



PAYING FOR

broadcasting

THE HANDBOOK

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ROUTLEDGE


What does the future hold for broadcasting in Britain? What revenues will be available for funding programming in the 1990s and beyond?

British broadcasting stands on the threshold of immense change. The BBC is reviewing its purpose and funding in an era of deregulation, mixed funding and multiple services. The independent television companies have staked their futures on advertising revenues which may not materialise; meanwhile, broadcasters face increasing competition for viewers and revenue from satellite television channels.

There is much agreement about what the audience wants in the 1990s: quality programmes, diversity, home-grown entertainment, comprehensive cultural coverage and reliable information at the flick of a switch. There is less agreement about how these needs are to be met and what balance is required between commercial and public broadcasting to ensure that they are satisfied.

Paying for Broadcasting: The Handbook takes these debates on board through a wide-ranging discussion of funding options open to broadcasters. Commissioned by the BBC to inform debate in the run up to the 1996 Charter Renewal, and drawing on examples from Britain and other worldwide broadcasting markets, the authors explore the histories of and project future possibilities for the revenues available from different sources: advertising and sponsorship, subscription, programme sales and co-production and various kinds of public funding.

This book is essential reading for broadcasters, journalists, civil servants, policy makers and academics involved and interested in the future of broadcasting.

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WITHDRAWN



FROM STOCK

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Foreword

What role is there for the BBC in the year 2000? What broadcast services will be flourishing in Britain at the end of the decade? How satisfied will audiences be with the radio and television channels then available? A new Broadcasting Act has created the framework for the commercial sector. Now the debate is switching to the BBC, its purpose and funding.

There is much agreement about what audiences are likely to want in the nineties; quality programmes, diversity, plenty of entertainment, with British not transatlantic roots, performance in music and drama, cultural coverage, reliable, accurate news and a wide range of information at the flick of a switch. There is less agreement about how these needs will be met and what balance is required between commercial and public broadcasting to ensure they are satisfied.

This is hardly surprising. Satellite, cable, subscription and digital technologies are revolutionizing the industry, but it is early days yet to assess their full effect. Ten years ago, there were only four commercial television services in the whole of Europe; now there are 58. Indeed, the United States is the only broadcasting market offering more than a decade's experience of deregulation and broadcast plenty. There is enough evidence, though, to indicate the main trends.

Broadcasting is extraordinarily competitive. In no other market can consumers exercise a series of choices within minutes and without leaving their armchairs. Revenues follow those choices. While this competition can and does produce excellence, particularly in popular genres, it also drives commercial providers to concentrate on the mass market. Most programmes create profit only by playing to large audiences and maximizing consumption. A few, highly valued genres, notably films or sporting events, can yield even more in a limited market now that it is possible to control access through subscription technology and charge a premium for preferential access.

Broadcasting, in fact, includes several distinct but overlapping markets, funded respectively by advertising, subscription, pay-per-view (whether on-air or through the video shop), and public funding; all supported by the proceeds of growing international sales.

The quality of British broadcasting in this mix will depend on the revenues available for British programme-making. So understanding what drives the markets concerned and how sources of revenue determine types of programme production is vital, if broadcasters are to supply the programmes people want within the right competitive framework.

The BBC commissioned the independent revenue reports published here as part of a year's programme of market analysis and research into the future of the industry. They represent the personal views of the authors, not BBC judgements. The opening commentary offers a guide to public policy questions and to using the data available; but this volume does not attempt to draw overall conclusions. With the exception of the chapter on direct funding (Chapter 6), the reports involve no prescriptions. They are intended as neutral accounts of the marketplace. In the chapter on direct funding, the authors analyse market failures in broadcasting and argue the case for correcting them through public policy. There is room for debate and disagreement about their conclusions, as about the spending forecasts made in the other chapters.

Nevertheless, the BBC found the analysis and predictions about market developments powerful and relevant to its own strategic discussions. Taken together, they contain much of the data needed to inform decisions about the future shape of broadcasting. They are published here as a contribution to public debate about the future of one of Britain's most successful industries.

Patricia Hodgson¹

¹ Patricia Hodgson is Head of the BBC's Policy & Planning Unit and commissioned these studies as a contribution to the BBC's own forward planning process. Particular thanks are due to Mark Oliver and Paula Carter for their contributions to this work.

Policy Questions in British Broadcasting

Tim Congdon

The next 20 years will see many radical changes in British broadcasting. Inevitably these changes will provoke an intense debate about the ideal policy framework for broadcasting services. The debate may evolve on familiar lines, with supporters of market freedom in dispute with advocates of state involvement. One point therefore needs to be emphasized at the outset: the main dynamic behind the current reappraisal in broadcasting is the development of technology, not a shift in public attitudes. The challenge to existing international arrangements, in particular to the public funding of broadcasting services, would arise regardless of the political complexion of the government of the day. There is a clear need to identify how recent remarkable changes in technology might interact with political and other considerations in determining the future shape of broadcasting. This volume presents a number of papers which analyse the new and exciting, but often difficult issues now confronting policy makers.

This introduction aims to set out the background to the papers. It tries to ask relevant questions and to isolate key issues, and does not claim to offer even tentative answers. The discussion will concentrate on television broadcasting,

where developments in technology and regulation will be particularly dramatic, but many related questions apply to radio and are dealt with in this volume.

The pivotal change, from which all the other interesting and significant consequences flow, is that technological progress has altered the characteristics of television supply. Because television has traditionally been the classic example of a 'public good', policy-makers have had to treat it differently from other goods and services and, indeed, from other media such as newspapers and magazines. But in the 1990s and the first decade of the next century television will increasingly resemble a standard private good. The case for a distinctive financing structure and special regulatory arrangements will become less straightforward. Crucially, the existing rationale for the BBC and the licence fee will need to be re-examined.

In the first section of this paper the most significant changes in technology, and their impact on television supply, will be explained. The second section will review possible alternative methods of financing television, given the new technological environment. The pattern of financing has a vital bearing on the demand for individual television productions and so on programme quality. The third section will therefore ask whether programme quality is threatened by the coming changes in the industry. Examination of this topic leads to a wider discussion of international trade in broadcasting products, where both the BBC and independent British television companies have much at stake.

I

A 'public good' (or 'collective consumption good') was defined by Samuelson in a famous journal article as something 'which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individual's consumption'. Whereas a free market economy is successful in matching the supply of private goods with the demand, 'no decentralized pricing system can serve

to determine optimally' the consumption of public goods, because 'it is in the selfish interest of each person to give false signals, to pretend to have less interest in a given collective consumption activity than he really has'¹. When television was first invented, it was clearly a public good as Samuelson had defined the term. Once the broadcasting station and television transmitter had been set up, a decision by any one citizen to tune into a programme did not encroach in any way on other citizens' ability to watch the programme. Both the marginal cost of supplying a new viewer and the price confronting him were zero.

Because customers do not give the correct signals about how much they value public goods, the private sector systematically under-provides them. Indeed, with early television the situation was worse than this. If the technology had been available for viewers to say how much they valued the overall television service and to indicate an appropriate price, they would have misled suppliers by understating their demand. But the technology for them to express their preferences, for either the service as a whole or particular programmes, did not exist. Moreover, the range of channels was limited, with only one (the BBC itself) initially, and genuine competition in supply was impossible. In such circumstances the natural method of payment was tax-based. The two main possibilities were a grant from government (i.e., for TV broadcasting to be financed from general taxation) and a licence fee, with the revenue exclusively for BBC purposes. The licence fee was preferred, partly because it was thought more likely to insulate the BBC from political pressure. The absence of market mechanisms also justified extensive regulation of programme content, viewing times and so on.

The first major evolution of the situation was the introduction of commercial television. After the necessary legislation had been passed in 1954, the Independent

¹ P.A. Samuelson (1954) 'The pure theory of public expenditure', *Review of Economics and Statistics*, 387-9. The quotation is from p. 387.

Television Authority was created. It owned and operated transmitting stations, and superintended competition in the supply of programmes from several independent companies. With the programmes financed from advertising revenue, a loose connection was established between customer preferences and the incentive to supply. The more viewers a programme had, the more valuable the advertising airtime sold with it.

But the structure of the television industry was still remote from the competitive ideal. There was competition between the BBC and Independent Television (ITV), but it was competition of a regulated and artificial kind. Its artificiality was reflected in the extraordinarily high profits earned, with Lord Thomson describing the ownership of television companies as 'a licence to print money'. The value of advertising airtime was far in excess of any conceivable costs of producing programmes. The government therefore imposed a special levy on the companies' profits, which reduced the incentive to control costs and led to wasteful restrictive practices. Despite the subsequent addition of two further channels (BBC2 and Channel 4), in the late 1980s the industry remained highly regulated by the standards of other products and services.

Recent and prospective developments are far more drastic than the move from monopoly to duopoly in the 1950s, and from duopoly to oligopoly in the 1970s and 1980s. As Veljanovski remarked in 1989, 'It took nearly a quarter of a century for the number of television channels to expand from one to two, and another 20 years for this to double to the present four channels. In the next year or so the number of channels available to British viewers will be measured in 10s.'² Three particularly important technological innovations have made this multiplication of channels possible.

First, direct payment for individual channels has become

² The quotation is from Veljanovski's preface (p.vii) to C. Veljanovski (ed.)(1989) *Freedom in Broadcasting*, IEA, London.

possible, through cable and satellite. (In the USA there are even 'pay-per-view' channels, which allow viewers to pay for individual programmes.)³ Direct payment establishes information flows about products between viewers and broadcaster, as in more conventional market structures.

Secondly, the potential number of channels is no longer technically limited by the availability of wavelength. In the jargon, 'spectrum scarcity' is going to disappear. In some parts of the USA a viewer with full cable connections, a sufficiently powerful satellite and a large enough TV budget already has access to over 50 channels. Europe is some way behind, but — if they have the right equipment — viewers on this side of the Atlantic can receive about 20 satellite channels. In the very long run, as technology improves, viewers may be able to access channels from many countries and the market in television may become truly global. If so, competition will be between an extremely large number of suppliers, as in other markets.

Thirdly, with the rapid expansion in the number of households owning video cassette recorders, viewers are able to record and store programmes, and choose when to watch them. The greater flexibility of viewing times strengthens the connection between demand and supply. Obviously, households with two or more TV sets and VCRs can record two or more chosen programmes simultaneously. As in other market contexts, customers can register their support for good programmes and express their displeasure for bad ones.

As the technology of payment for channels and programmes improves, and as the number of channels rises, the structure of the market in television broadcasting will increasingly resemble that of most products and services in a market economy. It may have taken 50 years for the BBC's monopoly to give way to the oligopolistic pattern of the mid-1980s, but there is every chance that the next 25 years will see oligopoly replaced by real competition. By (say) 2020 a large

³ See the accompanying report by NERA, Chapter 5, page 104.

number of suppliers may be offering broadcasting products to millions of viewers in several different ways (cable; satellite; conventional terrestrial services financed by subscription, advertising or public funding). Broadcasting will no longer be the pre-eminent example of a public good, but instead a host of broadcasting services and products will seek customers like other private goods.

This change undermines the traditional argument for treating television broadcasting differently from other activities and, in particular, for subjecting it to official regulation. In his 1981 MacTaggart Lecture to the Edinburgh International Television Festival, Peter Jay contrasted newspaper publishing and 'electronic publishing'. He noted that in modern liberal societies newspaper publishing was substantially free from official regulation and control, as people had 'the basic freedom to publish, to create a new publication, to contain in it any material whatsoever within the general laws of blasphemy, libel, national security and race relations etc.' But matters were different with electronic publishing. 'It is quite simply impossible, as things stand, for any individual or private institution to communicate with his fellow citizens by way of broadcast radio or television unless he has been appointed by a chartered or statutory body to do so.' Quite apart from respecting the laws of blasphemy, libel and so on, communicators in electronic publishing also had to conform 'to a most elaborate series of formal and informal codes affecting the content, balance, timing, etc. of such publications'.⁴ But, if television ceases to be a public good, and approximates to a private good like newspapers and magazines, are there then any valid reasons why electronic publishing should be regulated differently from newspaper publishing? Is there any argument for the 'elaborate formal and informal codes' which circumscribe the production of television programmes?

⁴ See the paper 'Electronic publishing', pp. 219–36, in P. Jay (1984) *The Crisis for Western Political Economy and Other Essays*, André Deutsch, London. The quotation is from p.223.

An equally fundamental issue for policy-makers is how television broadcasting should be financed in the new technological landscape. As we have seen, in the 1940s and 1950s the case for the licence system depended on certain unique attributes of the supply of broadcasting services. But with the supply of such services increasingly similar to that of other products, what is the merit of retaining the BBC licence? Why cannot television channels and programmes be paid for in the same way as newspapers, magazines and books? The diversity of payment arrangements for conventional publishing (advertising exclusively for free sheets and controlled circulation magazines, advertising and sales revenue for newspapers, and so on) might eventually be matched by equally diverse structures for electronic publishing. An argument can be made that it is wrong for policy-makers to impose their own preferences in this area. Perhaps the market should be allowed to decide. Parliament does not force citizens to pay an annual licence fee for the right to read newspapers. Some people might ask 'why — in the Brave New World of unrestricted electronic publishing — should they be made to pay a licence for the right to receive television?'

However, these views cannot be allowed to pass without critical comment. There is admittedly a general recognition that both the regulatory apparatus and the methods of payment for television will have to be altered in coming decades, and there is widespread agreement about the direction of the changes. They will be towards a more market-orientated system. But a market-orientated system will have its drawbacks. One of the most important insights in the theory of the firm is that the price mechanism is costly to operate, because market participants incur costs in setting prices, comparing them and deciding on the best options.⁵ In the case of broadcasting, these costs could be particularly heavy. Most significantly, the set-up costs for satellite and

⁵ R.H Coarse (1937) 'The nature of the firm', *Economica*.

cable systems, and the costs of billing and administration once they are in existence, will be very high compared with the costs of collecting the licence fee. It should also be emphasized that the number of channels will never be infinitely large, while producers cannot — in any world now conceivable — reduce the costs of making individual programmes to the cost of commissioning newspaper articles. (Programme costs are in tens or hundreds of thousands of pounds; the cost of an article is in hundreds of pounds.) Each channel will still have to select programmes from a limited menu of independent producers. For example, production companies may sometimes have to tender for programme slots. This process will be wasteful by definition, since some tenders will inevitably be rejected.

These points will have particular force and relevance in the next 10 or 20 years. Broadcasting will evolve step by step towards a market-orientated system; it will not be a once-for-all leap to the adoption of a totally new technology. One of the main difficulties for policy-makers during the period of transition will be to time changes in regulation to keep pace with the changes in technology. It is all very well to say 'let the market decide', but any market structure necessarily reflects past history and an accompanying regulatory framework. We cannot know what 'the market would decide' in the absence of regulation because regulation has been an abiding feature of all previous broadcasting systems. A recent pamphlet from the Centre for Policy Studies said the Peacock Committee envisaged the final outcome of advancing technology as being 'a multi-channel environment where viewers would pay to watch individual programmes', and described the vision as 'admirable'.⁶ But it also pointed out that a multi-channel environment on these lines would not be available in the 1990s or even, probably, in the first few years of the next century. In the interval between the present oligopoly and the ultimate situation of free competition is

⁶ D. Green (1991) *A Better BBC: Public Service Broadcasting in the 1990s*, Centre for Policy Studies. London, p. 29.

there still an argument for a licence fee?

Moreover, even in the very long run, when all the technology is installed, government subsidies for particular channels and/or programmes may be justifiable for a number of reasons. The BBC is recognized to have produced many programmes of exceptional quality and to maintain a high degree of impartiality in its news coverage. A case can be made that, if it were subject to the full rigour of market forces, quality and impartiality would suffer. There is no room here to assess the different views in detail, but the main question is obvious enough and highly controversial. Can a case for continued public financing (whether through the licence or another means) be made which does not rely on the value judgements of a restricted group of eminent persons? Almost no one nowadays would agree with Lord Reith's famous remark in 1922 that, 'few [listeners] know what they want, and very few want what they need.'⁷ But is there nevertheless some virtue in his notion of a 'policy of moral responsibility' in broadcasting? And, if so, is it not unavoidable that certain individuals have to be selected as having a particularly well-cultivated understanding of what the BBC's responsibilities are?

II

Payments for television services at present take three main forms — the BBC's licence fee, Independent Television's advertising revenue and various types of direct payment for subscription television (i.e., both satellite and cable). Licence and advertising revenue are currently far larger than other payments, and they finance only four channels (BBC1, ITV, BBC2 and Channel 4). As the structure of the television industry evolves in coming decades, this pattern of payments will change drastically. The BBC's licence fee is likely to come under increasingly critical public scrutiny, while direct

⁷ Quoted on p. 227 in the paper 'Models of broadcast regulation' by M. Cave and W.H. Melody in Veljanovski (ed.) *Freedom in Broadcasting*.

payments for channels and programmes will undoubtedly grow faster than advertising revenue for several years. Of course, the balance between the three forms of payment is difficult to forecast precisely. A host of uncertainties include the behaviour of the rest of the British economy, the characteristics of the demand for television products and the shape of the regulatory structure. There has been a particularly notable discussion, involving a large number of economic consultants, on the elasticity of the demand for advertising airtime.

But one definite conclusion seems to emerge from all the work that has been carried out: total payments for television will not rise as rapidly as the number of channels. On the reasonable assumption that individual programmes are not repeated more often than at present, it must follow that the average revenue available per programme will fall sharply. This has promoted fears of a decline in programme quality and an increased reliance on imports of standardized American products. Paradoxically, the strengthening of competition in the television industry, which is supposed to benefit consumers, may degrade the quality of the programmes on offer, which is against the consumer's best interests.

This is an awkward issue, undoubtedly one of the most difficult likely to face policy-makers in the next few years. There is ample room for debate about not only the size of the market for television products, but also about the exact definition of programme 'quality'. It also needs to be remembered that a conspicuous weakness of the oligopolistic structure of the industry in the past was over-manning and waste in programme production. As is well known, the potentially massive profits to be earned in the independent sector were reduced by the government's levy. But the high rate of the levy tempted management and unions to recruit large numbers of technicians and support staff, and to give excessive pay packages to everyone involved. Economists describe the returns in excess of those required to persuade labour and capital to enter an industry as 'economic rent'.

Under the old oligopolistic regime, with a restricted number of channels, people working in television were able to capture part of this rent for themselves. As the number of channels rises, and as the industry moves closer to the competitive ideal, the possibility of earning 'economic rent' in this way will be removed.

As revenue and costs per programme fall, there is nevertheless still a danger of a substantial loss of quality. This danger is greatest in areas such as drama and current affairs, where programme costs are unavoidably high and the BBC has a unique reputation for excellence. Could economies in the production of some of the BBC's more famous series have been carried out, without changing their character? In view of the remarkable contribution they have made to our national culture, would the economies have been sensible?

There may be some scope for true cost savings. It would be wrong to underestimate the flexibility of programme producers. As Bill Shew mentions in his chapter (Chapter 4), two or more companies sometimes agree to produce a programme jointly and to share the revenue. More efficient use of production facilities may also become feasible, if the traditional vertical structure of programme production gives way to more atomistic and competitive arrangements. In the past the BBC and ITV companies undertook every stage of the process including all the ancillary technical functions. In future producers will increasingly recruit cameramen, lighting experts and so on as they do actors, analysts and presenters for each individual production, and hire studios only as needed. With the price mechanism at work, waste ought to be cut back.

But a better way of meeting the challenge of competition would be to expand the market for television products. If the size of the market can be increased sufficiently, it may be possible to maintain the same resource commitment to those programmes with international appeal as at present, despite the rise in the number of programmes. If the UK's own domestic market is limited, the answer may be to seek a larger foreign market for UK-made television products. The 1980s

did indeed see rapid growth in exports of British television programmes. If the television industry can expand further into foreign markets in the 1990s, programme production may continue to be as well funded as before.

III

The prospect of increased international trade in broadcasting products should be welcome to both the BBC and independent British companies. As English is the international language, they have an inherent and substantial advantage over television production companies in the non-English-speaking world. However, here too the advance of technology will create new challenges and raise difficult policy issues.

Most obviously, television can cross borders. Even in the era of national monopolies financed by licence fees people living close to international frontiers could pick up transmissions from two countries. In the coming period of technological upheaval the possibilities of cross-border transmission will be far more extensive. Cable television may remain confined to national jurisdictions, if legislatures and regulators so decide. But satellite transmission opens altogether new horizons. If technology were taken to its limits, truly global television would become possible. Viewers anywhere in the world would be able to buy British-made television transmitted from Britain. Equally, viewers in Britain would be able to receive television made in scores of other countries. The world would move even closer to McLuhan's vision of a 'global village'.

