount than any alternative allocation of resources, where the benefits outweigh the costs in terms of alternatives foregone. This paper questions whether the performing arts begin to make a compelling case to this effect.

The paper is organised as follows. Section 2 briefly reviews the economic theory pertinent to an analysis of the seemingly perpetual financial knife edge on which not-for-profit British theatres operate. Sections 3 and 4 explore a number of popular assertions levelled against state supported British theatre with respect to their efficiency in production, and the alleged consumption benefits such theatre arts are said to confer. Concluding remarks are presented in the final section.

2. Economics of not-for-profit theatre enterprises: a brief outline

Not-for-profit theatre arts firms, like for-profit theatre arts firms, mainly exist to supply entertainment. The key difference is that the not-for-profit theatre may have access to state subsidies and voluntary price discrimination (vpr) (ie asking individuals to volunteer to pay (donate) an additional amount, which they may, if the value of the production to them exceeds the ticket price. In this way not-for-profit theatre arts firms can survive in segments of the theatre arts market which for-profit theatres cannot.

Whilst the marginal costs of a given theatre production are very low (once a staged production is in performance, the cost of an additional performance is low, and the cost of admitting another individual to a below capacity audience is close to zero), the fixed costs (ie those costs unrelated to audience size, namely rehearsing, directing, scenery/costume production), represent a very large proportion of the total costs for each production. Indeed, as Hansmann (1981) notes, for many typical not-for-profit theatre productions the demand curve lies below the average cost curve at all points, so that there exists no ticket price for which total admission receipts will cover total costs. In such a case there is reliance from the outset on subsidies and vpr, in addition to earned income. Whether sufficient effort is given to developing greater earned income in the presence of state subsidies and vpr, is, of course, a key point of contention. Whelan (1990) asserts that there is considerable production inefficiency and managerial slack (X-inefficiency) largely as a result of the frequently held aloft banner of 'artistic freedom' contributing to insufficient monitoring of subsidy recipients.

Since not-for-profit theatre arts enterprises could be expected to be dominated by life-long arts professionals devoted to their art, one might reasonably expect an emphasis on performance quality for such firms. Such an objective is more likely to complement the arguments in their own managerial utility functions (to the presumed exclusion of profit related objectives). Hence, in Hansmann's (1981) model of the not-for-profit theatre arts firm, quality is a possible objective to be maximised subject to a zero net revenue constraint (since the firm is not-for-profit). Quality relates to either (i) producing more lavish productions (in terms of stage sets, hiring exceptionally skilled star performers etc.) or (ii) might also be interpreted in terms of producing works of appeal to only 'highly refined' tastes ie, less populist theatre. In essence, for any given quality level, a quality maximiser selects the audience size that maximises its net revenue which it can then use to purchase more quality. Alternative formulations of not-for-profit theatre objectives are also advanced relating to budget maximisation and audience maximisation. In the case of the former, a budget maximiser is shown to operate at an audience/quality level combination between that of the quality and audience maximiser. For any given audience size, the audience maximiser will choose that level of quality that maximises net revenue, since those monies can then be used to reduce ticket prices, which will subsequently attract a larger audience. Such an objective, perhaps, relates most closely to more altruistic motivations for the enterprise, in widening tastes for theatre arts among the general population. Though as Austen-Smith (1994) points out with recourse to a number of audience surveys, that amongst economists,

> ..redistribution of resources solely on the grounds of taste is generally considered illegitimate. This is especially so when the redistribution favours a relatively wealthy and well-educated minority as in the case of arts. (p.239)

The relevance of Hansmann's model to the question of continued public financial support for not-for-profit theatre is that it suggests the main economic justification for a subsidy relates to the very high fixed costs. In the absence of a subsidy, such enterprises may be compelled to set ticket prices too high to satisfy marginal criteria for economic efficiency, making them unviable. That said, though a subsidy may help facilitate efficient pricing, the equity *versus* efficiency conflict would persist. The individuals who consume the performances supported by the subsidy will almost inevitably be a very small proportion of the population who paid for them. Theatre audiences have a greater than average proportion of socio-economic groups