But it is important not to be too over-enthused by the technological potentialities. The vision of global television will not be realized in the next 10 or 20 years, and quite possibly it will never be realized. Much continues to depend on the attitudes of governments and regulators. There has been a recent trend, notably in some European countries with the blessing of the European Commission, to place quota restrictions on the foreign-made proportion of a channel's programmes. This type of cultural protectionism may not be

viable in the very long run, because — as we have emphasized — satellite television can be transmitted across frontiers. But it is certainly effective in the current technological environment. Moreover, it could impede the international spread of cable and satellite services in the next 20 or 30 years because these rely, for example, on billing arrangements having authorizations from national governments.

As in so many other policy areas, Britain's attitude towards international trade in broadcasting is uncomfortable. In its historical position as the leader of the English-speaking nation it has much to gain from the globalization of television and must favour free trade in broadcasting; as a member of the European Community it has to recognize that its neighbours may have mixed feelings about a rising proportion of American- or British-made programmes appearing on their television screens. Again, there is no simple, uncontroversial answer. An added complication is that international and domestic issues intersect in a number of ways.

For example, the prospective debate about cultural protectionism has a bearing on the more familiar issue of the future of the BBC's licence fee. Licence revenue may be represented as implicit subsidy for one of Britain's more successful industries. However, a licence fee for public service broadcasting may be defended, even in the competitive, technology unconstrained environment of the future, on the grounds that it encourages national culture and promotes artistic standards.

The coming debate about the future of British broadcasting will not be complete unless it is set within the wider international context. It is clearly true that the full potential of the new technologies will be fulfilled only if broadcasting becomes more international and, ultimately, global. The more that broadcasters in one country can transmit across frontiers, the more programmes there will be for viewers to watch and the closer will be the approximation to the competitive ideal.

Paying for Broadcasting: Executive Summary

The Commercial Funding of Broadcasting

During the 1990s, direct payment (subscription, pay-per-view and video rental) may overtake advertising as the most important single source of funding for commercial broadcasting in the UK. Many channels will compete for these revenues.

Terrestrial services dependent on advertising (Channels 3 and 4 and commercial radio) may find their income squeezed and not much greater in real terms by the year 2000 than it was in the late 1980s. This is likely to lead to a cheaper programme mix, pressure to spread costs through repeats, acquisitions and sales and, eventually, to industry restructuring.

Direct payment, by contrast, promises significant growth during the 1990s to become the most important source of television revenue. However, pay-television has so far delivered a different mix of programming from that provided by 'free' television, with an emphasis on feature films, sport and children's channels. A substantial proportion of direct payment revenue — as much as a half — is required to fund the delivery systems of cable, satellite and video services.

Television Advertising

- During the 1980s television advertising revenue grew at an average annual rate of 7.1 per cent. This growth was exceptional in many ways, as the decade saw, in tandem, rising structural demand for the medium and above average consumer expenditure. Such conditions have only previously occurred between 1955 and 1969 – the early years of commercial television in the UK.
- Since the Peacock Inquiry in 1986, forecasts for future revenue growth have ranged from 2 per cent to 12 per cent a year. Forecasts underpinning the 1991 bids for the new ITV franchises ranged from an average annual growth rate of 3.2 per cent to 6.2 per cent. The difference between high and low forecasts produces a revenue gap by the year 2002 sufficient to fund Channel 4 twice over.
- What actually happens to growth in real advertising revenue will be of crucial importance to the new ITV contractors, given the wide variation in bids made to secure the franchises. It will also be of importance to the audience, since the quickest way for a contractor under pressure to cut costs would be to reduce programme budgets and increase the proportion of repeats and imported programmes.
- This study predicts that, as the structure of the airtime sales market changes from regional monopoly to real competition, future revenue growth is unlikely to match past experience.
- The introduction of cable and satellite, the launch of Channel 5 and increased penetration of all new channels is likely to lead to a significant growth in the supply of commercial airtime during the 1990s. The market will become much more competitive, with commercial television seeking to take audiences from the BBC. The response to an increase in supply of commercial audiences on a significant scale is predicted to be a significant fall in price. The effect of this structural change will be a dampening of revenue growth.

- This study, therefore, predicts an average annual growth rate for television advertising of around 4 per cent, at or just below the median predicted in the ITV franchise bids.
- The future profitability of individual contractors will depend not only on overall revenue growth, but also on cost structures and audience share in an increasingly fragmented market.
- Audience share for the two BBC channels by the year 2000 has been variously estimated at between 33 per cent and 39 per cent. This study predicts vigorous competition, leading to a low BBC share of around 32 per cent and an ITV share of about 34 per cent. Channel 4 is thought likely to achieve a share close to 8 per cent with cable, satellite and Channel 5 together achieving around 26 per cent.
- Whilst the overall prediction of advertising revenue is an increase to £2,419 million (1991 prices) by the year 2000, £392 million of this revenue could be attributable to non-terrestrial commercial channels. The revenue accruing to the ITV companies in the year 2000 may not be very different, in real terms, from the equivalent 1988 figure.
- The most visible reaction to a more competitive market and slower growth in commercial revenues is predicted to be a reduction in the production of more expensive programming. It seems likely that resources will be concentrated on the production of peak time programmes, with a reduction in off-peak programming costs. Investment in programmes for minority audiences would probably also decrease. There is also a possibility that some ITV franchise holders who bid large amounts for their franchises, based on more optimistic revenue growth forecasts, could experience real financial difficulties, perhaps even bankruptcy.
- If the BBC were to sell two minutes of advertising per hour it would be likely to further increase the supply of commercial minutes by an amount equivalent to a 13 per cent increase in the total commercial audience. It is estimated here (and has also been argued in earlier studies)

that such an expansion in supply would be met by inelastic demand, such that total revenue would fall to a predicted £2,382 million in the year 2000, a reduction of £37 million compared to the forecasts for a market where the BBC does not take advertising. The brunt of this reduction would be borne by the ITV companies, whose predicted revenue in the year 2000 would drop by £262 million.

Television Sponsorship

- Prior to the 1990 Broadcasting Act there were stringent constraints on broadcast sponsorship, except in relation to coverage of sporting and artistic events. These constraints no longer apply to commercial television.
- Sponsorship now provides broadcasters with a means of raising revenue from advertisers other than through the direct sale of commercial airtime. There are currently three types of programme opportunity:
 - network properties, e.g., national weather/events coverage such as the Rugby World Cup;
 - network programmes;
 - regional programmes.
- Estimates of the value of television sponsorship are unreliable at present. Broadcast sponsorship in 1990 may have been worth £7 million. Studies extrapolating from commercial airtime sales estimate future revenues reaching anything between £35 million and £68 million at 1991 prices by the year 2000.
- Such estimates should be tested against a number of substitution factors:
 - sponsorship of coverage of sporting or artistic events could divert sponsorship moneys from the event to the broadcaster, raising the cost of access to the event and reducing the overall gain for the broadcaster;
 - sponsorship opportunities may divert money from advertising budgets, rather than leading to an overall increase in commercial revenues;

- sponsorship may be found to be an imprecise alternative to advertising so that growth predictions are not fulfilled.
- The factors leading to pessimistic predictions of advertising growth in this study may also apply to sponsorship.
- Reliable evidence of whether sponsorship will generate significant new revenues for British broadcasting must wait on the experience of the commercial sector over the next few years.

Radio Advertising

- Radio advertising in the UK accounts for just 2.8 per cent of total display advertising, compared to a European average of 6 per cent. Whilst deregulation will dramatically increase the number of commercial channels in Britain during the 1990s, there is inconclusive UK evidence about the extent to which the increase in supply may generate an increase in radio's share of total advertising revenue. Radio's share of display advertising reached 2.8 per cent by 1980 and by 1991 it was still 2.8 per cent in spite of the fact that commercial listening doubled.
- The introduction of three national commercial (INR) stations and the continued growth in (local) ILR stations resulting from more incremental licences, means that commercial radio stations could take around 55 per cent of total radio listening by the mid-1990s with the BBC's share falling from 62 per cent now to around 45 per cent. Beyond 1995/96, the Radio Authority will be allocating new incremental services on 105–108 FM, leading to further growth in ILR audiences at the expense of existing local stations, INR stations and the BBC. The BBC's share may fall as low as 40 per cent by the end of the century, even without structural change on the BBC side.
- The increase in commercial radio's share, combined with a small projected increase in hours of radio listening, is likely to increase the supply of commercial radio

audiences by around 80 per cent between 1991 and 2000. Such a significant increase in supply is likely to depress prices and may constrain revenue growth to the point where it is insufficient to sustain all the new services.

- However, since the overall share taken by commercial stations is predicted to exceed 50 per cent, a point at which radio revenue has shown significant increases in other countries, and since there will be increased targeting opportunities offered by the combination of local, national and community stations, it is not unreasonable to assume that the market for radio advertising could expand as a result of increased commercial listening to something closer to average European levels.
- With the introduction of the three INR stations, most of this increase in commercial listening is likely to occur between 1992 and 1995. If this is combined with general growth in demand as a result of economic recovery, radio advertising could show a period of real growth in the mid-1990s, delivering a 3.1 per cent share of all display advertising by the year 2000.
- There is a clear conflict between evidence drawn from past domestic behaviour and international comparisons. The most optimistic revenue forecasts based on UK experience suggest insufficient growth to support the expanding commercial sector, with INR1 and INR2 likely to be profitable, but INR3 a marginal service and substantial restructuring required in local commercial radio.
- A forecast based solely on international evidence, however, would assume that a step increase in overall commercial listening could grow radio's share of advertising revenues closer to 6 per cent of all display advertising. This would ensure the viability of a commercial radio market larger than currently planned. The discrepancy between these two forecasts suggests a decision on whether any BBC stations could be funded from advertising cannot be taken with confidence until

the performance of INR provides further evidence of the level of UK demand for radio advertising.

Programme Sales, Co-productions and Acquisitions

- Competition is spurring TV operators to pursue more extensive arrangements for sharing programme production costs.
- Within the last decade the number of TV channels available in the UK has grown tenfold and hours of TV broadcasting more than sixfold; the combined audience of Channel 3 and the BBC has declined about 15 per cent.
- Increased competition has also fuelled rising programme costs, which have been growing 30 per cent faster than the general price level.
- These trends have stimulated more extensive sharing of programme production costs, through substantial growth in co-productions, foreign sales and acquisitions. The UK now accounts for approximately 15 per cent of worldwide exports of television programmes, and around 20 per cent of imports.
- Nevertheless, the *proportion* of UK production costs recovered through overseas transactions has increased only modestly.
- That is unlikely to change significantly in the future, despite continuing intensification of competition. Prospects for more extensive cost-sharing arrangements are limited by cultural differences and regulations abroad restricting TV imports.
- The most promising opportunity for increased cost-sharing may be by repackaging programmes for foreign distribution or a 'Best of Britain' subscription channel, something the BBC has started to do in Europe.

Subscription

- Direct payment for television is a valuable extension of the television market. It increases the power of viewers to influence the programmes provided, it fills in gaps in

the output of traditional broadcasters, and its commercial viability for some types of programming is now beyond doubt.

- About one-third of television homes throughout the world now have a VCR, and already 10 to 15 per cent receive pay-television. In Western Europe, the US and Japan, viewers spend about £27 billion a year on pay-television and video software (£14 billion and £13 billion respectively), equivalent to about £100 a year per television household. This compares with total television advertising revenue of £35 billion and licence fee income of £9 billion.
- If there is no change to the existing structure of terrestrial broadcasting, we estimate that viewers in the UK may be willing to pay up to about £4 billion (in 1991 prices) for cable/satellite television and video software by the year 2000, compared with current expenditure of about £1.3 billion. This potential is unlikely to be fully realized unless further pay-channels enter the market to broaden the range of programming available to UK viewers.
- This means that direct payment (for pay-television and video software) could be the most important source of television funding by the year 2000. The main reason for this growth is the projected increase in the number of homes with cable or satellite television. Expenditure on pay-television alone might be as high as £3 billion by the end of the decade.
- Pay-television has so far delivered a rather different mix of programming from that provided by 'free' television. Viewers are currently willing to pay most for recent release feature films. Premium pay-channels showing feature films are able to charge between £5 and £20 per subscriber per month, while films typically account for 85 to 90 per cent of video rentals and 50 per cent or more of video sales.
- Although a few 'premium' channels show programmes other than films for part of their schedule, there are still very few viewers willing to pay significant amounts of

money for other types of programme. In practice, other specialist channels, including news, sports, music, children's and minority interest channels, are bundled together, usually with some general entertainment channels, in a basic cable package. This often costs less than £1 per month for each channel, and most basic channels obtain a significant proportion of their income from advertising rather than subscription revenues. Music and children's videos have been relatively successful in video sell-through markets, but have yet to break the dominance of feature films in video rental markets.

- Although total expenditure on pay-television is substantial and growing, to date only two pay-channels, HBO in the US and Canal Plus in France, have been able to generate revenues much above £250 million a year, and many channels earn significantly less than £100 million a year. Even the most successful premium film channels have reached only 20 per cent of potential subscribers, and although basic channels often reach a larger population (since some are provided to almost every single cable/satellite home in a particular market), their share of total television viewing is low.
- Nevertheless, since almost all pay-channels rely on acquired programming to provide most if not all of their schedules, programme costs are low. Many pay-television channels are profitable, even with a very low share of total viewing or a low take-up rate.
- One way for the BBC to exploit this expanding market might be to switch to subscription funding for BBC1 and BBC2. However, this would be a major departure from trends seen so far in television markets around the world, as no viable subscription-financed public service/general entertainment channel has yet emerged. Recent survey evidence investigating whether viewers' willingness to pay would be sufficient to sustain the BBC's current level of service is inconclusive, and will become less relevant as more and more viewers subscribe to cable or satellite channels.

- At least one survey (by Ehrenberg and Mills, see page 144) does suggest that viewers would be willing to pay a sufficient amount to allow the BBC to maintain or even improve its current service. A switch to subscription finance would also imply a closer link between the BBC and its viewers. However, there would be three significant costs associated with a switch to subscription funding for BBC television:
 - a subscription-financed BBC would face far greater *uncertainty* over future income levels than it does at present;
 - there would be substantial costs associated with *subscription management* and the installation of *receiving equipment* in subscribing households; and
 - there would be a significant *loss of universality*, as some viewers (35 per cent, according to Ehrenberg and Mills) would inevitably choose not to receive the full BBC service.

In addition, a move to subscription finance would almost inevitably lead to a change in the nature and mix of programming shown by the BBC in order to maintain revenues. *A subscription-financed BBC, without additional government support, is unlikely to be viable unless it moves away from its current public service remit.*

- Clearly, though, the BBC cannot ignore the potential importance of direct payment as a major source of funding for television in the future. Indeed, other subscription television options for the BBC, including niche market television and the operation of new satellite channels, may have considerable commercial promise and should be examined carefully.
- If the BBC were to decide to take advantage of any such option, its market entry strategy would need careful planning. Although the BBC has some clear advantages in operating new channels (its unrivalled reputation in many areas of broadcasting and the fact that the subscription management/billing operation could be based on the existing licence fee collection operation, for example), it

is not obvious that it has a significant comparative advantage over rival operators in all parts of the market. Joint ventures or partnership with other operators could be one effective strategy. An attractive alternative for the BBC, given the likely premium on successful, quality programming for subscription services, might be simply to act as a programme supplier to new subscription channels.

The Public Funding of Broadcasting

In the current broadcasting market, the key public policy questions are:

- Is it necessary for public funds to continue to be made available for broadcasting purposes?
- If so, for what purposes should they be spent and how should they be raised?
- What scale of funding, if any, is required?

These questions cannot be discussed just on the basis of past experience since technological change is making it possible not only to supply many new channels but also to charge audiences for particular broadcasting services. A genuine market is therefore becoming possible.

The *feasibility* of market supply does not, however, prove its *desirability* and the particular characteristics of a broadcasting system driven entirely by the free market (whether financed by advertising or by subscription) will suffer from a number of failures.

- On the demand side, markets in information operate most efficiently when covering marginal costs only and, in the case of broadcasting, such extra costs are zero since it costs the same to transmit a programme to 1 million people as to 10 million.
- Markets do not function well in the short run where the nature of the product and the consumption of the product are determined at the same time (people do not know what

- they are 'buying' until they have experienced it and once they have experienced it they no longer need to buy it).
- Markets face an even greater problem where the tastes of the consumer and the consumption of the product are interdependent and where this interdependence may be spread over a long period — it is widely acknowledged that high quality television has in the past extended consumers' tastes.
 - The production of broadcasting may also exhibit market failures (especially in generating a sufficient range of high quality programmes).
 - Broadcasting affects us not just as consumers, but also as citizens. In a purely market-driven system there would be no sense of common cultures nor of shared communities. Whilst we are all individuals we are also all individual *somebodies* and our sense of our own identity is lessened if there is no society with which we can identify.
 - The potential power and influence of broadcasting requires that in a democratic society part of broadcasting must be independent both of the market and of the state.

The deficiencies of commercial broadcasting cannot all be corrected either by legislation nor by regulation.

- Rules, even when enforceable, are only negative, good at stopping the undesirable, but poor at promoting the desirable.
- Satellite broadcasting from outside the UK and more intense commercial pressures within the UK in the 1990s will make any rules, or any monitoring of public service obligations, increasingly difficult to operate.

What is required if the deficiencies are to be corrected is that any legislation be complemented by a *positive* force — an optimum broadcasting industry in the 1990s must contain at least one vertically integrated public service broadcaster.

- Acting as a guarantor of quality for consumers.
- Providing at least one 'centre of excellence'.

- Widening choice, by complementing the market, through pursuit of public service purposes.
- Achieving universal coverage.
- Large enough to influence the commercial sector.

It is in the light of this need for a public service broadcaster, that the appropriate form and amount of finance should be determined.

- A public service broadcaster, with purposes quite different from those of the market, is not an optional add-on, but central to the health of all broadcasting.

The best form of finance for public service broadcasting remains the licence fee, but the method of uprating must be changed if the 'quality guarantee' is to be achieved.

- In the short term the licence fee should be related, not to the RPI, but to the increase in unit labour costs in the private service sector.
- In the longer term the licence fee should be tied to the increase in overall labour costs in broadcasting.

Unless the licence fee is uprated in a more generous way the BBC will permanently lose share in the market.

- If uprated just by the RPI the BBC's market share would probably decline to less than 30 per cent by the year 2000 and to only about 20 per cent by 2010.
- If uprated 2 per cent less than the RPI the BBC's market share would probably decline to about 25 per cent by the year 2000 and into the low teens by 2010.

The BBC probably needs to maintain a market share of at least one-third.

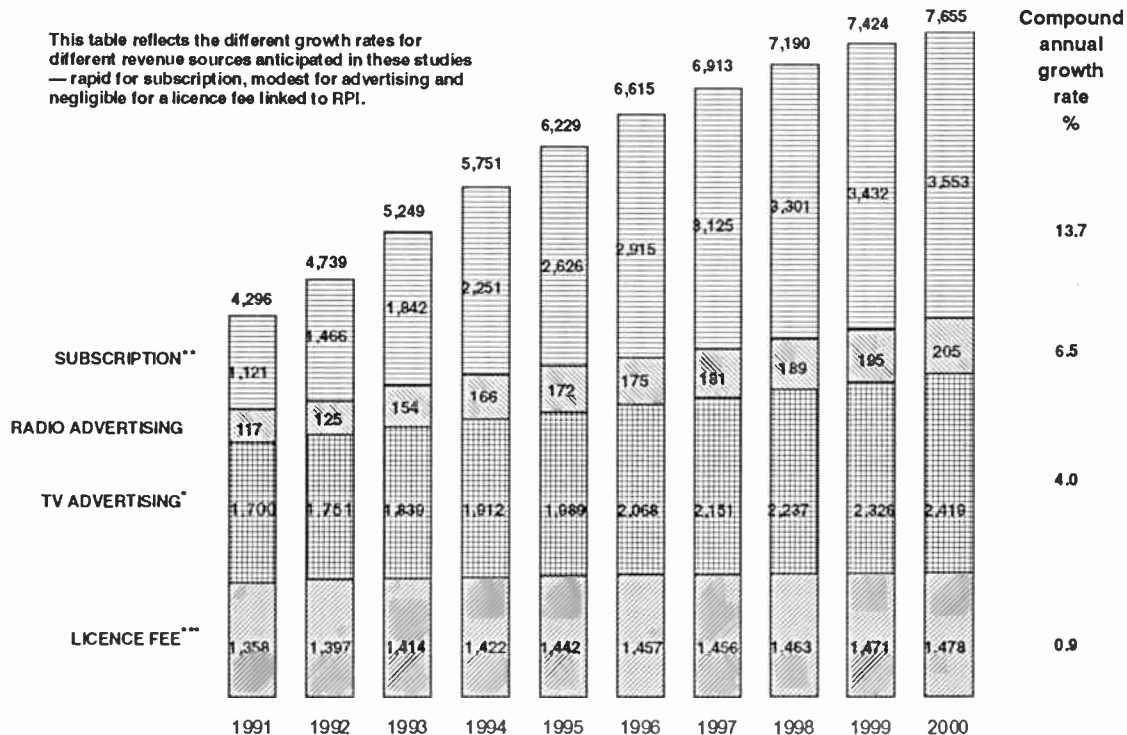
- Below 25 to 30 per cent the licence fee may become unsustainable.
- A share of 30 per cent or more is probably needed for it to fulfil its crucial 'quality setting' role.

Experience demonstrates that the process of creation and destruction are *not* symmetrical.

- The BBC could easily be undermined.
- Once undermined it would be difficult to replace.
- A successful public broadcasting service, admired both at home and abroad, should not be thrown away. Seventy years of public broadcasting culture could be destroyed far more easily than it could be re-created.

Erratum: the labels for the vertical axes of the graph on page xxxvii should be as shown below

This table reflects the different growth rates for different revenue sources anticipated in these studies — rapid for subscription, modest for advertising and negligible for a licence fee linked to RPI.

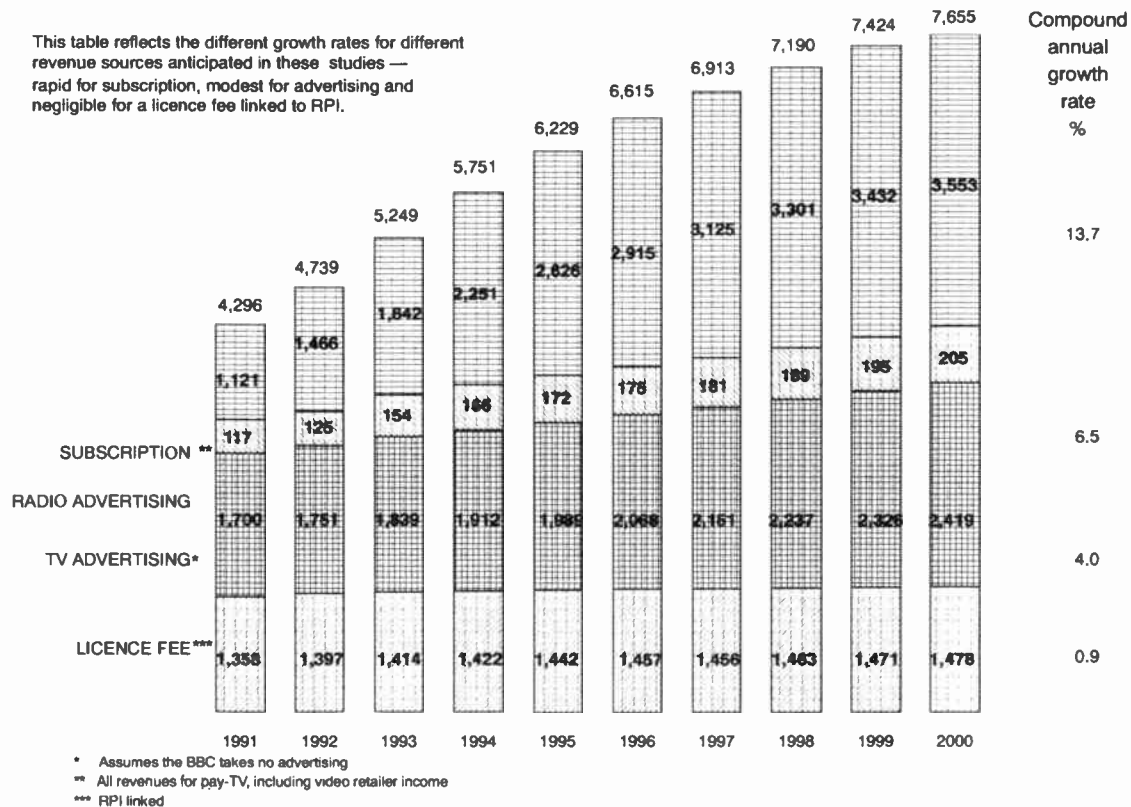


* Assumes the BBC takes no advertising

** All revenues for pay-TV, including video retailer income

*** RPI linked

This table reflects the different growth rates for different revenue sources anticipated in these studies — rapid for subscription, modest for advertising and negligible for a licence fee linked to RPI.



Projected UK Revenues from Subscription, Advertising and the Licence Fee 1991–2000 (£m, 1991 prices)

Part I

The Commercial Funding of Broadcasting

Television Advertising

Brian Sturgess

Introduction

During the 1980s many studies were made into the determinants of television advertising. Much of this research stemmed from the lobbying activity of broadcasters, advertisers and advertising agencies, whose objective was to influence politicians about the planned deregulation of the industry. The policy formation process saw the production of the Peacock Report (1986), the White Paper on Broadcasting and finally the Broadcasting Act (1990).

A second wave of analysis followed the implementation of the Act. The new ITV franchises, due to start in January 1993, were to be awarded by competitive tender to the highest bidder.¹ Future projections of television advertising, made for and by bidders, had the object of persuading the ITC of the soundness of the business plans underpinning the cash bids. The forecasts of real average annual advertising revenue growth made by bidders, six of the most accessible of which are shown in Table 1.1, ranged from 3.2 per cent to 6.2 per cent. The actual growth rate in real television advertising

¹ Franchises were awarded on the basis of competitive tendering. Winners were chosen from incumbent ITV franchise holders and from challengers on the basis of the size of their cash bids and their ability to attain a quality threshold. Tenders were submitted in May 1991, and the winners were announced in October of the same year.

2 Television Advertising

revenue will be of crucial importance to the profitability of the winning ITV contractors, given the wide variation in bids made to gain the franchises.² It will also be of significant importance to the audience, since the quickest way to cut costs would be to reduce programme budgets and increase the proportion of repeats and imported programmes. Whatever the assumed revenue share of the ITV network in 2002, the difference between the high and low forecasts produces a real revenue gap of £446 million, enough to fund Channel 4 twice over.

Table 1.1 ITV auction – May 1991: forecasts of total real net television advertising revenue (1991 prices)

	Revenue growth 1993–2002 (average % per annum)	1993 £m	2002 £m
KPMG ³ (1991)	6.2	1,815	3,108
NERA ⁴ (1991)	5.5	1,937	3,129
LBS ⁵ (1991)	3.2	2,002	2,662
Brunel ⁶ (1990)	5.2	1,830	2,880
Coopers ⁷ (1991)	3.9	1,882	2,657

² One way to review the bids is to normalize them by calculating how much each bidder was prepared to pay per percentage point of network revenue share. TVS, whose bid was rejected by the ITC, was prepared to pay around £5 million for each point of market share, while Anglia was only prepared to pay £2.6 million. HTV offered £3.3 million and Tyne Tees offered £4.5 million.

³ KPMG Peat Marwick, used by West Country TV, LWT, CPVTV, Yorkshire and Granada.

⁴ National Economic Research Associates, used by TVS.

⁵ London Business School, used by TVS.

⁶ Cave *et al.* (1990), used by the ITVA.

⁷ Coopers & Lybrand Deloitte (1991), used by Grampian, Tyne Tees, Ulster, STV, Meridian, Channel and Thames.

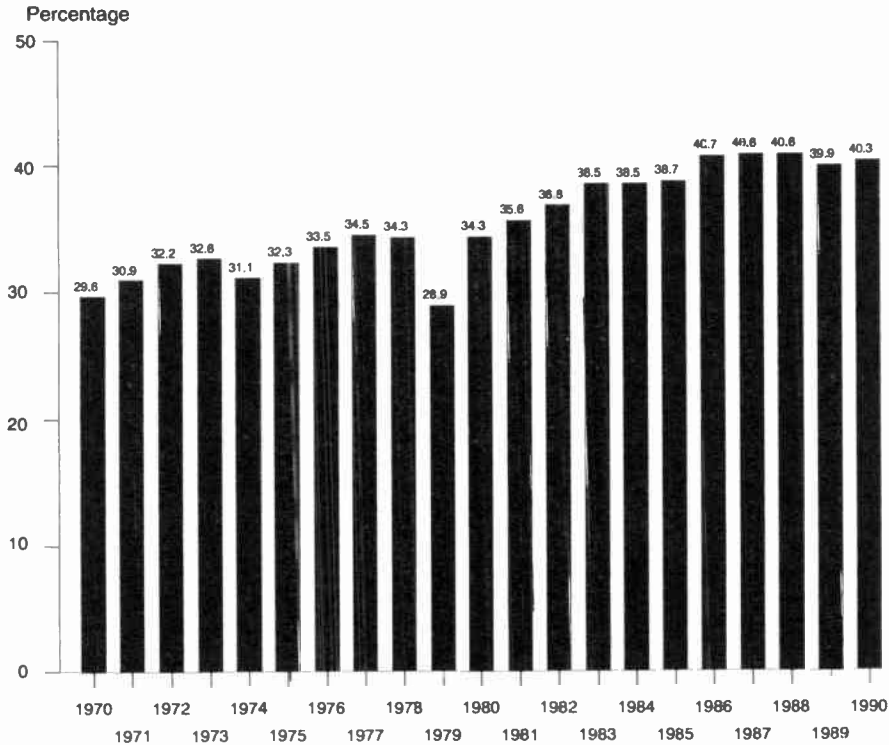
Six years after Peacock, there have still been too few dispassionate surveys of the economics of broadcasting finance in the UK. Many studies have been based upon the assumption that the economics of the television advertising market will operate in the same way during the 1990s as during the previous decade. This assumption is unlikely to be justified. Prior to 1989, the ITV companies were the monopoly suppliers of commercial airtime. Rising penetration by satellite and cable services, the separate selling of Channel 4's airtime from 1993 and the possible launch of a new terrestrial Channel 5 will cause a metamorphosis from monopoly to serious competition.

Not only will these changes alter the way the system operates, rendering past economic studies of limited use, they will also change the overall growth patterns of advertising revenue.

During the 1980s, television advertising revenue grew at an annual average real rate of 7.1 per cent. Forecasts of its future growth rate made since 1985 range from 2 per cent to 12 per cent a year. This study concludes that the most probable rate of growth for the next decade will be at the bottom end of these predictions and will be unlikely to exceed 3 per cent to 4 per cent a year in real terms. The implication of this forecast, and a predicted increase in the share gained by non-terrestrial broadcasters, means at best almost static real revenue growth over most of the next licence period for the ITV licensees and Channel 4. Combined real revenue for ITV and Channel 4 is estimated to rise from £1,729 million in 1993 to £1,841 million in 2000 (1991 prices).

I UK TELEVISION ADVERTISING EXPENDITURE

In 1991, expenditure on television advertising was estimated at £2,397 million by the Advertising Association. After adjusting for production costs and the commission earned by advertising agencies, this translated into total revenue of £1,650 million earned by the ITV contractors, including TV-am, from the sale of commercial airtime in the UK. This



Source: Advertising Association

Figure 1.1 Television's Share of Display Advertising 1970–1990

figure also includes the sale of Channel 4 airtime by the contractor in their licence areas. It is estimated that a further £50 million was earned by cable and satellite channels in 1991. The bulk of this money was income for what is now BSkyB.

The importance of television advertising in the total advertising market is shown in Figure 1.1, which covers the period from 1970 to 1990, and charts the share of display advertising expenditure taken by television advertising.

This section examines how television airtime is bought and sold and what influences the supply of and demand for advertising minutes. Long term spending trends in the UK and overseas are then taken into consideration, and the sensitivity of the market tested against the relevant variables. This allows a prediction of the shape and size of the advertising market in 2000 and a critical analysis of the ITV auction models. It is already obvious that the companies themselves are less than happy with their predictions of advertising revenue, as the recession continues to hold back advertising growth and the increasingly competitive nature of the new market becomes clear.

How Television Airtime is Bought and Sold

Advertisers value airtime because it yields audiences to whom a selling message can then be delivered. The value of an airtime minute is measured in terms of the total number of people potentially watching the advertisement (commercial impacts). This audience is expressed as a rating, or percentage of the total available universe of viewers. In the UK, most airtime is bought and sold in bulk packages delivering a certain number of ratings. For most spot sales, airtime is traded like any other commodity, with buyers estimating the value of the spot on the basis of likely audience, likely demand for the spot from other buyers, and an average cost of ratings across the network, known as the all time station average cost.

It is possible that the bulk buying system of airtime purchase may erode as the market becomes more complex and

audiences fragment. The experience of the French television market following deregulation has been an instability in peak time audiences and a move towards programme-led buying. However, ITV will still enjoy the powerful attraction of being the only commercial channel providing mass audiences, and advertisers will probably continue to express interest in the only other mass market channel, BBC1, taking advertising.

As with any traded product, the price of airtime depends on supply and demand. The factors influencing supply and demand are now considered.

Demand Conditions

The demand for advertising minutes comes from advertisers trying to reach audiences. Most advertisers will buy less airtime as the cost increases. This results in a downward sloping demand function for commercial airtime. A real rise in the price of airtime will, under normal conditions, lead to a decrease in demand, and vice versa. The response of advertisers to airtime price changes is shown by movements up and down the demand function, D_0 .

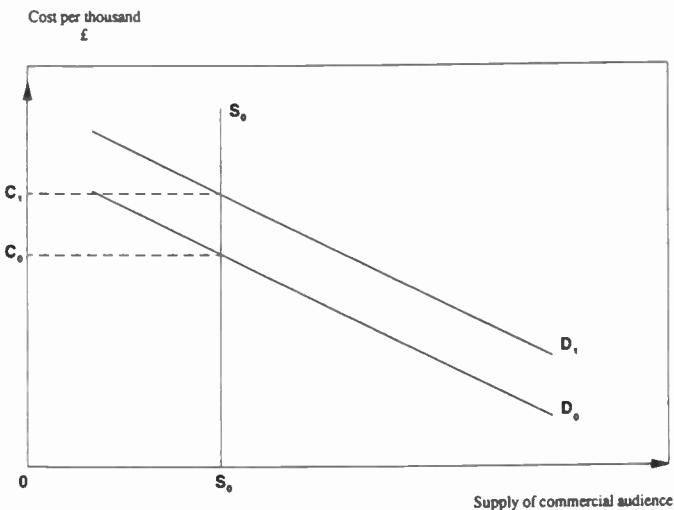


Figure 1.2 Demand Function for Commercial Audiences

For the whole economy, the total demand for airtime is the sum of the demand by each advertiser, reflecting how much airtime each industry wants to buy at the prevailing price. This is a function of thousands of individual corporate decisions on how to allocate advertising budgets. Of course, some industries, typically those producing fast moving consumer goods must use television and are less sensitive than others to price increases.⁸ Airtime demand is also a function of the macroeconomic environment. Economic growth increases the resources devoted to television advertising. Economic theory and marketing practice have identified two main macroeconomic influences on the demand for television airtime: consumers' expenditure and company profits. Real growth in either usually produces an increase in the demand for television airtime, irrespective of the price of such airtime.

Supply Conditions

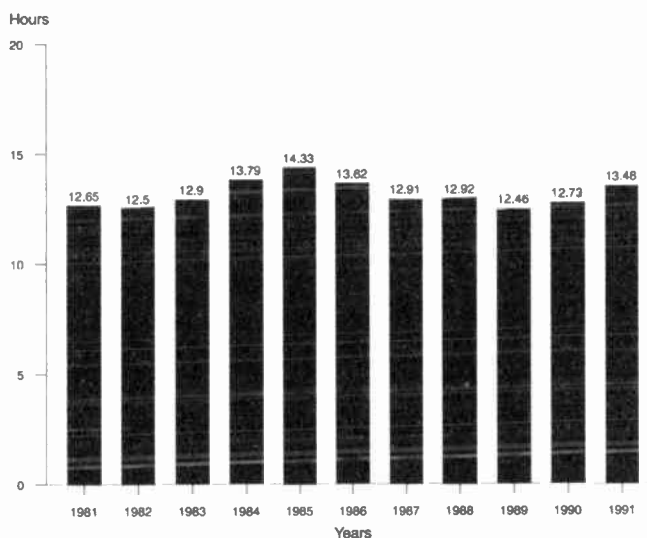
Unlike most goods, a rise in the price of commercial airtime does not lead inevitably to an increase in the supply. Companies can usually control supply or price, but not both. The ITV contractors can control neither. The ITC allows a maximum of seven and a half minutes per hour of advertising on ITV and Channel 4, and this cannot easily be expanded to meet increased demand.⁹ Perhaps surprisingly, the ITV companies are not permitted to decrease the amount of commercial airtime to bolster-up the market if the price drops. The ITC specifies that contractors must sell virtually

⁸ LBS study: Kay *et al.* *The Economist* 29 February 1992.

⁹ The ITC is empowered under the Broadcasting Act 1990 to regulate the quantity of airtime the licensees may sell.

all of their permitted commercial airtime.¹⁰

The supply of audiences also depends on two other factors over which the ITV contractors have limited influence: the total size of the television audience and the audience share of the commercial channels. Despite the introduction of Channel 4 and TV-am and the extended transmission hours by the established channels, which have nearly doubled output over the decade, average weekly viewing of terrestrial commercial channels grew only 2 per cent between 1981 and 1991.



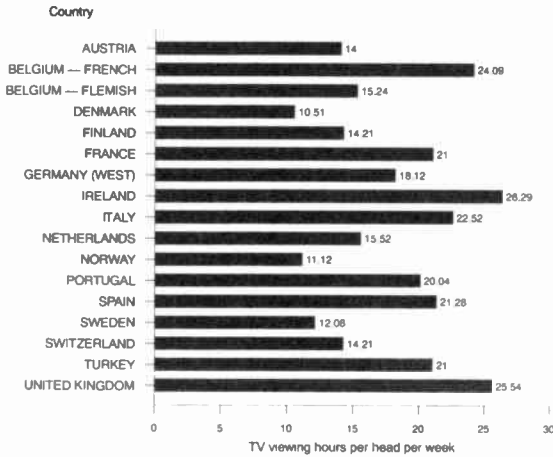
Source: BARB

Figure 1.3 Increase in Average Viewing Hours of Terrestrial Commercial Channels 1981–1991

Average total consumption of television in the UK has hardly changed in the last 15 years; including satellite, cable and video viewing, it has remained around 25 to 26 hours a

¹⁰ During the 1991 ITV franchise auction, the ITC informed applicants that the obligation to sell all airtime would only be reviewed in the light of experience as the dominant position of Channel 3 is eroded. This study assumes no change before the mid-1990s.

week per head. As Figure 1.4 shows, this is high by international standards, so there may be little room for growth.



Source: GEAR

Figure 1.4 Television Viewing Per Head Per Week 1990

There are two basic views about likely trends in viewing in the 1990s. Saatchi & Saatchi (1989a)¹¹ and the IPA (1990)¹² believe that an increase in the number of channels will raise total viewing.¹³ In contrast, it has been argued by Buck (1989)¹⁴ that viewing habits are primarily a function of external factors — short term factors such as the weather,

¹¹ Saatchi and Saatchi (1989a) *Television to 2000*.

¹² Institute of Practitioners in Advertising (1990) *The Prospects For a Fifth Channel*.

¹³ The main difference between the studies that predict an increase in viewing is the amount of the increase. Estimates of the average annual rise in viewing hours as a result of deregulation range from Saatchi & Saatchi — 2 per cent, IPA — 1.6 per cent to estimates of a more modest impact, RTS (1989) — 0.5 per cent and Budd (1990) — 0.2 per cent.

¹⁴ Buck (1989) *The Future for Old and New Television Channels in the UK*.

available time and competing leisure activities and longer term factors such as demographic changes. Some predictions for demographic change over the next decade, such as an increase in retired people, would increase television viewing, but there is also predicted to be a switch away from television in favour of other leisure activities amongst young AB social classes. Given the already high level of viewing described above, the net effect assumed by this study is no increase in viewing during the 1990s as a result of the introduction of new channels.

At present, it is the relative strength of ITV and Channel 4 schedules, and the lack of serious commercial competition which have determined the size of the audiences available to advertisers on commercial channels and the concentrated development of television advertising in the UK. However, the control of an ITV contractor over this supply of audiences is limited. The largest variable in the size of commercial audiences and its regional distribution is currently the audience share of BBC1 and BBC2.

An increase in the number of commercial channels will affect the audience share of the established channels. It cannot necessarily be assumed that the total size of the commercial audience will increase, since new channels may only succeed in taking viewers from existing commercial channels. If this occurs, then the average price of airtime over all commercial channels is likely to remain unchanged. However, the price actually paid by advertisers could well fall because the airtime will be sold in a competitive and fragmented rather than a monopolistic market.