AB and C1, and opera audiences are predominantly group AB (*The Economist* 1994). This inequity might be counteracted by some form of direct consumer subsidy such as a voucher system; but how they would be distributed to genuine potential low income theatregoers (without the opportunity for selling the acquired tickets on to others) without high transaction costs is a serious difficulty. From a public choice perspective, Peacock (1968) has argued that continued subsidy, ostensibly orientated to the preferences of a cultural elite, might simply be a consequence of the focus of the subsidy reflecting the preferences of the choosers - in this UK case the Arts Council (who are also contracted to act as the distributors of National Lottery arts monies). He suggests that in order to avoid this, the membership of such bodies should be regularly changed and be socio-economically heterogenous.

There also exists a school of thought advancing a labour productivity argument for theatre subsidies. In essence, it has been advanced by Baumol and Bowen (1976) that because live performance is technologically resistant to constant labour-saving innovation, ie., to continuous increases in labour productivity, then such enterprises will be exposed over time to 'Baumol's cost disease'. This phenomenon relates to a tendency for the output of the non-progressive sectors of an economy to decline and possibly vanish. A simple algebraic exposition of this phenomenon is presented in the Appendix. Intuitively theatre arts would seem to feature in such a sector since there appears at first sight very little scope for increasing productivity (beyond reducing cast sizes, which has been observed over time (Baumol 1997) without reducing quality or fundamentally changing the product. For example, removing Iago from a production of Othello would reduce labour inputs, but also destroy the product. Live music in theatre could be replaced by pre-recorded music, but would change the nature of the product. Yet whilst some limited support, with recent data, for the existence of this cost disease is provided by Gapinski (1984), Peacock *et al* (1982) failed to find a single example of Baumol's cost disease in the UK. Cowen (1996) suggests that the statistical evidence offered in support of the cost-disease thesis does not address the relevant empirical issues. He argues that these studies do not measure productivity accurately for three reasons, namely:

(a) not accounting for increases in product quality;

(b) not accounting for increases in diversity;

(c) cost disease studies are unduly biased towards high culture pursuits (opera, theatre, symphony orchestras) and neglect current 'cultural winners' such as rock and roll, heavy metal, rap, rave and country music.

He points to the fact that live performance has not declined in general, even if specific kinds of live performance have fallen out of favour. Cowen and Grier (1996) provide alternative empirical tests of productivity in the arts showing artist numbers increasing as a percentage of the population and total labour force, earnings rising faster than the national average, and artists enjoying superior educational opportunities over time.

3. Arguments over continued subsidies - the production side

3.1 Does the theatre produce too many unwanted productions?

Subsidising the theatre inevitably leads to free market overproduction, but it has been argued that such overproduction is socially necessary to serve the option demand for particular types of productions. As Cameron (1993) contends,

> ... people should be given the opportunity to consume a wide variety of cultural outputs whether or not they appear to want them. If the opportunities do not exist, there is no way to cultivate a taste for them. A taste for Pinter is unlikely to be developed from a diet of musicals if there is no opportunity to see Pinter. (p.183)

There is no satisfactory evidence on the extent of option demand. Accordingly this argument does not seem readily capable of being used to inform decisions about subsidising performances of works that only a relatively small number of people seem actually to want to attend. Indeed Whelan (1990) argues that in the case of the Royal Shakespeare Company (RSC) there is an abuse of its subsidy by virtue of the fact they are putting on 'unpopular' plays. Certainly, it does seem that the option demand argument may be reinforcing an unduly paternalistic resource reallocation purely on the grounds of taste. Further, the argument neglects, or may even help justify the diversion of resources away from school education which must play a far more critical role in developing refined cultural tastes. If schools are successful, more refined audience tastes should independently evolve to such an extent that they can be satisfied by demand-sensitive commercial theatre. If they do not evolve, then subsidies are arguably simply advancing another non-compulsory means of trying to shape individuals' cultural tastes to replicate those of a much smaller fraction of the population, who perceive themselves as having more refined tastes.