The inability of ITV contractors to vary supply means that an increase in demand for commercial airtime resulting from economic growth has, in the past, translated directly into a rise in price. This is demonstrated in Figure 1.2 where supply remains fixed at S_0 . A rise in demand from D_0 to D_1 produces only a rise in price from C_0 to C_1 , and advertisers find themselves paying a higher price for airtime across the network. As a result, expenditure on television advertising rises, but this increase is due solely to a rise in price.

Economic growth in such a restricted market will produce inflation. Real television expenditure, as measured by the Advertising Association, may also rise, but only if the cost of airtime rises faster than the RPI, which measures the increase in the cost of the goods and services being advertised.

If, in contrast, the demand for airtime decreases because of a change in macroeconomic conditions, there is a sharp drop in the real price of airtime, and the rate of growth of advertising revenue falls, often turning negative. Inflation and deflation, seen as fluctuations in the price of airtime, are the result of fixed supply, and are illustrated in Figure 1.5, showing the Advertising Association's index of airtime costs,¹⁵ adjusted for changes in the retail price index over the period 1965 to 1990.

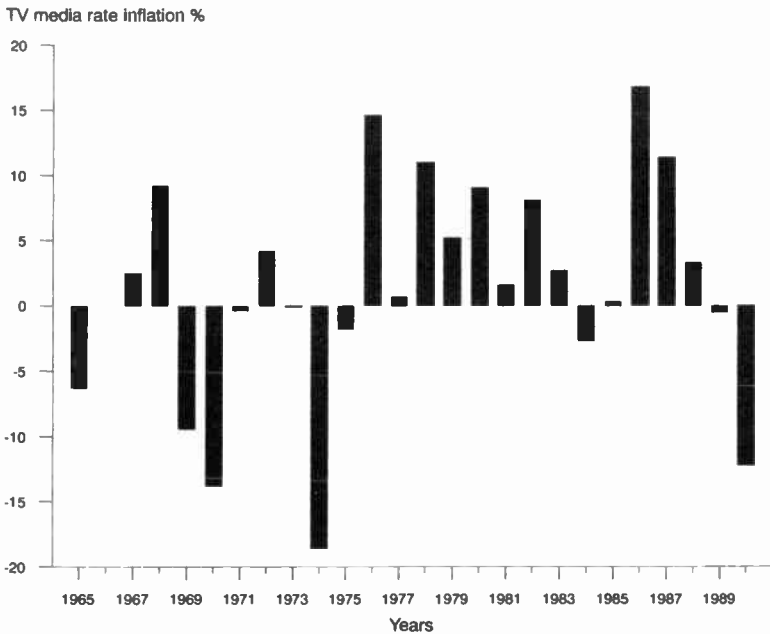


Figure 1.5 Media Rate Inflation 1965 to 1990

¹⁵ The units of airtime cost are Commercial Home Minutes, the number of commercial minutes transmitted, weighted by the size of the commercial audience.

From 1965 to 1990, annual rates of inflation in the real cost of television airtime ranged from -18.6 per cent to +16.8 per cent, compared with a range of -14.3 per cent to +10.3 per cent in the press, where both supply and price could be altered in response to changes in demand.

The changes expected in the 1990s will, however, introduce flexibility in the supply of audiences, irrespective of the ITC's decisions on commercial minutes. Audience data reveals that, in satellite homes, the new channels are taking share from both BBC and the commercial channels. BSkyB's supply of commercial minutes is governed by the EC Broadcasting Directive, which came into operation in October 1991 and is more flexible than the ITC rules, producing only airtime maxima.

Thus, flexibility in the supply of commercial audiences will increase in the 1990s in line with the increase in penetration of the new services. The main result will be that the normal response to a rise or fall in demand for airtime will be an increase or reduction in the volume of commercial audiences, and not just a reaction in price.

II THE ECONOMICS OF TELEVISION ADVERTISING

Long term Trends in Advertising

The proportion of the economy's resources devoted to advertising increased during the 1980s. Total advertising as a proportion of GDP at factor cost grew from 1.26 per cent in 1979 and reached a peak of 1.79 per cent in 1989 before falling back to 1.65 per cent in 1990 in response to the recession in the advertising market. The decline continued into 1991 with advertising's importance in the economy falling back further to 1.53 per cent of GDP.

Television advertising grew at a faster rate for most of the 1980s, now seen as the 'golden age' for the advertising industry. It rose from 34.3 per cent of all *display* advertising in 1980 to a peak of 40.8 per cent in 1988. During the latter half of the 1980s, the consensus within the advertising

industry was that both these ratios would continue on a steady upward path, but, as Figure 1.1 shows, television's share of the display advertising market has not always exhibited this steady progression.

Few researchers agree about the future path of television advertising. Predictions of the long run average growth rate made since 1985 range from 2 to 12 per cent a year. Most studies agree, however, that the growth in television advertising will exceed real GDP and other forms of advertising in the market. This implies the 1980s upward trend in the ratio of television advertising to GDP, albeit interrupted by the current recession, will resume in the 1990s.

Both IPA (1985) and Saatchi & Saatchi (1989a) assumed that the relative size of the television market would continue to grow. Over-optimistic assumptions are often justified by reference to some rather misleading international comparisons. In 1989, according to the Advertising Association, total advertising as a percentage of GDP in the USA was 21 per cent higher than its level in the UK. Television as a percentage of *total* advertising in the same year stood at 38 per cent in the USA, 50.1 per cent in the virtually unregulated Italian market, 34.5 per cent in Japan and only 32.7 per cent in the UK. It has been generally assumed that deregulation in the UK market will propel both ratios upwards.

However, if expenditure on advertising per capita and on television advertising per capita is ranked against GDP (output) per capita — a better measure of the wealth of an economy — a different picture emerges. Figure 1.6 illustrates evidence from 16 European countries, Japan and the USA for 1989, and shows a clear positive relationship between press advertising intensity and incomes per head.

A similar correlation between television advertising intensity and GDP per capita is found for many countries, as shown in Figure 1.7. By this measure, Britain is not out of line with deregulated television economies like Italy and the USA. Countries 'out of line' are those which had even more severe quantitative restrictions on television advertising than the

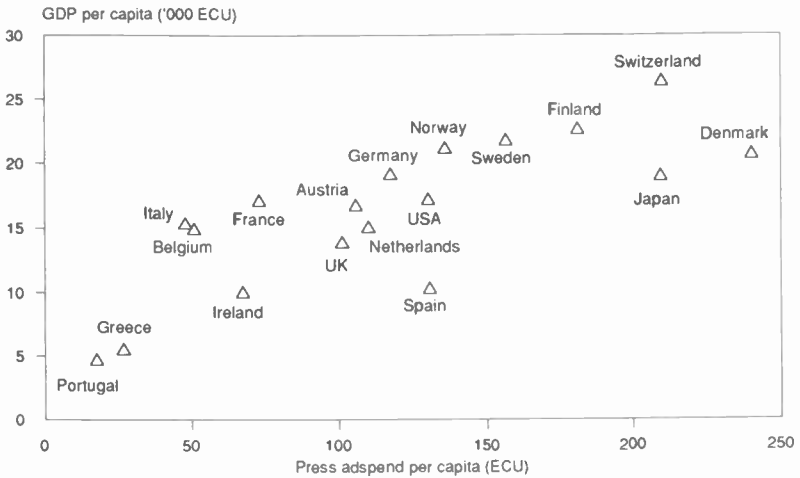


Figure 1.6 Press Advertising Intensity Versus GDP Per Capita 1990

UK.¹⁶ In fact, ITV's high audience share and efficiency in delivering commercial impacts seems to have grown UK television spending. It is difficult to avoid the conclusion that significant long term growth in television advertising intensity in the UK will depend mainly upon higher living standards (GDP per capita) and that deregulation will primarily cause prices to be less volatile.

Television's share of advertising and its relationship to GDP will only rise if the long run demand for television airtime exceeds the supply of commercial audiences. Demand for television airtime varies across product categories and can

¹⁶ Switzerland does not allow advertising breaks within programmes, and has a maximum of 29 minutes per day on its public channels. In Finland, only 15 per cent of transmission time (10 per cent for cable channels) can carry advertising. Denmark only introduced commercial television in 1988, has bans for several product categories and permits a maximum of 15 minutes advertising per day.

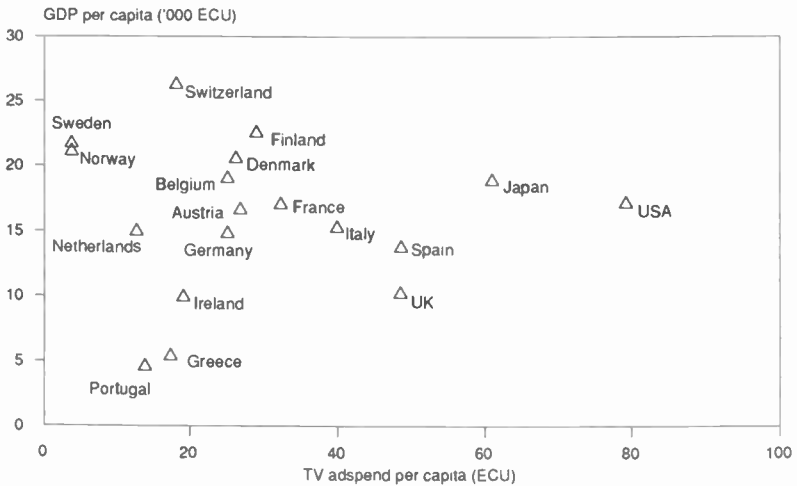


Figure 1.7 Television Advertising Intensity Versus GDP Per Capita 1990

experience significant changes within a decade.¹⁷ Attempts have been made to predict sectoral shifts for the decade ahead by Coopers (1991) and TVS (1991),¹⁸ but it is difficult to anticipate sector changes of the kinds that were seen in the 1980s as a result of privatization policy. A reasonable assumption is that the effects of sectoral changes may well cancel each other out, so this study assumes that sector

¹⁷ In 1969, the sectors Food, Drink and Household Stores accounted for 65 per cent of expenditure on television advertising. By 1990, the combined share of these three sectors had fallen to 40 per cent, whereas relatively new users such as Motors and Financial Services had increased their combined share from 4 to 16 per cent. Budd (1990) estimated that a 1 per cent rise in the ratio of expenditure on durables to total consumption, lagged by one year, produced a rise of 0.6 per cent in the price of television advertising.

¹⁸ TVS, in a report submitted to the ITC to support their profit and loss projections.

demand remains constant at its 1991 levels during the next decade. The only obvious exception is the effect of the EC Directive on Transfrontier Broadcasting, which banned all forms of tobacco advertising on television across the Community from October 1991.

Income Sensitivity

Economic growth raises the demand for television advertising. If demand rises faster than income, as is the case for luxury products such as foreign holidays and hi-fis, demand is described as income sensitive, or income elastic, and the elasticity is said to be greater than one.

In the case of television airtime, the value of income elasticity is said to be greater than one if the demand for airtime rises by a faster rate than that of real GDP. All econometric studies of the UK television advertising market suggest that demand is income elastic, but there have been wide variations in estimates of the effect on demand of changes in GDP, consumers' expenditure and corporate profits.

Cave and Swan (1985) and NERA (1985) estimated the income elasticity value at around two, but Budd (1985) produced a value closer to one. This study uses a current elasticity of one and a half — a mid-point of these studies.

Cyclical Changes in Television Advertising

Television advertising expenditure is affected by the business cycle but it varies with a more pronounced cyclical pattern than total advertising expenditure. This phenomenon was evident in Figure 1.1, and is further illustrated in Figure 1.8, which shows changes in the annual rate of growth of television and total advertising between 1971 and 1990. The extent of the current recession in the market on real growth is clearly indicated.

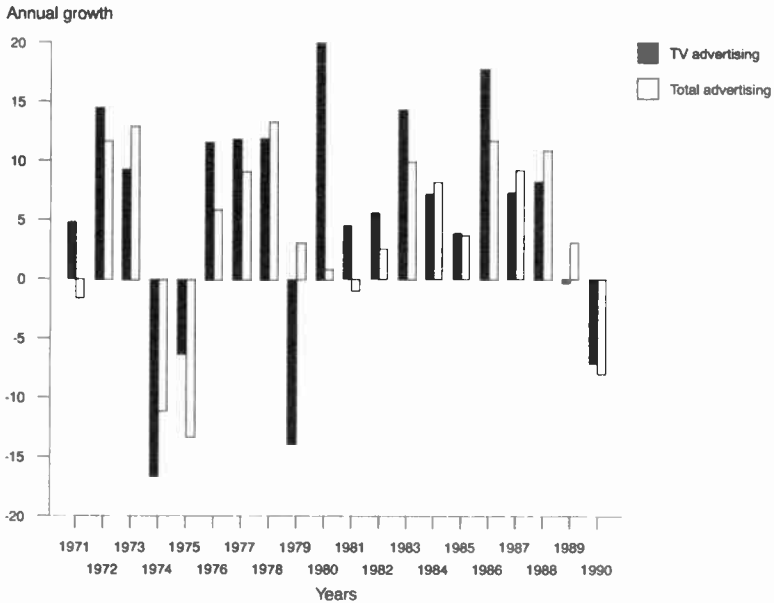


Figure 1.8 Changes in the Annual Growth of Television and Total Advertising, 1971 to 1990

There have been a number of attempts to identify the main macroeconomic influences on television advertising. Studies have used different variables to model how cyclical changes feed through into the advertising market. They all suggest that television advertising expenditure is more volatile than consumers' expenditure, but less volatile than company profits.

Changes in Supply and Price Sensitivity

Having considered supply and demand factors on the basis of past experience, the next stage is to assess the effect of an increase in the supply of airtime in the 1990s on revenues. This is crucial, since the increase in supply of commercial airtime, from more commercial channels and increased penetration of these new channels, may well be the most significant change in the airtime market over the next decade.

If the average price for airtime were to remain the same, an increase in supply would mean a concomitant increase in revenue. If, on the other hand, price decreases, total revenue may increase by less, or remain the same, or even decrease. The impact of the increase in supply depends upon how much it affects price. The greater the price drop, the less price elastic demand is said to be.

It is almost universally accepted that price *will* fall, and a belief that raising supply would moderate rising airtime costs helped inspire the deregulation of the UK television market facilitated by the 1990 Broadcasting Act.

The period in which broadcasting came under scrutiny in the lead-up to the Bill coincided with strong growth in the television advertising market (1986–1989). Advertisers, of which the government was one of the largest, faced an inflationary spiral in the cost of reaching audiences. It was even suggested by Jonscher (1987), in a report sponsored by a number of Britain's leading advertisers, that the ITV monopoly, and the resulting inflation in the airtime market, was producing a significant economic loss to society. Jonscher argued that smaller advertisers launching new products were denied access to the marketplace by the prohibitive cost of airtime.

Sensitivity of Demand to Price Changes

One of the criticisms that can be levelled against previous econometric studies is that they predict only the effect of small changes in the television environment on expenditure. Expanding supply through the slow growth of satellite and cable penetration or by a small increase in the number of commercial minutes would have a different effect from a sudden and significant increase in supply.

Such large increases would arise from the launch of Channel 5, the introduction of advertising on a non-commercial channel such as the BBC or a large increase in the overall viewing share of ITV and Channel 4. Lind (1985) predicted that price sensitivity would be elastic for small changes in

supply conditions, but inelastic for large changes.¹⁹

Most of the studies carried out so far have assumed small changes in supply. A relevant estimate of price elasticity must be based upon an assessment of the future evolution of the commercial television market in the UK as it becomes more competitive in the 1990s. Table 1.2 summarizes the expected changes in the structure of the market.

Table 1.2 Evolution of structure of UK airtime market

1989	ITV contractors have monopoly over sale of their own and Channel 4 airtime in each region.
1990	TV contractors challenged by launch of satellite channels, but ITV retains its position as virtual monopolist and satellite airtime sold at deep discount.
1993	ITV and Channel 4 sell airtime in competition. Growth of satellite channels to significant (nearly 20 per cent) reach.
1996	Rising cable and satellite penetration and establishment of Channel 5 dilute the share of ITV and Channel 4.

The transformation from advertising monopoly to competition will create incentives for all commercial channels to increase their share of viewing and thus their proportion of total television advertising expenditure. As they compete for greater share of all viewing, they are likely to increase significantly the amount of *commercial* viewing, at the expense of the BBC. These large scale increases in supply are predicted to decrease the demand elasticity.

The industry may be faced with buoyant demand — for example in response to growth in the economy — so that the price paid by advertisers is likely to be bid upwards. However, following deregulation, ITV and Channel 4 will find it easier than in the past to compete aggressively with the BBC

¹⁹ In evidence on behalf of the Newspaper Society, Harold Lind predicted that if BBC1 sold four minutes per day in peak time, it would have produced in 1985 a rise in total advertising of the order of £25 million. In contrast, a large increase in supply, from both BBC1 and BBC2 selling a full six minutes per hour, would have produced a fall in total advertising expenditure of about £200 million.

to increase share. Satellite and cable channels can increase the amount of advertising minutes they offer. Any future surges in demand are likely, therefore, to be associated with increases in supply. Since demand is then predicted to be less elastic, this will have the effect of dampening down revenue growth rates.

III THE EFFECT OF NEW ENTRY IN THE 1990s

One of the most important questions for viewers is how the changing environment facing the industry will affect the revenue prospects of existing players? For the Peacock Committee, the question of competition within the industry was paramount.

From our point of view, what is important is not so much the effect on *total revenue* in the short run, as the result of a fall in the price of 'slots', but the *division of revenue* between the independent companies and the BBC.²⁰

The deregulation brought about by the 1990 Broadcasting Act and the short-lived war between Sky and BSB had focused research on this question by the late 1980s. Furthermore, the auction of the ITV franchises, in May 1991, meant that the ITV incumbents and potential contenders needed to evaluate a television environment that would be very different from the industry's past.

In order to predict the division of revenue, predictions are needed for the take-up of new media, the share of audiences that each channel can expect and the discount or premium at which each channel will sell its airtime.

Cable and Satellite

Broadband cable television in the UK has developed slowly so far. The Cable Authority was established as early as 1982, but

²⁰ Peacock (1986) *Report of the Committee on Financing the BBC*, p.71.

homes passed by broadband cable stood at 0.2 million in January 1992, or 1 per cent of UK households. Recent rates of system building suggest that a majority of households gaining access to new channels will do so through individual satellite dish receivers.

For new broadcasters, cable and satellite distribution are alternative retail outlets for their programmes. Cable operators are permitted under current rules to produce and distribute television programmes but they must carry public service channels and can negotiate to carry services transmitted by satellite. This expands the programme mix offered to subscribers, but for advertisers it is the combined penetration of cable and satellite service that will affect the volume of commercial airtime and audiences on offer.

Following the merger between Sky and BSB at the end of 1990, satellite service marketing concentrated on one major supplier, BSkyB, and one transmission system, the Astra satellite. This service had been launched in February 1989, and by March 1992, household penetration of the Astra satellite services through individual dish installations had reached 2.4 million or 11 per cent of all households.

Forecasts of the take-up of satellite and cable services have been based on a variety of methodologies: statistical diffusion models, economic models of discretionary leisure spending and sample surveys of consumer attitudes towards the new media. There is much uncertainty about the rate of growth of the new media and likely saturation level in terms of household penetration. Forecasts of combined cable and satellite penetration in the UK by the year 2000 range from a low of 40 per cent (RTS, 1989) to a high of 59 per cent (Saatchi & Saatchi, 1989a). A review of the various forecasts is explored in greater depth by NERA in the chapter on subscription revenues (Chapter 5). This study uses their consensus prediction of 50 per cent combined penetration by the end of the decade.

Channel 5

Channel 5 will probably take the form of a national service with regional opt-outs, but the rate of household penetration by the year 2000 will depend on a number of factors: the franchise award date, the rate of transmitter construction, the design of the service and the willingness of households to take it. Forecasts of the household penetration of Channel 5 must take account of the technical and other problems associated with its launch. The frequency allocated will not cover all UK households and could interfere with video recorders in the reception area. Most households will have to purchase a new aerial to receive the signal, and the ITC has ruled that the franchise holder will be responsible for the retuning of VCRs in the transmission area.

The ITC estimated that, on the frequency allocated, terrestrial transmissions of the channel will cover a maximum of 73 per cent of UK households. There has been little consensus among researchers about the prospect for Channel 5, and forecasts for penetration of the channel by the end of the decade range from 51 per cent (IPA, 1990)²¹ to 67 per cent, with higher figures assuming a degree of satellite and cable transmission outside the terrestrial reception area.

The success of local television services in countries such as Canada, and the interest shown in the licence, suggest that there may be a role for the channel in the 1990s, although many potential investors have been deterred by the technical difficulties. There is a view that the conditions for the channel will need to be changed, which would delay the possible launch. This study assesses two scenarios — an optimistic scenario, with a launch date of January 1995 and a three year transmitter construction programme and a more

²¹ IPA assumed a launch date of January 1994 and a two year transmitter construction programme. The transmission area of the channel was assumed to rise from 35 per cent of all households in 1994 to the earlier expected maximum of 60 per cent by 1996. They assumed that 25 per cent of all homes within the transmission area would initially purchase the new aerial, rising steadily to 85 per cent of all homes by 2000.

pessimistic scenario with either an early failure or a delay of the launch until after 2000.

On the optimistic scenario, the new channel's programme content is assumed to be mainly a mixture of popular mass audience programming and local and regional news opt-outs. It is assumed that household penetration will rise from 10 per cent of those able to receive the service in 1995 to a peak of 75 per cent by 2000. A simultaneous launch of the network framework of Channel 5 through cable systems and to satellite households via Astra is also assumed in 1995. Adjusting for overlap, this produces a rise in the combined Channel 5 annual average household penetration from 17 per cent of all homes in 1995 to a maximum of 70 per cent by the year 2000.

Audience Share

An advertising-financed channel's share both of total audiences and of the commercial audience depends on several factors. The distribution of audiences in a competitive system is a function of the level and pattern of household penetration of the new media, the programmes offered by rival channels and the viewing behaviour of the new media households.

A channel's share of total viewing can be defined as channel reach multiplied by average hours viewed per head. The reach of a channel is a function of the proportion of total households taking the channel and the breadth of appeal of the channel's programme output. A new entrant needs to raise rapidly the number of receiving households and must supply sufficiently compelling programming to attract audiences away from the established, mass audience channels. As was shown above, estimates for penetration of the new channels already vary quite widely.

The growth in the audience share of new channels also depends on assumptions about viewer inertia, or the brand loyalty to established channels. In order to restrict the number of possible variables, most simple models assume that the programme policies of Channel 3, Channel 4 and BSkyB

remain unchanged over the forecast period, although this seems most unlikely. The effect of deregulation in France, Spain and Italy has been to stoke-up inter-channel programme rivalry to a far greater extent.

In the most basic model, new channels gain audience share while established channels lose proportionately. The final distribution of audience between channels then becomes a function of just two factors: the saturation level of household penetration of new services and the initial market share of the established broadcasters. A more realistic approach is to assume that established channels experience disproportionate losses as a result of new channels. This can occur for two reasons: differences in viewing behaviour between households with satellite and cable and those without²² and competitive differences between channels in programme supply.

Differences between studies in projecting new media penetration rates, viewer behaviour²³ and programme policies have produced wide variations in the forecasts of the distribution of total audience between channels. Forecasts of the audience shares of cable and satellite channels by the year 2000 range from 12 per cent to 25 per cent. Channel 5 has

²² Saatchi & Saatchi (1989a) using AGB data on viewing in broadband cable households assumed new channels would gain an audience share of 40 per cent by 2000 across all homes served by cable or satellite. BARB Astra Panel data have also been used to make projections of the future distribution of the total audience between channels. The BARB report for December 1990 shows that the audience share of satellite channels fell to 35 per cent from previous levels of 40 per cent, but had recovered to 41 per cent by June 1991. This phenomenon could be explained by the attraction of cable and satellite to CIC2D households who watch more television and are more attracted to mass market programmes. This bias could lessen over time as the rate of penetration of cable and satellite expands. Cave *et al.* (1990) assumed new channel viewing share would decline steadily to 33 per cent by 2000.

²³ IPA (1990) assumed Channel 5 would gain an audience share of 16.5 per cent in homes without access to satellite channels and a share of only 8.8 per cent in homes with access, producing a combined share of 11.8 per cent in all homes with access to Channel 5.

been predicted to gain a share of the total audience ranging from 6 per cent to 13 per cent. Most studies assumed a gradual slide in the total audience share of Channel 4 (although it is usually assumed that its minority remit for a specialist range of programming gives it a certain core audience) from current levels of around 9 per cent to a tighter range of 6 per cent to 7 per cent.²⁴ The range of these forecasts is illustrated in Table 1.3.

Table 1.3 Projected percentage audience share by channel 2000/02

	BBC	Channel 3/ TV-am	Channel 4	Channel 5	Satellite/ cable
Saatchi (1989a)	33.5	25.8	7.4	10.3	23.0
IBA (1989)	37.5	28.0	6.5	*	28.0
RTS (1989)	36.3	31.2	6.7	13.5	12.4
IPA (1990)	32.7	30.4	5.8	6.1	25.0
Budd (1990)	38.6	33.1	7.1	6.3	15.0
Cave <i>et al.</i> (1990)	34.6	34.3	5.6	**	17.3
NERA (1991)	36.0	32.0	6.0	8.0	18.0
KPMG (1991)	35.0	31.0	7.0	7.0	20.0

* Combined Channel 5 and satellite/cable forecast.

** VCR viewing at 7 per cent, but no Channel 5 forecast.

Programming Policies

The most controversial issue distinguishing models and forecasts is the assumptions made about each channel's likely programme policies. What is clear is that competition for advertising revenue tends to produce mass audience high cost programming in peak time and low cost programming elsewhere. Saatchi & Saatchi (1989a) assumed the new

²⁴ An alternative view that is gaining currency among media buyers, in particular Saatchi & Saatchi's Zenith, is that Channel 4 under its current management will schedule aggressively after 1993. Channel 4 estimates that its share of the commercial audience will increase on a virtuous circle of rising advertising revenues that can be reallocated back into programming without the need to consider shareholders.

channels would compete head-on with Channel 3 in the period 1993 to 2000. The agency believed Channel 5 would choose a similar range of programme output to Channel 3 and would obtain an audience share of 60 per cent of Channel 3's share in homes able to receive it.

The IBA (1989) took issue with these predictions, believing it unlikely that new channels would be that successful in capturing viewers from established channels. It assumed differences in the composition of audiences between channels would affect the relative resilience of the existing players' audience shares.²⁵ The IBA thought Channel 3 would be most vulnerable, followed by BBC1, BBC2 and Channel 4.²⁶

Effect on Existing Broadcasters

There has been no consensus about the ability of the established broadcasters to retain audience share in the face of new competition. In the various models surveyed, Channel 3 retains an audience share ranging from 26 per cent to 34 per cent and the BBC's two channels retain an audience share between them ranging from 33 per cent to 39 per cent. Evidence from the USA highlights features of television markets that favour established channels and justify caution in producing forecasts of audience shares of new channels. By 1990, the three US networks had an audience share of

²⁵ Economic models of spatial competition demonstrate that new channels would only attract audiences from existing channels in equal proportions if each channel's audience was equal in age, socio-economic characteristics and tastes.

²⁶ The BBC's audience is somewhat younger, with a slightly higher proportion of ABC1 adults than ITV's, and its audience share is higher in the south than in the north of England or in Scotland. The socio-economic profile and geographical distribution of the new media households suggest that the competitive thrust of the new channels is being directed against Channel 3 strongholds. Furthermore, Channel 5 will be unavailable by terrestrial means throughout much of the densely populated south of England.

approximately 50 per cent, with the greatest challenge coming from Fox and the independents, with programming supplied from the barter market. Satellite and cable 'narrowcasting' or targeted programming has gained an audience share of 22 per cent.

Smaller channels suffer from the dual disadvantages of attracting a smaller number of viewers than the larger channels with those viewers watching the channel relatively infrequently. Professor Andrew Ehrenberg of the London Business School suggested a strong positive relationship between reach and hours viewed.²⁷

On the basis of the combined household penetration figure for new media of 50 per cent assumed in this study, the share of total television audience is predicted by this study to break down in the year 2000 as shown in Table 1.4.

Table 1.4 Share of total television audiences in the year 2000 (%)

	With Channel 5	Without Channel 5
BBC	32	33
Channel 3	34	37
Channel 4	8	9
Channel 5	7	
Cable & satellite	19	21

The low projection for the BBC share reflects the expectation that the commercial channels will compete more aggressively for share of viewing than is assumed in other studies.

²⁷ This statistical relationship is known as the 'Double Jeopardy' effect. The crux of the Double Jeopardy effect is that a new channel will have to increase both reach and hours viewed to gain audience share. This becomes increasingly difficult against established channels because of the resource benefits conferred upon them by their ability to convert audience share into revenue.

Discounts and Premia

The revenue shares of commercial channels will depend upon their share of audiences and the price that they can charge advertisers for delivering audiences. If relatively undifferentiated audiences are bought and sold, then each channel's share of revenue will be proportional to its share of the commercial audience. If there is an advantage in coverage, or if there is some differentiation in the type of audience supplied by each channel, then revenue may diverge upwards or downwards from a channel's share of the commercial audience.

One of the main influences on the price of airtime in competitive television markets is a channel's reach. Reach is, in turn, related to a channel's household penetration and audience share. Buyer behaviour in the UK airtime market, concentrating on bulk buying of commercial audience 'impacts', implies that money will migrate first to channels which provide maximum coverage of the target markets. Since ITV provides a greater reach than satellite, new channels are forced to sell airtime at a discount. This assumption was built into the models by the RTS (1989) and IPA (1990). The RTS study assumed satellite channels sell at a 10 per cent discount to comparable Channel 3 airtime, while IPA assumed a 50 per cent discount for satellite in 1990, dropping to 25 per cent by 2000.

A move towards programme-led airtime buying, aimed at more precise targeting, would allow a degree of price discrimination for differentiated audiences. This view was postulated by Saatchi & Saatchi (1989a) and is supported by Zenith, its media buying arm. Saatchi & Saatchi believe that Channel 4's ability to attract upmarket audiences, combined with the extra coverage provided by its higher proportion of light viewers, will allow it to command a price premium over Channel 3 rates of 10 per cent in 1993, rising to 30 per cent by 1997. The agency also predicted the price gap between satellite and cable channels and Channel 3 would narrow from a 25 per cent discount for the former in 1993 to parity in

1996 moving to a premium of 20 per cent by the year 2000.²⁸

This premium was based on the assumption, at odds with the USA experience, that narrowcasting would attract light or non-television viewers, many of whom are in higher income groups, for whom advertisers would be prepared to pay a premium. Further support for the existence of such premia for differentiated audiences was assumed in the three scenarios constructed by IPA (1990) in its study of the advertising potential for a fifth channel.²⁹

Premia for differentiated audiences could be important if the BBC were to sell advertising airtime. This question was investigated at the time of the Peacock Inquiry by Barwise (1985) who concluded that the differences between the BBC and ITV audiences were not sufficient to provide advertisers with gains in advertising efficiency from buying BBC airtime. This view was supported by Henry (1985). However, in a system leavened by programme-led airtime buying rather than bulk buying, a block of spots watched by a higher proportion of younger, light TV viewers could command a premium over an undifferentiated block at an equivalent time-slot. The value of such coverage would rise as the total audience fragmented.

²⁸ Saatchi & Saatchi analysed airtime pricing differences by channel in relation to Channel 3, but the implicit conversion of audience share into revenue share is only consistent if the assumed premia or discounts are calculated in relation to the market average price. Recalculating the price differentials in relation to Channel 3 to correct this mistake produces a 29 per cent premium for cable and satellite audiences, which is hard to believe, and a more modest 2 per cent premium for Channel 4.

²⁹ IPA (1990) assumed local airtime would sell at a 20 per cent premium to Channel 3, regional airtime would sell at par and national airtime at a 20 per cent discount.

How Will Revenue be Shared Out?

Table 1.5 shows a variety of advertising revenue shares based upon different models of penetration of new media and the resultant pricing of airtime. The forecasts for ITV range from a 34.1 per cent to a 72.1 per cent share. The relationship between audience share and the share of revenue acts against the smaller channels. In the USA, cable television had built up an audience share of 22 per cent by 1988, but this only translated into a share of national television advertising expenditure of 6 per cent spread across 60 national and 25 regional networks. This discrepancy between audience and revenue share has also been seen in France following the deregulation in 1986. Canal Plus is a successful subscription channel with only a fraction of broadcasts transmitted unscrambled. In contrast, the smaller channels, La Cinq and M5, which are funded wholly by advertising income, have struggled to remain financially viable, with La Cinq collapsing at the end of 1991.

Table 1.5 Projected percentage share of advertising revenue by channel 2000/02

		ITV/TV-am	C4	C5	Satellite/cable
Saatchi	(1989a)	34.1	10.5	13.5	41.2
IBA	(1989)	49.7	11.1	*	39.1
RTS	(1989)	63.9	11.6	6.9	17.6
IPA	(1990)	48.9	11.8	10.3	29.1
Budd	(1990)	65.1	14.0	*	20.9
Cave <i>et al.</i>	(1990)	72.1	10.3	**	17.5
NERA	(1991)	64.0	N/A	N/A	N/A
KPMG	(1991)	60.0	N/A	N/A	N/A

* Combined Channel 5 and satellite/cable forecast.

** No Channel 5 forecast. N/A Not available.

This study assumes that ITV airtime gains a premium of 12 per cent of the market average price, rising to 25 per cent by 2000. Channel 4 airtime starts at par, and ends with a premium of 12 per cent, while Channel 5 and satellite and cable sell airtime at discounts of 25 per cent and 40 per cent

respectively. This results in revenue shares of 63.5 per cent for ITV (down from 78.6 per cent in 1993) and 13.6 per cent for Channel 4 (down from 15.4 per cent in 1993).

The fact that ITV could gain a premium from its high share and high reach will make it eager to counter Channel 5 and satellite incursions into its viewing share. One obvious way for it to do so would be to target the BBC's traditional audience of lighter, more upmarket viewers.

IV FORECASTS OF FUTURE OF TELEVISION ADVERTISING

Models

Most forecasts assume rates of growth higher than the long run growth in GDP and the average growth of the total advertising market. Many models have been based on simple extrapolations of past expenditure trends. Not only is the relevance of such models questionable in the current climate of change, but also their accuracy depends upon the time horizon studied. Data samples of less than one cycle bias estimates of long run advertising growth.³⁰

A more realistic assessment of the behaviour of the advertising industry was made by Harold Lind (1985), in a study which predicted a modest growth in real television

³⁰ The direction of the bias depends on the proximity of the chosen base year to the most recent or impending peak or trough in the economic cycle. Examples of bias can be seen in the projections made by the Incorporated Society of British Advertisers (1985) and IPA (1985) which extrapolated the growth rates seen during the periods 1981–1984 and 1975–1984 respectively. Both of these sample periods have base years near the troughs of recessions and produce average real growth rates of 8 per cent and 9 per cent, high by longer term historical standards. In consequence, ISBA produced wildly optimistic forecasts for long term advertising growth ranging from 10 per cent to 12 per cent per annum, while IPA forecast growth rates ranging from 2 per cent to 7 per cent per annum.

advertising expenditure of between 3 and 3.5 per cent per annum. Lind also extrapolated past trends, but by choosing 1969 as the base year, he anchored the study in a longer historical run. Lind's data sample spanned from peak year to peak year across three business cycles.

Forecasts of industry television advertising revenue, when based upon a more sophisticated method of analysis than extrapolation, can differ for two basic reasons. First, the organizations making the projections may be using different models of the variables affecting advertising, such as consumer expenditure, profits and business confidence. Secondly, and more importantly, significant differences can arise as a result of differences in the projections of the behaviour of the variables that are then fed into the model to generate the predictions. No matter how well informed the forecasting body, projections of these variables over a forward 10 year period are necessarily entirely subjective.

Average View

The arithmetic mean of the ITV forecasts shown on page 2 gives an average annual growth rate of 4.5 per cent. As argued earlier, some of the studies producing these forecasts may not have accounted sufficiently for the change in behaviour as a result of a move to a competitive market, and, consequently, their growth rates may be overstated. For the reasons adduced in this study, an average annual growth rate at or even below the mean would be prudent. The ITC, during the challenge made by an unsuccessful contractor, TSW, said that it had used an average real rate of growth for television advertising revenue of 4 per cent.

Forecasts are based upon projections of all relevant variables. In the case of television advertising, the main variable thought to affect the growth of advertising revenue has been consumers' expenditure. As a result, a significant factor affecting the 1993 starting point of the above forecasts has been differing assumptions about the timing of the economic recovery and the real rate of growth of consumer

expenditure in the 1990s. In this respect, the results have been sensitive to the time the study was undertaken, and this is the likely explanation for the relatively pessimistic projections produced by the LBS.

There have also been a number of differences between studies in the projected long term annual average rate of increase of consumers' expenditure from 1993 to 2002 based upon the impact of ERM entry on the growth in nominal macroeconomic demand. The range of estimated long run growth rates in consumers' expenditure produced by the studies surveyed for this chapter varies from 2.4 per cent to 3 per cent.

Summary of this Study's Forecasts

This study uses an annual average real rate of growth of television advertising revenue of 4 per cent per annum between 1993 and 2000, although there is still reason to believe that this may be optimistic.

Table 1.6 Net advertising revenue by channel (£m)³¹

	ITV	Channel 4*	Channel 5	Cable/satellite	Total
1991	1,413	262	—	25	1,700
1992	1,434	266	—	51	1,751
1993	1,445	283	—	110	1,838
1994	1,434	298	—	180	1,912
1995	1,452	304	36	197	1,989
1996	1,448	310	68	242	2,068
1997	1,441	318	120	272	2,151
1998	1,454	322	148	313	2,237
1999	1,465	326	174	361	2,326
2000	1,512	329	186	392	2,419

* Forecasts of Channel 4 revenue are before redistribution of revenue to ITV and the IR Fund, according to the formula outlined in the 1990 Broadcasting Act.

³¹ Details of the supporting assumptions on audience share, price premia and discounts and revenue share for Tables 1.6 and 1.7 are given in the Appendix, pp. 37–39.

As there is doubt about the future viability of Channel 5, it is also relevant to forecast advertising revenue without Channel 5.

Table 1.7 Net advertising revenue by channel, without Channel 5 (£m)

	ITV	Channel 4*	Cable/Satellite	Total
1991	1,413	262	25	1,700
1992	1,434	266	51	1,751
1993	1,445	283	110	1,838
1994	1,434	298	180	1,912
1995	1,472	304	213	1,989
1996	1,489	314	265	2,068
1997	1,506	323	322	2,151
1998	1,521	331	385	2,237
1999	1,558	335	433	2,326
2000	1,609	339	471	2,419

* Forecasts of Channel 4 revenue are before redistribution of revenue to ITV and the IR Fund, according to the formula outlined in the 1990 Broadcasting Act.

Advertising on the BBC

Using the same model, it is possible to consider the impact of the BBC taking advertising. Four different cases have been considered:

- I BBC1 and 2 take two minutes advertising per hour, Channel 5 successfully launched in 1995.
- II BBC2 only takes two minutes advertising time per hour, Channel 5 successfully launched in 1995.
- III BBC1 and 2 take two minutes advertising per hour, Channel 5 not launched before 2000.
- IV BBC2 only takes two minutes advertising per hour, Channel 5 not launched before 2000.

In all cases, it is assumed that advertising is introduced on the BBC in 1997, the first year of the new Charter.

Table 1.8 Advertising revenues in the year 2000 (£m)

	Case I	Case II	Case III	Case IV
BBC	316	58	333	92
ITV	1,250	1,523	1,310	1,572
Channel 4	285	290	298	278
Channel 5	176	218	—	—
Satellite/ cable	355	330	441	477
Total	2,382	2,419	2,382	2,419

The model predicts that any significant introduction of advertising on the BBC would actually decrease overall total advertising revenue. For example, in Case I, total revenue is £2,382 million, compared to £2,419 million with no advertising on the BBC. In Case II, where BBC2 only takes advertising, the increase in advertising is not sufficient to affect total revenue, and the BBC gets just £58 million additional revenue.

The increase in supply arising from the introduction of advertising on the BBC would compound the effects of increased commercial viewing as a result of the introduction of new channels and intense competition for audiences between ITV and Channel 4, such that demand would be almost certain to turn inelastic, and the effect on revenues for ITV and Channel 4 could be significant. If Channel 5 does not succeed, ITV and Channel 4 should do better, but still not as well as in the 1980s.

V SUMMARY AND CONCLUSIONS

The 1980s growth in television advertising revenue was exceptional in many ways. The decade combined, in tandem, rising structural demand for the medium and above average growth in consumers' expenditure. These conditions have only previously been found together during the years from 1955 to 1969 — the early years of commercial television in the UK. From 1982 to 1989, advertising expenditure was pulled up above its long term structural growth rate by an extended

upswing of the economic cycle. It seems optimistic to expect that the growth seen in the 1980s will be replicated in the 1990s.