3.2 More commercial sponsorship should be used!

Commercial sponsorship is frequently held to be a potential saviour in covering (fully or partially) the costs of free market overproduction and the concomitant inadequate revenue streams. If the shadow price of public funding of theatre arts is high, then a greater share of the burden being carried by commercial sponsorship would be economically desirable in welfare terms. Yet potential sponsors clearly have commercial objectives which have an impact on the focus of their sponsorship agenda, such as promoting company names (especially after changes) and logos among 'opinion formers', and promoting and differentiating individual product brands (for example, see Tait (1997) who discusses the relationship between the Royal Shakespeare Company and Allied Domecq). Sponsorship of theatre/opera companies is thus not an example of pure altruism on the private sector's part, but firmly a commercial transaction. Following Simon (1969) and Reekie and Crook (1982) let

$$PV_{Th} = S_{Th0}(1+r)/(r+k_{Th})$$

$$PV_{Sp} = S_{Sp0}(1+r)/(r+k_{Sp})$$

where PV_{Th} and PV_{Sp} are, respectively, the predicted present values of all present and future net sales generated by advertising in the current period via theatre sponsorship and alternative promotion expenditures, such as sport sponsorship or more newspaper and television advertising.

S_{Th0} and S_{Sp0} are, respectively, the increments in sales (net of all costs except advertising) generated by theatre sponsorship and alternative promotion expenditures in the current time period.

r = the firm's cost of capital

k_{Th}, k_{Sp} = the assumed constant rate of depreciation for each type of promotional spending.

Computation of the above expressions would enable some economic assessment to be made of alternative advertising/marketing strategies, since strategies will differ in terms of their awareness impact decay or depreciation pattern. Overall one would expect $PV_{Th} < PV_{Sp}$ but though theatre sponsorship may be forecast to have little immediate impact on sales (and so a low S_{Th0}), it may also have a low value for k (due to, for example, company logos remaining on theatre programmes, brochures, posters etc. over one or more seasons). This suggests it could be useful as a much longer term base element to be embedded in a multiple media advertising or marketing strategy. On its own, however, theatre sponsorship is unlikely to be able to wholly cover any revenue shortfalls caused by total subsidy withdrawal.

3.3 Why don't the commercial theatre and television companies support the subsidised sector instead of taxpayers?

It could be argued that one of London's main attractions to domestic and foreign tourists is the commercial theatres in the West End. However, this ignores the contributions of the National Theatre and the RSC, and the link between subsidised and commercial theatre. The West End has played host to productions from the subsidised sector, one of the best known being *Les Miserables*, which the RSC co-produced. According to *The Stage*, on average 20 productions a year in the West End come from the subsidised sector (Field 1995). It has been argued that without the subsidised sector, the standard of performance in the West End would fall, as would standards in the broadcast media, since the latter benefit from the experiences of actors, directors, and designers in subsidised theatres. There is also a case for subsidy as a means of promoting new writing by compensating for risk, though perhaps too often national subsidised theatres tend frequently to revisit more traditional works. That said, these training-bed external economy linkages have achieved some limited recognition in the industry, with some commercial theatre profits being ploughed back into the regional/subsidised theatre by the Cameron Mackintosh Foundation. No such formal support is provided by the broadcast media. Accordingly, there exists a case worthy of further examination, for the introduction of a hypothecated tax on broadcast media and commercial theatre profits to sustain this training activity, in the face of subsidy diminution or withdrawal.

4. Arguments over continued subsidies - the consumption side

Most of the arguments pertaining to the purported external consumption benefits of continuously subsidising theatre are tenuous and devoid of any robust empirical evidence. Indeed many of these arguments are soundly thrashed in Sawers (1993), but have regularly re-emerged with a new spin as part of the cases advanced by professionals seeking funding from various sources for local economic development.