In addition, the unprecedented increase in supply of airtime as new channels are established is likely to depress prices and cause revenues to grow more slowly than many expect. With advertising growth being absorbed largely by the new channels, ITV may experience no significant increase in revenues between 1991 and the year 2000. Any major increase in commercial airtime over and above present plans, such as would occur if the BBC took some advertising, could cause an overall reduction in advertising revenues leading to a significant restructuring of the industry. Even without such dislocation, the pressures on the commercial sector in the 1990s will emphasize the need to cut costs and increase audience share, leading to programme and scheduling decisions that could change the face of commercial television.

APPENDIX

Table 1 Forecasts of audience share, price, revenue share and revenue with Channel 5

	BBC	ITV/ TV-am	C4	C5	Satellite/ cable
Audience share %					
1993	43.0	40.0	8.8	—	8.2
2000	32.0	34.0	8.0	7.0	19.0
CPT index*					
1993	—	112	100	—	40
2000	—	125	115	75	60
Advertising revenue share %					
1993	—	78.6	15.4	—	6.0
2000	—	62.5	13.6	7.7	16.2
Advertising revenue (£m) 1991 prices					
1993	—	1,445	284	—	110
2000	—	1,512	329	186	392

Table 2 Forecasts of audience share, price, revenue share and revenue without Channel 5

	BBC	ITV/ TV-am	C4	Satellite/ cable
Audience share %				
1993	43.0	40.0	8.8	8.2
2000	33.0	37.0	9.0	21.0
CPT index*				
1993	—	112	100	40
2000	—	121	108	53
Advertising revenue share %				
1993	—	78.6	15.4	6.0
2000	—	66.5	14.0	19.5
Advertising revenue (£m) 1991 prices				
1993	—	1,445	284	110
2000	—	1,609	339	471

* Market average cost per thousand = 100

38 Advertising Appendix

Table 3 Forecasts of audience share, price, revenue share and revenue, BBC1 and 2 taking advertising, with Channel 5

	BBC	ITV/ TV-am	C4	C5	Satellite/ cable
Audience share %					
1993	43.0	40.0	8.8	—	8.2
2000	32.0	34.0	8.0	7.0	19.0
CPT index*					
1993	—	112	100	—	40
2000	111	119	120	80	60
Advertising revenue share %					
1993	—	78.6	15.4	—	6.0
2000	13.3	52.4	12.0	7.4	14.8
Advertising revenue (£m) 1991 prices					
1993	—	1,445	284	—	110
2000	316	1,250	285	167	355

Table 4 Forecasts of audience share, price, revenue share and revenue, BBC1 and 2 taking advertising, without Channel 5

	BBC	ITV/ TV-am	C4	Satellite/ cable
Audience share %				
1993	43.0	40.0	8.8	8.2
2000	33.0	37.0	9.0	21.0
CPT index*				
1993	—	112	100	40
2000	117	112	104	56
Advertising revenue share %				
1993	—	78.6	15.4	6.0
2000	14.0	55.0	12.5	18.5
Advertising revenue (£m) 1991 prices				
1993	—	1,445	284	110
2000	333	1,310	298	441

* Market average cost per thousand = 100

Table 5 Forecasts of audience share, price, revenue share and revenue, BBC2 only taking advertising, with Channel 5

	BBC	ITV/ TV-am	C4	C5	Satellite/ cable
Audience share %					
1993	43.0	40.0	8.8	—	8.2
2000	32.0	34.0	8.0	7.0	19.0
CPT index*					
1993	—	112	100	—	40
2000	120	126	109	92	80
Advertising revenue share %					
1993	—	78.6	15.4	—	6.0
2000	2.4	63.0	12.0	9.0	16.0
Advertising revenue (£m) 1991 prices					
1993	—	1,445	284	—	110
2000	58	1,523	290	218	330

Table 6 Forecasts of audience share, price, revenue share and revenue, BBC2 only taking advertising, without Channel 5

	BBC	ITV/ TV-am	C4	Satellite/ cable
Audience share %				
1993	43.0	40.0	8.8	8.2
2000	33.0	37.0	9.0	21.0
CPT index*				
1993	—	112	100	40
2000	125	120	88	70
Advertising revenue share %				
1993	—	78.6	15.4	6.0
2000	3.8	55.0	11.5	19.7
Advertising revenue (£m) 1991 prices				
1993	—	1,445	284	110
2000	92	1,572	278	477

* Market average cost per thousand = 100

Television Sponsorship

Brian Sturgess

Introduction

Sponsorship provides broadcasters with a means of raising revenue from advertisers in addition to selling commercial airtime. Unlike advertising revenue, sponsorship money goes to the producer and so reduces programme production costs. Given the high level of operational gearing involved in television, substituting sponsorship revenue for advertising revenue has, therefore, a direct beneficial impact on the risks of the broadcaster. A programme can be defined as being sponsored if :

any part of its costs of production or transmission, is met by an organisation or person other than a broadcaster or television producer, with a view to promoting its own or another's name, trademark, image, activities, product, or other direct or indirect commercial interests.¹

I BROADCAST SPONSORSHIP IN THE UK

The broadcast sponsorship market in the UK is undeveloped relative to the USA and many European countries. Reliable estimates of the size of the market prior to the liberalization of the regulations following the passage of the 1990

¹ Mintel (1991), p.107.

Broadcasting Act are generally unavailable. Mintel² has estimated that broadcast sponsorship grew by 40 per cent from £5 million in 1988 to reach £7 million by 1990. In January 1991, the Independent Television Commission's (ITC) new Code came into force, but the recession has held back advertiser interest in sponsorship deals.

The predominant form of sponsorship characterizing the early stages of the industry in the UK has been the use of the sponsor's logo in association with the programme. There has been only a weak attempt to link the sponsor with the programme in a positive way or to move towards more involved forms of sponsorship such as co-productions or barter.

There were a number of headline sponsorship deals in 1991 under the new regulations.³ In that year, International Distillers and Vintners (IDV) paid £300,000 to sponsor six episodes of *Rumpole of the Bailey*.⁴ *Rumpole* was one of a group of networked programmes nominated by the ITC. However, demand remained weak at the prices offered by broadcasters. Tyne Tees's Catherine Cookson drama series, for example, failed to find a sponsor. Despite the initial cool response to the opportunities created by the ITC Code, Mintel believed that the total market doubled to reach £15 million in 1991.

UK estimates of the future size of the sponsorship market for ITV range from £32 million to £68 million by the year 2000 (at 1991 prices). Such estimates must be weighed against critical assumptions concerning how much new revenue is

² Mintel (1991), p.107.

³ The ITC Code parallels the EC Directive on Transfrontier Broadcasting (89/552/EEC).

⁴ IDV obtained for *Croft Port*, 15 seconds at the beginning of the programme, 10 seconds at the end and a further 20 seconds distributed between the two advertising breaks.

generated by sponsorship and how much is simply diverted from commercial airtime sales.

II THE ECONOMICS OF SPONSORSHIP

The demand for sponsorship depends upon the relationship between the cost of the deal and its value to the sponsor. At present the valuation of sponsorship deals is a new and inexact science, implying that published estimates of the future growth of the market contain a large speculative element. Current valuation methods have been based upon samples from a small universe of existing deals, a thin market in sponsorship and a new, uncertain regulatory environment.

A sponsor has to compare a deal with other forms of marketing investment. Most sponsorship valuation models concentrate on evaluating a package in terms of the opportunity cost of buying airtime. This is known as the 'airtime equivalence net cost', since it relies on transforming a sponsorship deal into a quantifiable volume of commercial impacts which can then be valued at market rates.

There is no definitive formula for converting a sponsorship package into an airtime equivalent. The methodology followed by agencies and intermediaries between sponsor and broadcaster has been to derive a formula from an analysis of the price paid for a few early sponsorship deals.⁵

A number of stages are involved in this process. First, the sponsorship package has to be converted into an airtime

⁵ It would be dangerous to assume, however, that airtime equivalent formulae derived from the prices paid in deals struck during the early stages of a market will remain appropriate when the market matures. A limited number of deals implies a low level of liquidity in the sponsorship market. As the market in infrequently traded shares of small companies in the stock market demonstrates, thin markets produce often violent fluctuations between asking prices and bid prices. This liquidity problem compounds the risk to the sponsor and the broadcaster of being locked into a deal at the wrong price. The impact of such uncertainty produces high returns to intermediaries and limits the size of the market.

equivalent volume. This volume equivalent is then valued at current airtime market rates. Finally, multipliers are applied to this valuation to account for any positive or negative factors that might affect the efficacy of the sponsorship package.

This method allows the advertiser/sponsor to compare a sponsorship deal on offer with the cost of buying the equivalent amount of airtime. The broadcaster/programme-maker can also contrast it with the advertising revenue that could be generated from airtime sold within a 30 minute transmission.

The advertising equivalence method of valuing the sponsorship potential in the UK television market is simple, if heroic. The maximum volume of sponsorship seconds that could be yielded from the ITV companies alone is large. Under the 1991 ITV Code, all categories of programmes are sponsorable apart from news, current affairs, and religious broadcasts. The opportunity for on-screen recognition for a sponsor has expanded in duration and in prominence. The main restrictions on the ITC-controlled channels' ability to raise sponsorship revenue are economic: the impact of sponsorship on audience appreciation and on the perceived value to other advertisers buying airtime around it.

At present the ITV companies could offer three types of programme for sponsorship:

- Network properties, e.g., national weather/Rugby World Cup
- Network programmes, e.g., Coronation Street
- Regional programmes

The maximum potential revenue from sponsorship can be estimated as outlined above by valuing a week or a season's total sponsorship secondage by the equivalent airtime cost.

One such study of the network's sponsorship potential was carried out by one of the contractors in its franchise bid.⁶

The actual expenditure on broadcast sponsorship will depend on the level of supply and demand in the market during the 1990s. The contractor study, mentioned above, estimated two market levels depending on the percentage of transmission time sponsored. Based on the 1991 network schedule, a high demand for sponsorship (one sponsored programme of 30 minutes every six hours or 8 per cent of transmission time) produced a total network value of £45 million at 1991 prices. In contrast, low demand (one sponsored network per day in early peak time) produced total sponsorship revenue for the network of £32 million.

An alternative approach is to consider international experience in countries where there have been a greater number of sponsorship deals. In France, where a sponsorship code similar to the new ITC model has been in operation since 1988, sponsorship revenue had grown to over 5 per cent of total commercial income by 1990. If this is taken as the equilibrium level, on the assumptions of the revenue growth anticipated in this study, it implies that commercial television could raise approximately £120 million (1991 prices) in sponsorship by 2000. However, sponsorship was introduced into a relatively undeveloped television advertising market in France, so may have grown faster than would be the case in a more developed market.

Estimates of the total size of the sponsorship market should be tempered by considering the fluidity of sponsorship money. The airtime equivalent method of valuing sponsorship carries with it the danger that advertisers will readily compare and contrast the relative yields on the two methods of promoting

⁶ Chris Bonney carried out the study for Tyne Tees Television. Sponsorable programmes were converted into network and regional 30 second spot equivalents and valued by multiplying the total by adult cost-per-thousand, adjusted according to time of day, by the estimated audience and the network universe.

their products. Increasing the substitutability between advertising and sponsorship means that a large proportion of sponsorship revenues might be simply transferred from the advertising budget.

In the case of events, there is a potential trade-off between sponsorship money going into the events themselves and into the broadcast coverage. In many cases, in sport and in the arts, the events and sponsorship are supplied jointly. A transfer of money by some advertisers from financing the event to reducing the production costs of the broadcast could eventually become self-defeating. At first, revenue would be raised by the broadcasters from event programme sponsorship, but only at the cost of depriving the events themselves. Event organizers, faced with a loss of income, would raise the cost of access to broadcasters. If the broadcasters did not pay up, there could be a resultant reduction in the range and volume of events. Some events might face bankruptcy.

III SPONSORSHIP IN THE BBC

The highest of the more reliable estimates above suggests that ITV could raise a maximum of £68 million (in 1991 prices) from sponsorship by 2000. The lowest estimate has been £32 million and the median £50 million. At first sight, it might seem that BBC1 could raise a similar amount. However, a paper by Sharp (1990)⁷ considered a number of reasons why the BBC could charge a premium over ITV for programme

⁷ Total visual and verbal accreditation were valued by Sharp (1990) at equivalent airtime seconds, but, in addition, opening and closing credits were awarded a 10 seconds impact value along with verbal credits. Trailers were awarded a value of 10 seconds, whereas visual-only credits during an event or programme were believed to have their impact reduced by the on-screen action and were awarded a value of only 5 seconds. Perimeter advertisements or signage during events were assumed to have such a minimal audience impact that total on-screen secondage should be multiplied by 0.2 to achieve an advertising equivalence estimate.

sponsorship. The extra coverage, the non-commercial reputation and the value of the BBC's slightly more upmarket audience are the principal reasons why a premium might be charged. It has also been argued that this premium could be reinforced if the BBC did not sell commercial airtime. A sponsored programme's accreditation of 40 seconds would have to compete with seven minutes of advertising on ITV per hour reducing its marginal effectiveness.

The experience of the PBS networks in the USA is instructive. The smaller upmarket audiences delivered on these channels has allowed them to raise sponsorship money from 'top quality' corporations without losing any editorial independence. In many cases, sponsorship revenues attained can exceed six times airtime equivalent, compared to the 1:1 relationship experienced in the early ITV deals. However, the high prices attained from sponsors are based on a process of careful sponsor selection and offering a limited number of network properties. There is a trade-off between the additional value a BBC sponsored programme might hope to gain and the total volume of programmes sponsored. It is also likely that the ITV companies will push the sponsorship market close to saturation point, leaving little opportunity for later entrants. In consequence, the amount of sponsorship money the BBC could attract without changing its programme policy is likely to be far less than the ITV maximum estimate.

There may be other limiting factors. The overall growth in advertising opportunities, described earlier in this study, may reduce advertiser interest in sponsorship. Sponsorship revenue sought in relation to events may, as suggested above, result in a countervailing increase in the cost of access to those events, leading to a low net yield for broadcasters. Audience concern about compromising the editorial independence of documentary and factual programmes may reduce the range of opportunities judged appropriate for sponsorship.

It is difficult to avoid the conclusion that reliable evidence of whether sponsorship will generate significant new revenues for British broadcasting must await the experience of the commercial sector over the next few years.

Radio Advertising

Brian Sturgess

Introduction

In contrast to the significant number of statistical studies conducted for forecasts of the UK TV advertising market, very little has been done on UK radio. Historic data on the commercial radio industry go back just 15 years. The next five years are likely to see such a large structural change in the industry that the relevance of recent history is questionable.

The few econometric studies carried out suggest the introduction of new local services and the first three national commercial services in the early 1990s are, at best, likely to result in only modest growth in the UK radio advertising market. However, international evidence from countries where either national commercial radio stations already exist or where commercial radio as a whole obtains well over half of total radio listening (in the UK it is still just 38 per cent), suggests that there is potential for radio advertising to grow significantly. In particular, in most of these countries radio accounts for at least 5 per cent of all display advertising whereas in the UK it accounts for just 2.8 per cent.

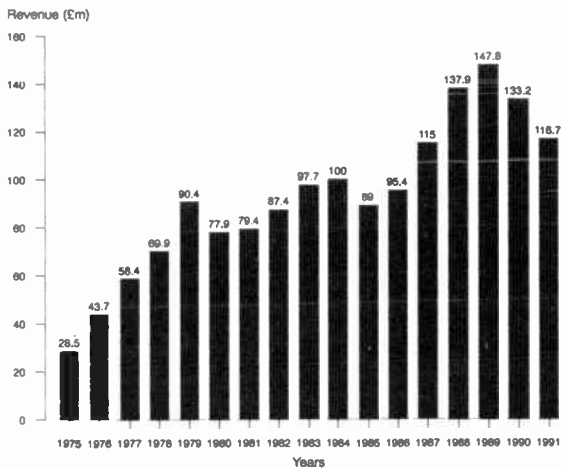
This chapter tries to encompass these very different views. It describes in some detail what relevant evidence there might be from the historic performance of the UK radio advertising market and what international evidence does and does not reveal. The end result is a best-guess forecast, based on

historic evidence and some speculation about the effect of structural change.

Diverging views of the prospects for the industry do suggest that investing in UK radio will represent a risk. It also suggests that decisions on the funding of BBC radio cannot be taken with confidence until the performance of independent national radio (INR) proves whether or not there is an untapped demand for more radio advertising.

I THE UK RADIO ADVERTISING MARKET

In 1990, the Advertising Association (AA) estimated that advertisers spent £163 million on commercial radio, of which some £133 million was received as revenue by the independent local radio (ILR) companies. At the time of writing, the industry is in deep recession. After showing real growth of 7 per cent in 1989, radio advertising expenditure fell by 9 per cent in 1990 and is believed to have fallen by another 9 per cent in 1991. A modest growth rate is expected for 1992. Figure 3.1 shows real radio advertising revenue from 1975 to 1991.



Sources: Advertising Association, AIRC, BBC Estimates

Figure 3.1 Real Radio Advertising Revenue 1975–1991 (1991 prices)

Radio's share of *display* advertising expenditure rose from 0.2 per cent in 1973 to 2.7 per cent in 1980 as the number of separate commercial radio stations on-air increased from three to 19 in the same period. Independent local radio increased its coverage from 24 per cent to 56 per cent of the UK.

The 1980s, a 'golden decade' for television advertising, showed little sign of a link between an increase in supply of commercial radio audiences and the growth of total radio advertising revenue. From 1979 to 1990, the number of commercial stations on-air increased to 107, while their coverage of the UK rose from 60 per cent to 95 per cent, close to saturation level. Yet over this period, real radio advertising expenditure grew at an annual average rate of only 3.6 per cent, compared with a rate of 5.4 per cent for total display advertising. As a result, the share of display advertising taken by radio, as shown in Figure 3.2, averaged 2 per cent over this period showing, if anything, a slight trend decline.

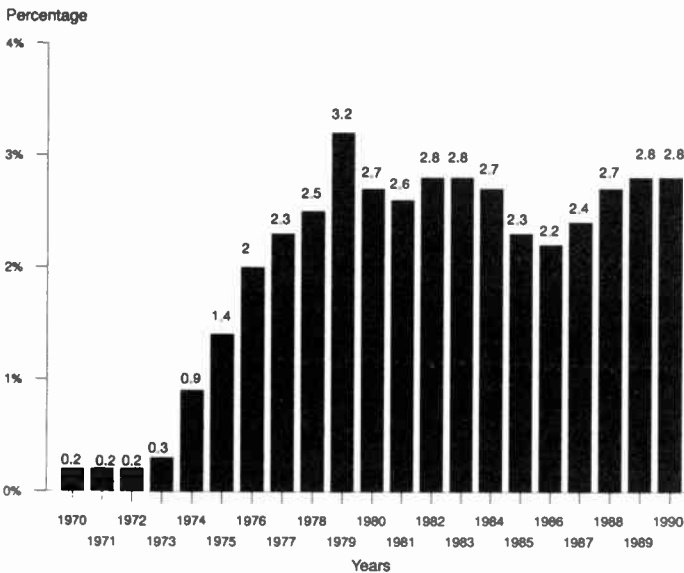


Figure 3.2 Radio's Share of Display Advertising Expenditure 1970–1990

Indeed, the only years of high growth for radio advertising were 1986 to 1989. This was not only a period of buoyant economic growth but also one of lower commercial TV audience share, which pushed up real TV advertising costs by as much as 20 per cent per year. This led advertisers to use other media, including radio.

II ECONOMICS OF RADIO ADVERTISING

The level of radio expenditure depends upon the demand for, and supply of radio listeners. An increase in the share of radio will only result if the long term growth in the demand for radio audiences consistently exceeds supply. During the 1980s, the balance of these forces kept the growth of radio advertising below growth in the total advertising market.¹

Supply

A major increase in supply will result from the launch of the new INR stations. A further increase will follow with the licensing of more local incremental stations using existing frequencies and 105–108 FM from 1996 onwards. It is assumed that the total number of commercial radio stations at the end of the decade will rise to 300, including at least three national stations.

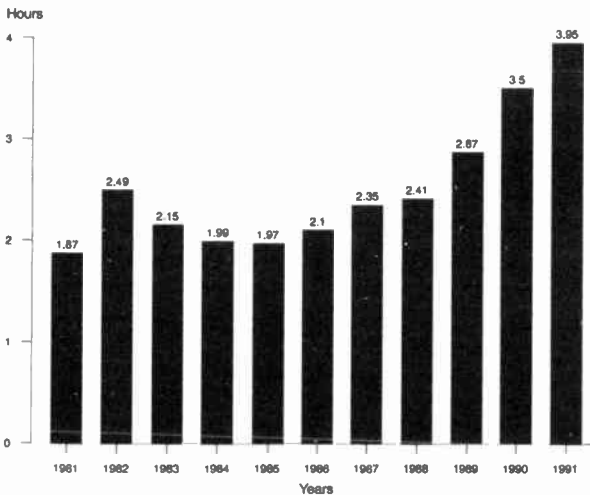
¹ The author and Nick Wilson used an index of quarterly average commercial listening per head as a proxy for the supply of commercial exposures. An increase in the supply of listening of 1 per cent was found to reduce radio revenue by 0.2 per cent, implying that the demand for radio is price inelastic in the short term. This means that increases in the supply of audiences reduce radio's share of total advertising because advertisers do not respond to a decrease in the fall of the medium's price by buying more of it.

Demand

In radio, cyclical disturbances have been magnified because changes in supply (Figure 3.3) have occurred in isolation from changes in demand. Regulators have licensed new stations at varying stages of the demand cycle.

As a result, real radio advertising expenditure follows a more volatile pattern of growth than many other media carrying display advertising. From 1987 to 1990, press display advertising grew at an average real rate of 4 per cent a year. Radio grew by 7.3 per cent a year, but the respective ranges around the average growth rates were +12 to -9.3 per cent for press and +31 to -12 per cent for radio.

Macroeconomic models of the demand for advertising typically attribute underlying cyclical influences to the relationship between radio advertising, consumer expenditure



Source: BBC Broadcasting Research Department

Figure 3.3 Commercial Radio Listening 1981 to 1991

and company profits. An econometric study by the author² found the strongest impact on radio advertising revenue came from variations in the growth of consumers' expenditure, with a much weaker impact arising from changes in corporate profitability. A 1 per cent rise in consumers' expenditure was shown to produce a 1.5 per cent rise in radio advertising revenue, whereas an identical rise in gross trading profits produced a rise of just 0.2 per cent in advertising expenditure.

The model also found an impact on radio advertising of conditions in the television market. A 1 per cent rise in the real cost of buying television airtime produced an increase of 0.1 per cent in radio revenue. The model implies that growth in radio advertising in the 1990s will be tied mainly to the prospects for consumers' expenditure, company profits and the conditions prevailing in the television market, as well as any major structural changes due to changes in the BBC's share of radio listening.

III EFFECT OF NEW ENTRY IN THE 1990s

Substantial new entry into the commercial radio market is expected during this decade. In 1988, the IBA sanctioned 'incremental services' and 'split frequency broadcasting'. Split frequency broadcasting allows radio contractors to provide at least two separate services, one on FM and one on AM. By the end of 1989, five new incremental services were broadcasting specialized programming. These services were intended to meet a variety of religious, cultural, ethnic and other specialist tastes. At the end of 1990, nearly 30 stations were providing split frequency services. The 1990 Broadcasting Act, which established the Radio Authority, abolished the distinction between 'full service' licences and incremental services. As a result, it has been estimated that

² Sturges and Wilson used dynamic time series techniques on a model of radio advertising using quarterly ILR advertising revenue data covering the period 1978 to 1989, which was successfully tested on data for 1990.

the number of commercial radio stations could exceed 300 by 1996.

Deregulation of the sector has also taken place at the national level. The 1990 Broadcasting Act ended the BBC's monopoly over national radio broadcasting. The Radio Authority was empowered to authorize three new national commercial radio stations, INR, using a new FM frequency and two BBC AM frequencies. INR1 was awarded to Classic FM after the winners of a competitive auction, Showtime, failed to raise enough money to run the service. It is expected to begin broadcasting an 'easy listening' format, in competition with BBC Radio 2 in September 1992. The INR2 franchise was awarded in April 1992 to Independent Music Radio, a joint venture between Virgin Communications and TV-am, who intend to run a broad-based rock station. At the time of writing INR3 was to be advertised soon.

IV UK EVIDENCE ON THE EFFECT OF CHANGING STRUCTURE

From 1981 to 1991 total listening to commercial radio per person increased by 110 per cent. However, total real revenue only increased by 50 per cent.

In London, from 1988 to 1990 the share of all radio listening taken by commercial radio went from 40 per cent to 60 per cent, but real advertising revenue grew by just 5 per cent. Indeed, London's share of all UK radio advertising actually fell during this period. There is, therefore, no evidence from the past to suggest that increasing radio's reach or share actually has a positive effect on advertising revenue.

However, in a submission to the Peacock Inquiry, Lind (1985) distinguished between large and small scale effects. He maintained that if an expansion in the commercial radio audience was large enough this might cause the average cost for a commercial impact on radio to fall sufficiently to attract substantial new use of the medium. Smaller changes, however, in commercial audiences simply allow existing advertisers to achieve target audiences with lower financial

outlay. It could be argued that the introduction of new INR services could be just the large scale expansion needed.

Nevertheless, the expansion in the commercial audience in London from 1988 to 1990 did not release a great new demand for the media. For instance, Capital Radio, with the help of its new 'Gold' service managed to increase its average audience by 30 per cent between 1988 and 1990 but its real cost per thousand listeners fell by about 22 per cent, resulting in a real increase in revenue of under 2 per cent.

V INTERNATIONAL COMPARISONS

On the other hand, optimists believe that deregulation could propel the share of radio advertising in the total advertising market towards the 1989 European average of 6 per cent.

Relative ease of entry is employed as an explanation of the high share of total advertising enjoyed by radio in North America and some European countries. In the USA, with over 5,000 FM and 4,000 AM commercial stations, radio achieves an average share of around 10 per cent of the total media market. In France in 1989, radio advertising, with over 1,600 stations selling airtime, attained a share of 11.2 per cent.

Simple international comparisons can, however, be misleading. In the USA, unlike the UK, commercial radio preceded the introduction of commercial television. There is no cinema advertising, a medium which, like radio, has a high penetration among 15 to 34 year old adults. There are other major structural differences. Neither the USA nor most European countries have strong non-commercial public radio. In the UK, the BBC predated the introduction of commercial radio by nearly 50 years.

There are other problems with international comparisons. In Europe, estimates of advertising expenditure in many countries exclude classified advertising in the definition of total spending. In 1989, UK classified advertising accounted for 24.4 per cent of the total market. Expressing the share of radio as a proportion of display advertising raises the ratio from 2 per cent to 2.8 per cent.

In Europe, commercial radio markets range from the highly regulated as found in Austria and the Netherlands, with just a handful of domestic commercial stations, to the completely deregulated such as France, Italy and Spain, which boast a total of over 4,600 commercial radio stations. Data on the market structure of 15 European countries in 1989 is presented in Table 3.1. Radio's share of advertising ranges from a low of 1.7 per cent in Belgium to a high of 11.2 per cent in France and Spain. The average share of radio in these countries in 1989 was 5.3 per cent, while the UK market appears underdeveloped for its size with a radio share of display advertising of only 2.8 per cent. However, the data reveal no systematic relationship between the number of commercial radio stations and the share of radio advertising across Europe. Despite the high shares attained in the liberalized markets of Spain and France, Italy, with over 2,500 commercial stations, produced a radio advertising share of only 3.6 per cent. In Austria, in contrast, radio's share was as high as 8.5 per cent, despite having only three domestic commercial stations.

Quite a strong relationship does exist, nevertheless, between radio's share of all advertising and the audience share of commercial radio stations. Countries where the audience share of commercial stations is less than 50 per cent are more likely to have a radio advertising share below the European average. In the UK in 1991, the commercial radio stations had a share of listening of 38 per cent, up from 14 per cent in 1976.

VI AUDIENCE DIFFERENTIATION

Another argument proposed in favour of predicting expansion in the share of radio advertising is that deregulation will allow advertisers and commercial stations to exploit the targeting potential of radio. Optimists point to the USA where at least 11 distinguishable programme formats exist in the music broadcasting sector alone. Whether such segmentation can be profitable, however, depends on the number of similar

Table 3.1 Structure of 15 European radio markets, 1989

	Share of radio	Share of television	Number of commercial stations	Daily reach	Audience share of commercial stations	Market share of top 3 stations
	%	%		%	%	%
Austria	8.5	24.8	3	74.6	n.a.	n.a.
Belgium	1.7	24.4	197	n.a.	n.a.	n.a.
Denmark	3.4	8.1	174	61.2*	22.8	n.a.
Finland	2.4	12.9	56	85.0*	n.a.	30.5
France	11.2	24.7	1,249	74.8	78.5	82.2
Germany	4.5	13.3	141	73.1	89.5	96.5
Greece	7.2	40.8	372	56.5	94.3	69.2
Ireland	10.0	28.9	22	67.0	100.0	66.0
Italy	3.6	50.1	2,500	52.5	98.0	60.0
Netherlands	1.9	10.3	5	n.a.	86.2	95.0**
Norway	1.9	1.6	297	n.a.	19.7	n.a.
Portugal	8.9	48.2	301	73.3*	86.0	86.8
Spain	11.2	30.1	900	53.0	90.0**	42.5
Switzerland	1.4	6.5	34	77.5	36.6	20.0**
UK	2.8	38.0	99	43.8	34.6	60.2

* Weekly reach

** Estimate

Source: Carat (1990), BBC Broadcasting Research

stations and the size of the total audience for each format.

Currently, many ILR stations still cover quite a wide age and demographic range with one station. Only in the major metropolitan markets, and particularly London, has there been a move towards a segmented marketplace.

These stations now offer unique opportunities for certain advertisers to target audiences specifically. The actual cost per thousand listeners each station enjoys depends on the particular demand and supply characteristics of each sub-market.

There is no evidence, as yet, that increased differentiation in the London market has allowed stations to enjoy a higher cost per thousand due to better targeting. While targeted stations may have brought new advertisers into the medium,

Table 3.2 Commercial stations and share in London, 1991

Station	Content	Age group	Share(%)
Capital FM	Top 40/album	16 to 30	21
Capital Gold	Oldies and sport	30 to 45	14
Melody	Easy listening	45 to 60	6
Kiss FM	Dance music	16 to 24	3
Jazz FM	Jazz, light album music	24 to 40	2
LBC Talkback	Phone-ins	45+	5
LBC Newstalk	News and discussion	30 to 60	7
Spectrum/ Sunrise	General	Ethnic	1

Source: BBC Broadcasting Research Department

this has tended to be at low cost per thousand. At the same time, existing advertisers have taken advantage of better targeting by spending the same, or even less, and getting more for their money. Targeting may help individual stations. There is little evidence that it will cause the market to grow significantly.

VII NATIONAL VERSUS LOCAL ADVERTISING

International evidence supports the argument that markets where commercial radio stations enjoy high share and reach tend to have a larger radio advertising market than those where this is not the case. However, in some countries, this high reach is created by many local stations, in others it is created by a few national ones.

There are two views on the desirability of radio as a national rather than local outlet. First, a national outlet provides the opportunity for 'one-stop shopping' for national brands. Currently, national campaigns in radio in the UK not only have to buy time on several stations, they also have to verify that the advertisement has been transmitted by all the stations. This extra administration may cause advertisers to discount quite heavily the price they are willing to pay. In addition, advertising agencies tend to view radio advertising as a second-tier, relatively unimportant medium. Once a

commercial national outlet is available, the price that advertisers are prepared to pay for the medium could increase.

The alternative view argues that, while most national brands still operate a series of regional campaigns, few want 100 per cent coverage. If national stations provide just national advertising rather than regional opt-outs, then advertisers will find some of the coverage they are buying of little value. This in turn will be reflected in an expected discount for national stations in terms of overall costs per thousand.

Table 3.3 Estimated breakdown of revenue 1990

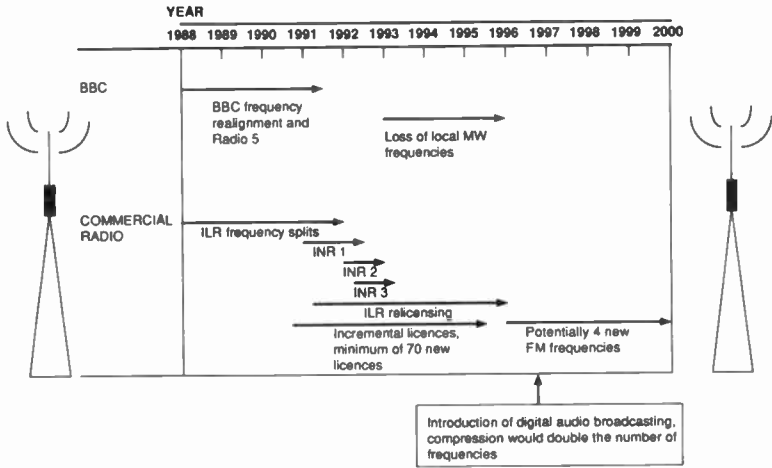
	Value (£m)	%
Local goods and services	40	30
Local campaign for branded products	40	30
National brand campaigns	53	40
Total	133	100

Table 3.3 gives an estimated breakdown of the UK radio advertising market. About 40 per cent of all money is spent on national campaigns (not always fully national), while around 30 per cent is spent on advertising purely local services. The remaining 30 per cent is spent on local campaigns for national brands. National radio stations will compete for the money currently spent on national campaigns. This competition for national advertising will cause a decrease in price which might in turn attract more local advertising, albeit at a lower price.

VIII THE FUTURE AUDIENCE TO COMMERCIAL RADIO

Figure 3.4 highlights the future trends of entry into the industry. The first two INR stations will have been launched by the end of 1992. By 1993, INR3 should have been advertised and allocated to a speech station.

INR1 will be an FM service offering a classical music/easy listening station. Audience shares are hard to predict, but a



Source: BBC PPU

Figure 3.4 UK Radio Channels' Timetable of Events

reasonably conservative estimate would be about 7 per cent to 8 per cent. Melody Radio, London's easy listening station, obtains about a 6 per cent share. The service is likely to take most listeners from BBC Radio 2, with some also taken from 'Gold' services like Capital Gold, ILR easy listening services, Radio 3, Radio 1 and Radio 4.

INR2 will be a MW service offering a pop and rock mixture, probably aimed at the 24 to 35 year old age group. It is aiming for an audience share of 10 per cent to 12 per cent and is likely to appeal mainly to listeners of Radio 1 and ILR FM services. INR3 will probably be a speech service, perhaps with some sport as well as news and phone-ins. It is unlikely to get more than a 5 per cent share and is predicted to take audiences from those stations with a 35+ year old audience, such as ILR Gold services, BBC local radio and, to a lesser extent, Radio 4.

By the mid-1990s, therefore, INR could have a share of about 24 per cent of national audiences. About one-third of that listening – say 8 per cent – is likely to result from audiences switching from ILR. Total commercial radio listening would, on that basis, rise by about 16 per cent, at the

expense of the BBC. This would increase commercial radio's share to about 55 per cent by 1995/96.

Beyond 1995/96, the Radio Authority will be allocating new incremental services on 105–108 FM in various areas of the UK. Some of their listening will come from existing ILR stations and INR, but some will also come from the BBC. This study assumes that the BBC loses a further 6 per cent with the commercial sector growing to 60 per cent of listening by 2000.

Recent studies show an increase in the hours of radio listening, particularly in London. This seems to be because new niche channels give established audiences what they want and they listen for longer. There has been no increase in the size of the audience. Increased choice and segmentation in the national radio market could raise total listening by another 10 per cent to about 12 hours per week, near the current listening levels in London. Taking all these factors together, the period from 1991 to 2000 is likely to see an increase in size of the commercial audiences of about 80 per cent.

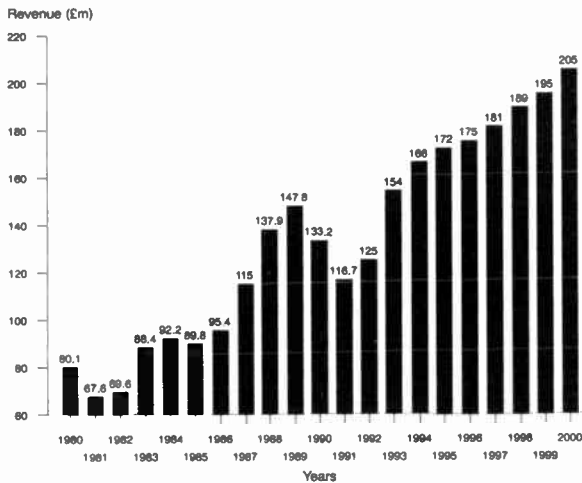
IX REVENUE FORECASTS

The most optimistic extrapolation from past trends would suggest that this 80 per cent increase in commercial listening might expand revenues by about 15 per cent in real terms. Given that the level of commercial audiences projected will take commercial radio well beyond 50 per cent of all listening, will also offer targeted advertising opportunities and provide national, local and community advertising segments, it is not unreasonable to suppose that revenues will expand as a consequence of increased commercial listening.

With the introduction of the three INR stations, most of this increase in commercial radio listening will probably occur between 1992 and 1995. If this is combined with general growth in demand as a result of economic recovery, radio advertising could show a period of high growth, albeit from a low base.

X THE BREAKDOWN OF REVENUE

While there are grounds for optimism about overall revenue growth in radio, predictions of local radio's share are less encouraging. National commercial radio shares are likely to both bring in new advertisers and attract some of the £50 million or so spent on national brand campaigns in 1990 on ILR. It seems likely, therefore, that ILR will lose some national advertising and accrue less revenue, as a result of lower price, from those advertisers they retain. However, this drop in price could also attract some new local advertisers. In addition, as more local outlets come on-air during the mid-1990s this is likely to give a secondary boost to ILR and incremental stations. If this were to happen, ILR's revenue might recover to 1990 levels in real terms by the year 2000. However, in 1990 the revenue was being shared by 107 stations, by 2000 it will have to be shared by about 300. INR would probably sell at a discount to average market price, especially in the early years (for instance in 1995 it might account for 45 per cent of all commercial listening, but just one-third of all revenue).



Sources: AIRC, Brian Sturges Forecasts

Figure 3.5 Net Radio Advertising Revenue 1980–2000
(1991 prices)

Overall, this leaves a base case forecast of radio revenue growth of about 6.5 per cent in real terms per year from 1991 to 2000, perhaps the fastest growing display advertising medium over the decade, but from a low base. On the basis of past experience, it could have risen from the current 2.8 per cent of all display revenue to just over 3 per cent by the year 2000. Figure 3.5 summarizes the forecast.

Advertising on Radio 1 and Radio 2

The introduction of advertising on Radio 1 and Radio 2 in 1996 would increase the commercial sector's share to about 70 per cent of listening in that year, compared with the base case forecast of 55 per cent of listening. The model used here would suggest that this increase in commercial listening might produce a small positive boost to revenue of about an additional 10 per cent. Under such circumstances, Radio 1 and Radio 2, assuming that airtime was sold on a par with INR, might gain about £30 million and £15 million respectively.

By the year 2000, although the market would have grown with general economic growth, increased competition from more local services would keep Radio 1 and Radio 2's expected revenue constant. INR's income would be reduced compared to a situation where Radios 1 and 2 remained totally licence-funded, perhaps by as much as 25 per cent, with ILR possibly losing less revenue, perhaps about 10 per cent. The INR stations might find themselves in financial difficulties and ILR would be reduced to a total income similar to that of 1987/1988 in real terms, with four times as many stations operating.

XI SUMMARY

There is a clear conflict between evidence drawn from UK market behaviour and international comparisons. The forecast here represents a compromise, and has had to rely on assumptions which, while reasonable, lack the wealth of

analysis available in the television market. The growth pattern it predicts would probably leave commercial local radio intact, although severely restructured, and INR1 and INR2 in profit, with INR3 a marginal service.

A more optimistic forecast, based solely on European evidence, where radio typically accounts for 6 per cent of all display advertising, could yield radio revenues of up to £340 million by the year 2000, based on the projection of display advertising revenue in the year 2000 of £5,666 million. This would leave all new commercial radio services comfortably in profit. However, it should be stressed that the UK market offers no evidence to support such optimism.

If these predictions are valid, only a step increase in radio advertising as a proportion of all advertising to European levels, would allow Radio 1 and Radio 2 to take advertising while leaving all services, including the two BBC ones, potentially viable.

Table 3.4 Forecasts for Radios 1 and 2 taking advertising, revenues in £m (1991 prices)

	Radio 1	Radio 2	ILR	INR	Total
Optimistic extrapolation of past UK growth	30	15	121.5	52.5	219
European trend growth	46.5	23	189	81.5	340

NB: These are illustrative figures, based on two hypothetical growth scenarios.

Trends in the Organization of Programme Production*

William B. Shew

Introduction

The last decade has witnessed an unprecedented growth in the number of TV channels available to the viewing public — both here and abroad. But for a typical television operator, intensifying competition has meant smaller TV audiences and higher costs of programming, developments that can strain the preservation of programme quality.