4.1 Theatre subsidy helps local economic regeneration!

The argument here is that theatre can be viewed as part of a composite good of residential and recreational experience, and where the spillover effects of theatre directly benefit hotels, restaurants and bars. It is argued that its presence may encourage inward investment into an area and it has been claimed that it may improve the quality of life of an area making it a more desirable place to live. These effects may well be true but there is no unambiguously clear case why it should be subsidised theatre acting as a tool of local economic development. In support of the 'arts as a magnet' argument, Myerscough (1988) showed that 42 per cent of those interviewed in Glasgow, 50 per cent of those interviewed in Merseyside and 24 per cent of those interviewed in Ipswich regarded museums and theatres as important for enjoying living and working in the region. The lower figure recorded for Ipswich is perhaps explained by the number of theatres already existing in those cities. In Glasgow there were 22 arts venues with a total of 16,429 seats, in Liverpool 11 venues with 10,788 seats and in Ipswich 4 venues with 3,581 seats (Barbour 1994). Considered objectively, the supporting evidence for this argument is decidedly feeble and would only be strengthened if it could be shown that enterprise was attracted as a consequence (in itself more a case for local rather than national subsidy). In this regard even Myerscough (1988) is reduced to wishful thinking - 'Nobody could say for certain why firms chose Glasgow. Stated reasons were not always the real reasons and quality of life was impossible to disentangle from other factors' (p.136).

4.2 The subsidised theatre confers the psychic benefits of prestige!

The performing arts may confer prestige upon a country if they receive international recognition, or upon a region if it receives national recognition. The level of prestige may be indicated by the decision of foreign performers to join professional companies here. In itself this is not a strong case for continued subsidy, and it is not clear why the same consumption benefit is not also possible from quality commercial theatre.

4.3 The subsidised theatre confers a bequest value of culture for our children!

The argument here is that utility may be derived from preserving the arts for future generations. Although it is acknowledged that the performing arts would not disappear altogether if all subsidies were withdrawn, it is contended that it would be difficult to re-create a cultural tradition. Recent evidence does not seem to support this assertion, particularly given the development of the Globe theatre in London by Sam Wannamaker and others, and the revival of music on period instruments. Further, one might argue that innovation in theatre has been stifled by tradition, and that the subsidised theatre is a main culprit in continually revisiting traditional works at the expense of the new.

4.4 Subsidising the performing arts can help displace social costs!

In the same way as a liberal education is said to benefit society, it is argued that arts do likewise. This argument is developed further by Scitovsky (1983) who suggests that the great arts satisfy a craving for excitement. Should the arts become more popular they would, it is argued, displace other outlets for this craving, possibly replacing gambling or crime. Suspending any doubts we may have about the substitutability of ballet attendance for gambling or joyriding, there is not a single shred of evidence that the arts reduce crime, or in any other way reduce negative externalities, or produce positive externalities from behaviour modification. Further, the social cost displacement thesis need not be addressed by arts subsidies at all. One might consider substituting the arts in Scitovsky's argument with boxing, or rock music, or religion as alternative outlets for combatting potential youth misbehaviour, and thus being equally worthy of subsidy.

5. Concluding remarks

Whilst the subsidisation of the performing arts may be regarded as an investment, attention should be given to the opportunity cost of those public funds, and the scope for displacement of public financial support by the private sector. Whilst the consumption-benefits case for continued theatre subsidy seems generally very weak, inevitably subsidisation leads to an increased level of output requiring more labour and therefore yielding more tax income. It is not clear, however, how many jobs exist because of subsidisation, thus taking the total tax income from this sector (as some have done) would greatly exaggerate the return to government. The subsidised theatre makes some very minor contribution to the UK balance of payments, and by attracting tourists, also contributes to the invisible exports account. Looking at the potential effects of subsidy withdrawal, studies of individual companies are more reliable, but can seriously overstate the losses to the Treasury depending on the accuracy of the assumed employment and expenditure multipliers (For examples of such studies see National Campaign for the Arts, 1995). Inevitably in these studies the opportunity cost of the arts subsidy is typically not given any consideration.

A key objection to funding the arts is that the benefits accrue to a small proportion of the population. If the vague external consumption benefits of the arts are ignored for the moment, the net effect of subsidisation is a redistribution of income to the rich. In the absence of some kind of voucher scheme, subsidising ticket prices will only affect the socio-economic composition of the audience if the demand for the arts is elastic, or the perception of the arts change.

It has also been argued that the theatre would not need a subsidy if it was more efficient, and simply put on less unpopular plays. The existence of high fixed costs and the objective of serving option demand may well, however, frustrate pure market solutions to the production of 'serious' or 'legitimate' theatre. A hypothecated tax on commercial theatre and broadcast media profits could be used to address this problem were it deemed sufficiently serious to merit political action. The conventional wisdom remains that subsidy drives up wage bills and allows monopoly suppliers to raise their prices[4].

Various studies have concluded that the gain from subsidising the arts outweighs the cost. Gapinski (1984) concluded that the RSC gives a benefit-cost ratio of 1.18, ie. every £1 of subsidy returns £1.18 in benefits. Forrest, Grime and Woods (1995) used the Clawson-Knetsch travel cost method[5] in their study of the Royal Exchange Manchester, and found a benefit-cost ratio of 1.083. The findings of these studies do not take account of the potential returns elsewhere with those funds, nor consider the scope for private sector involvement. Yet even though not necessarily socially optimal (particularly with respect to the distributional impact of the subsidy), some level of subsidy can be shown to be economically justified, but only in the narrow institutional context of the status quo.

In short, the case for continued arts subsidy is certainly not compelling, especially with regard to the alleged external consumption benefits, and the absence of real evidence presented for the persistence of Baumol's cost disease. Further, given the history of public services of much greater social and economic significance that have been subjected to privatization and deregulation, some experimentation of subsidy withdrawal with, say, the Royal Opera House, and auctioning it in the private sector, seems hardly radical.

Endnotes

1. University of Portsmouth. The authors are grateful to an anonymous referee for extensive comments on an earlier version of this paper. Any remaining errors are their own responsibility.

2. Not-for-profit theatres are taken to include national theatre and opera companies, municipal/local/regional theatres, and provincial repertory companies

3. Tait (1996) and Meikle (1996) point to movement towards particular American practices in arts funding namely stabilization funding (possibly involving an initial one-off payment to wipe out current debts) and talent funds. The former relates to the distribution to each not-for-profit theatre of monies for a reserve fund to be used as insulation from unexpected shortfalls in their 'working capital'. This approach is an attempt to retain incentives for efficiency as the theatre still faces a hard budget constraint. Talent funds relate to monies for the development and maintenance of premium theatrical skills, or to address particular skills deficits.

4. Spooner (1995) attempts to rebut this view by pointing out that the 1000 employees in the Royal Opera House (cited in *The Economist* (1995) as guilty of serious overmanning), included the corps de ballet of the Royal Ballet, the Opera Chorus, the orchestra, and the technical staff (earning the ROH over £1m by hiring out productions). The rebuttal is not that convincing to the authors.

5. The Clawson-Knetsch method recognises that potential users of a recreational facility face different generalised costs if travel costs are included. The effects of distance on the usage of the facility can be examined and a demand curve for the entire recreational experience (journey and tickets) estimated (the Clawson demand curve). From the demand curve the consumer surplus may then be calculated.

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Appendix - The labour productivity argument for theatre subsidies

Assume there are two sectors in the economy. In sector 1 the productivity of labour is constant, in sector 2 output per person grows cumulatively at a constant compounded rate (r). Using Baumol's (1967) notation the output at time t is as follows:

$$Y_{1t} = aL_{1t}$$
$$Y_{2t} = bL_{2t}e^{rt}$$

where a and b are constants. Suppose that wages are equal in the two sectors at a level W_t and the wage rate increases with productivity increases in sector 2. From this we can show that costs in sector 1 (the unprogressive sector) will rise without limit while in sector 2 costs will stay constant:

$$C_1 = W_tL_{1t}/Y_{1t} = We^{rt}L_{1t}/aL_{1t} = We^{rt}/a$$
$$C_2 = W_tL_{2t}/Y_{2t} = We^{rt}L_{2t}/bL_{2t}e^{rt} = W/b$$