This chapter examines opportunities to maintain quality by sharing the costs of programme production with television operators elsewhere. Cost-sharing arrangements — co-productions, sales of exhibition rights overseas, imports of foreign productions — can lessen the tension between licensing more TV channels and preserving quality.

This chapter is organized into four sections. Section I describes the growth in channels and the challenges it poses for programme quality. Section II discusses the economics of programme production and of arrangements to share costs. Section III then examines recent UK industry trends in cost-

* I gratefully acknowledge the assistance of the ITC, ITVA, the CSO and the BBC, who provided much helpful information.

sharing, as measured by programme exports and imports, and the activities of individual channels in programme markets. The final section considers how current developments are likely to affect the future sharing of production costs.

I THE CHANGING MARKETPLACE FOR TV PRODUCTION

In Britain, as in many other countries, new technologies and liberalized regulation have prompted a significant expansion of television channels, a trend that shows few signs of slackening. Within the last decade, the number of TV channels available in the UK has increased tenfold, and TV output, as measured by hours of transmission, has increased more than sixfold.¹ The launch of Channel 4 and TV-am in the early 1980s² was followed by broadband cable television, now supplying six specialized cable channels, and by direct-to-home (DTH) satellite television, which currently transmits 20 English-language channels. A new terrestrial service, Channel 5, is due to be launched by 1995; meanwhile, continued growth of cable and satellite channels is expected.

Whether the ongoing proliferation of channels turns out to be a success in the eyes of channel providers and the viewers

¹ The output of terrestrial channels alone has doubled. In 1982, the BBC and the average ITV company between them provided over 14,000 hours of broadcasting. By 1991, over 28,000 hours were provided by a combination of the BBC, the average ITV company, Channel 4 and TV-am. Although most of this growth is attributable to new programme services (Channel 4 and TV-am), some is attributable to longer programme schedules of the BBC and ITV companies. The BBC increased the output of its two channels from 9,619 hours to 12,589 hours, while the average ITV company's output increased from 5,243 hours to 7,492 hours. See *TV, UK Special Report* (1991) Knowledge Research, Peterborough, Table 3. (Henceforward *The Knowledge Report*).

² Channel 4 began transmitting in November 1982; TV-am commenced in February 1983.

they hope to attract will depend in no small measure on the programming used to fill the channels.

Licensing new channels, although not without controversy, has generally been regarded as a positive development. It has provided viewers with greater choice and permitted the exhibition of a more diverse range of political and cultural views, something of considerable value in a democratic society.

But channel growth also unleashes forces that can threaten programme quality. With more channels, each channel tends to attract a smaller audience, because total demand for TV viewing is relatively inelastic — an increase in channels leads to a less than proportionate increase in total viewer hours. Channel 3 and BBC1 and 2 collectively attract an average audience of 9.5 million, down from 11.2 million in 1981, when they did not face competition from Channel 4, DTH satellite channels or broadband cable television channels.

Smaller audiences are likely to reduce a commercial channel's ability (or willingness) to spend as much on programming, whether the channel is supported by advertising revenue or subscriber payments. Nor are publicly funded channels necessarily immune, since the inclination to commit public funds may not be independent of the audiences they attract.

Competition can drive up programme costs, as well as reducing the revenue a channel has to spend on programming. That risk is most visible in the market to acquire rights to exhibit programmes produced abroad. If a domestic TV channel has no direct competition, it can acquire foreign programming on highly advantageous terms. As the only channel to whom a foreign programme owner can sell rights, it has considerable bargaining power, especially since the foreign owner stands to gain from making a sale at any price in excess of the incremental costs of the sale (tape duplication, dubbing, etc.). When several domestic channels compete for programming, however, the owner can often play one off against the other to obtain a substantially higher price. In a much publicized example several years ago, competition

between the BBC and ITV for the American series Dallas drove its price up from \$29,000 to \$60,000 per episode.

Channel growth can also exert upward pressure on the cost of producing a programme, as competition for scarce production talent intensifies.³ Such cost inflation, however, is more difficult to identify than rising prices for foreign productions, since there is always some ambiguity about whether higher costs are attributable to inflation or efforts to upgrade programme quality.

There is a widespread conviction that the prices paid for TV programmes have been rising faster than general inflation, but developing an accurate measure of programme inflation is difficult. Some categories of programming (e.g., drama) are intrinsically much more expensive than others (e.g., current affairs), so changes in a channel's programme mix can significantly alter the average cost it incurs for an hour of programming, obscuring the pure impact of inflation. Even the cost trend within a programme category may be misleading, reflecting decisions to upgrade programme quality (to better serve domestic audiences or to improve prospects for foreign sales) or downgrade quality (to reduce the impact of inflation or to engage in belt-tightening in response to lower revenues).⁴

³ There is some controversy about whether an increase in demand for production leads to higher programme costs in the long run. Many people in the industry feel that it does. On the other hand, a voluminous study of the costs of producing television programming in the US, conducted by the Federal Communications Commission some years ago, concluded that programme production can be expanded with little or no upward pressure on costs or prices. See US Federal Communications Commission Network Inquiry Special Staff(1980) 'An Analysis of Television Programme Production, Acquisition and Distribution', *New Television Networks: Entry, Jurisdiction, Ownership and Regulation*, Vol. 2, Washington DC, October.

⁴ A quality-adjusted price index would reveal true inflation, but the information required to construct it is not readily available.

Removing the price effects of quality shifts is impractical, but altered programme mixes can be dealt with by computing the trend in programme costs that would have occurred in the absence of changes in the mix of programming. By that measure, programme costs have been growing 30 per cent faster than the general price level. Since 1986, general inflation has been averaging close to 7 per cent per year, while programme costs have been increasing at almost 9 per cent annually, equivalent to an increase in real terms of 2 per cent per year. (See Table 4.1.)

Table 4.1 Average production cost per programme hour (thousands of 1991 pounds)

	1986	1991	Annual growth (%)
Channel 4	50.0	54.8	1.9
BBC	75.1	85.0	2.5

Note: Computed from average costs of individual programme categories, using weights that reflect 1991 programme mixes. Figures for ITV are not available. Sources: BBC Facts and Figures, Channel 4, The Knowledge Report.

In short, the increasing television competition in Britain holds out a challenge as well a promise. The growth in diversity means that households have a broader range of viewing choices, and would-be programme producers have expanded access to the public — both clear virtues. But a combination of smaller average audiences and higher programme costs could exert pressure on channels to transmit less attractive programming.⁵ If increased diversity is achieved at the cost of some deterioration of programme quality, channel expansion cannot be considered an unmixed success.

⁵ Although this will almost certainly occur for channels whose costs already exhaust their revenues, it is not necessarily the case for commercial channels earning supernormal returns. Increased competition may provide them with an incentive to either decrease or increase programme quality, depending on a variety of factors, including how the growth in competition affects the operator's marginal revenue from improving programme quality.

The tension between expanding channels and maintaining programme quality may be lessened by more extensive sharing of programme production costs among channel operators here and abroad. Such sharing can take several forms — sales of foreign rights to exhibit domestically produced programming, co-productions and acquisition of rights to exhibit programming commissioned by others. Each type of transaction can, in principle, reduce the net cost of programming incurred by channel operators with little or no degradation of programme quality.

Since television competition has been on the rise for some time now, an examination of recent history should provide important clues to the potential for restraining programming costs in the future through cost-sharing arrangements. That is a matter of considerable importance, given the launch soon of yet another terrestrial channel (Channel 5) and anticipated growth of cable and satellite television. But history alone is an imperfect guide. Recent developments — quotas on imported TV programmes are an important example — could make it more difficult to distribute programme costs over wider audiences. To interpret these developments, past and prospective, it will be helpful first to consider the basic economics of programme markets.

II THE ECONOMICS OF PROGRAMME MARKETS

It is becoming less easy to draw a sharp line between television programming and other forms of audiovisual entertainment. Movies made for theatrical release have long been a staple of television. But recent times have also seen a reverse flow, with made-for-TV movies occasionally migrating onto the large screen. Programming produced for television broadcasting is also now being distributed through video cassettes. In these circumstances, television programmes can perhaps be best defined as productions commissioned primarily for television transmission, whether by terrestrial stations, DTH satellite channels or cable television.

The activities required to produce a TV programme can vary substantially from one type of programme to another. On most channels, a viewer can find documentaries and current affairs, sports, light entertainment, children's programmes, and drama, to name but a few examples. A TV drama requires preparing a script, hiring a director and actors, arranging for music and costumes and, when pre-production activities are completed, the actual filming (or taping) of the drama can begin. Producing sporting events typically involves negotiating broadcast rights and arranging for cameramen and commentators. News and weather programmes involve the spontaneity of sports programmes (a live broadcast), but the producer hires the presenters and arranges for whatever script preparation is needed. As one would expect, production costs vary considerably across types of programming. A half hour of a successful drama can easily cost £450,000 – 5 to 10 times as much as a half hour of news or current affairs.

Table 4.2 Hours of production, 1990/91

	Network programmes	Local programmes	Total
BBC	6,294	3,780	10,074
ITV	4,894	5,444	10,338
Independents	3,135	700	3,835

Sources: BBC Facts and Figures, IBA/ITC

Most television production is arranged for by vertically integrated companies, which operate channels and produce much of the programming that appears on them. The ITV companies and the BBC exhibit a combination of network programming and 'local' programmes (e.g., local news and weather) whose exhibition is confined to a particular region. Local programming, because of its limited appeal to audiences elsewhere, offers little potential for cost-sharing. In 1990/91, the ITV companies produced almost 5,000 hours of network programming, and the BBC produced over 6,000 hours. Independent UK producers accounted for another 3,000 hours, most commissioned by the terrestrial channels.

Some programming is also produced by operators of DTH satellite channels and cable television systems. Figures on their programme production are not readily available. Most satellite and cable channels rely heavily on purchased programming, and are not believed to account for a significant proportion of production activities at the present time.⁶

Once a television programme has been produced, it can be exhibited time and time again. In the jargon of economics, it is a 'public good'.⁷ This reusability, which distinguishes it from most products, means that the same programme can be sold simultaneously in various places (e.g., America as well as Britain), to various media (VCRs as well as television channels) and at various times (e.g., repeat programmes). Reselling is possible because, unlike steel ingots and restaurant meals, for example, a television programme is not used up when it is 'consumed' by an individual.

This public good feature has a profound effect on the economics of TV programme production. Most TV programmes are produced for a particular channel, which becomes the primary exhibitor of the programme. But the programme may also bring in revenues from 'secondary' markets — other TV channels abroad and at home, VCR rights and so forth. These secondary markets allow the cost of a programme to be supported by a wider audience, through contractual arrangements with other distributors of TV programming. Such arrangements have become increasingly

⁶ A few satellite channels, notably Sky News, do however seem to be engaging in a considerable amount of production, much of it live studio programmes and sports coverage.

⁷ Television programming is often cited in the economics literature as a classic example of a public good. For a discussion of public goods and the difficulties of arranging for an optimal supply of them, see R.Auster (1977) 'Private Markets in Public Goods (Or Qualities)', *The Quarterly Journal of Economics*, Aug., and G.Brennan and C.Walsh (1985) 'Private Markets in (Excludable) Public Goods: A Reexamination', *The Quarterly Journal of Economics*, Aug.

important, as channel providers, faced with audiences diminished by competition, experience growing pressure to spend less on programming. Recovering programme cost across a wider range of markets, suitably pursued, offers distinct advantages over settling for lower quality programming or making more extensive use of repeat programming.

There are several traditional mechanisms for sharing production costs. Each has distinctive advantages and drawbacks, superficially at least.

Programme Sales

A channel operator producing a programme may be able to sell exhibition rights in foreign markets and even to other domestic channel operators. Sales reduce the net cost of the programming to the channel that produced it, while at the same time providing the buyers of the rights with relatively inexpensive programming. In this manner, the cost of producing the programme can be distributed across several TV audiences. When a channel operator commissions a programme from an independent producer, much the same thing can occur. The operator may pay the independent producer the full cost of production, in exchange for the rights to sell the programme in secondary markets as well as exhibiting it on his own channel. Alternatively, the channel operator may agree to pay the independent producer something less than the full production cost, in exchange for assigning the producer the rights to secondary markets, which can be sold off to cover the difference.

Co-Productions

Co-productions are another device commonly used to share the costs of programme production. Two or more companies — often channel operators — will agree jointly to produce a programme and share in its exploitation. For example, both the BBC and ITV companies often enter into agreements with

an American broadcaster or cable TV network to produce jointly a programme or series of programmes. Each obtains the right to exhibit the co-production in its geographic market, and some agreement is reached about the sharing of rights to exhibit the programming in other markets. The lead producer has the principal, and often exclusive, control over the production. The co-producer provides support in the way of money or contributions in kind (e.g., studio facilities) and may have some say in production decisions. Because negotiating a co-production contract can be time-consuming and costly, a co-production is more likely for a large scale production.

Acquisitions

Rights to exhibit a programme produced for another channel, foreign or domestic, can often be acquired inexpensively. At a superficial level, acquisitions are simply the obverse side of sales. A channel operator can produce a programme and recover some of its expenses through foreign sales or, reversing roles, can acquire the right to exhibit a programme produced for another market.

These mechanisms for sharing production costs differ in respects that can affect their attractiveness to a channel operator. The most significant is control over programme content, which can be important in delivering programming responsive to the tastes of the audience to whom the operator is catering. In-house productions and commissions to independent producers are most attractive in this respect, since in principle the operator retains complete control. Acquiring programming produced by someone else ostensibly lies at the opposite extreme. Such productions, aimed at a different audience, often foreign, can appear to be an uneasy compromise. Co-productions lie somewhere between.

It is easy, however, to overestimate the significance of these differences. Co-productions, it is true, frequently reflect compromises aimed at satisfying the different needs of the co-producers (e.g., an American programmer and a UK

channel operator). But co-production arrangements merely make explicit what often occurs when there is a single British producer. If the production appears to have some export potential, the producer (or the commissioning channel) may elect to incorporate themes, casting or production values aimed at increasing the attractiveness of the programme to other television outlets.

Opting for higher production values cannot be a source of concern, as long as the additional cost is recovered by greater revenue from secondary sales. But adapting themes or casting to accommodate foreign audiences can involve a real trade-off for domestic audiences. The resulting programming may be less well suited to the domestic market, but its lower net cost (as reduced by revenue from secondary markets) enables more costly programming to be provided than otherwise would be possible.

From a public interest perspective, it is difficult to say how far producers should go to adapt productions to improve their sales potential. Relatively innocuous changes that allow much of the production costs to be recovered in foreign markets can benefit domestic viewers, since they can permit programme quality to remain high despite the fragmentation of TV audiences. At the same time, there can be too much of a good thing. Overzealous moulding of a programme to enhance its foreign sales appeal or to obtain co-production revenue can be injurious to the public interest. Large foreign sales are of little consolation if they are achieved at the expense of programming not well suited to local taste.

The line between beneficial and excessive accommodations of the tastes of secondary markets is ultimately a matter of judgement. A producer contemplating tailoring a programme to increase its attractiveness in other markets can only guess how much additional revenue would be brought in, and how much less value domestic audiences will impute to the programme. People operating in the industry should have the most complete information to assess those difficult trade-offs.

That said, are the incentives of programmers compatible with the compromise between programme content and cost-

sharing that is in the interest of domestic viewers? There is a presumption that the BBC, as a public service institution, will exercise its judgement in the public interest. As for the ITV companies, the matter is less clear. As commercial companies interested in profits, their willingness to cater to other markets is likely to depend on an assessment of the resulting loss of advertising revenues (from smaller domestic audiences), compared to the expected gain in revenues from abroad. Since viewership provides a rough index of viewer satisfaction, that principle may produce a reasonably satisfactory outcome.

The programme choices of ITV companies are ultimately constrained by the need to satisfy minimum quality standards to retain their franchises. Those quality standards, for understandable reasons, are somewhat imprecisely defined. But the ITC's ongoing surveillance should provide some check on an excessively exuberant pursuit of foreign markets by ITV companies interested in retaining their franchises.⁸ Since the BBC's mission is to educate and inform, as well as to entertain, it would not be surprising if it feels more reluctant to alter programming to increase sales and co-production revenues.

There are several ways of promoting foreign sales without compromising local tastes and quality standards. A special version of a programme may be prepared for a foreign market. 'Versioning' is not uncommon, but does involve the additional expense of re-doing parts of the programme (e.g., the programme may be re-edited to provide a somewhat different selection of shots). Or it may be possible to sell to a foreign producer the right to produce a programme fashioned after one (usually a series) that a British producer has already made. Sales of 'formats' were quite successful in

⁸ The ATV franchise, which enjoyed considerable success in selling foreign rights to its programming, in 1981 failed to obtain a renewal of its franchise, apparently at least in part because the IBA was dissatisfied with ATV's programme quality.

the 1970s and 1980s, leading to American spinoffs of a number of popular British series.⁹

The socially optimal degree and form of sharing programme production costs cannot be determined with any precision. But the recent growth in TV channels would seem to have made it desirable to distribute programme costs over wider audiences. It is therefore instructive to examine how the market has reacted, to see if there is evidence of increased use of cost-sharing arrangements. That can be done by looking at trends in the principal mechanisms used to share programme costs – sales, co-productions, and acquisitions. Of particular interest is how each has affected the net cost of programming. The determinants of net cost depend on the type of programming.

Internally Produced and Commissioned Programming

Net cost consists of the gross production cost to the operator, reduced by the net revenue it receives from any sale of secondary rights. Net revenue is gross sales revenue minus the incremental cost of the sale (tape duplication, dubbing, marketing, etc.). If the programming is commissioned from an independent producer who retains secondary rights, the value of potential sales should be reflected in a smaller payment the channel has to make to the independent producer to exhibit the programming.

Co-Productions

For the lead producer, the net cost of a co-production is gross production cost minus the contributions in cash and in kind made by the co-producer. For 'reverse' co-productions, in which another party acts as the lead producer, the cost is the

⁹ For example, the ITV's *Man about the House* was the template for *Three's Company*, and the BBC's *Till Death Us Do Part* was reformatted to become the highly successful American series *All in the Family*.

contributions in cash and in kind made to the lead producer in exchange for exhibition rights.

Acquisitions

The cost of purchased programming is simply the price at which the channel negotiates the right to exhibit it.

It will now be useful to look at the recent history of these costs, as somewhat imperfectly revealed by public data.

III RECENT TRENDS

An examination of recent trends can provide important clues about how much cost-sharing can be reasonably expected to occur in the future, since the last decade has seen mounting pressures to restrain costs. It will be useful to begin with the relatively limited information on the industry as a whole, before turning to the richer data that are available on some of the terrestrial channels. Channel 4 and, especially, the BBC publish more extensive information than do other channels, providing an opportunity to study in greater detail methods of cost-sharing.

The Industry

Industry-wide data on the television programme market — sales, co-productions, acquisitions — are not extensive. The most useful figures are those assembled by the Central Statistical Office (CSO) on overseas transactions of domestic television companies. They are of interest especially because they provide information not otherwise available on transactions in programme markets by cable and satellite channels and by ITV companies.

Foreign sales and co-productions, as well as imports of programming, have been growing rapidly, consistent with the expectation that an expansion of TV channels increases the incentive to share programme costs more widely. Aggregate

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Table 4.3 Overseas transactions of UK TV companies (nominal £m), 1981–1990

Year	Sales & co-productions		Acquisitions	
	revenue (£m)	% of total broadcast revenue	Cost (£m)	% of total broadcast revenue
1990	138	5.1	213	7.9
1989	194	7.5	186	7.2
1988	128	6.0	121	5.7
1987	117	6.1	130	6.7
1986	101	5.8	99	5.7
1985	110	7.8	86	6.1
1984	91	6.4	90	6.3
1983	77	5.9	69	5.3
1982	62	5.7	55	5.0
1981	47	5.1	37	4.0

Note: Sales include receipts from merchandise sales (e.g., publications related to the programming and video cassettes), which are believed to be relatively small by comparison to programme revenues. TV companies comprise the BBC, IBA, satellite and cable television companies.

Source: Derived from CSO Bulletin data.

overseas programme sales and co-production revenue have almost tripled over the last decade (see Table 4.3), growing in real terms (after removing general inflation) at an average rate of almost 7 per cent per year. Spending on rights to exhibit foreign programming has grown in real terms at almost 15 per cent per year over the same period.

A consolidated measure of cost-sharing can be constructed by adding acquisition outlays to sales and co-production revenue, and expressing the sum as a proportion of total broadcast revenue. That measure of cost-sharing has risen modestly, from an average of 11.5 per cent over the period 1981–85 to 12.7 per cent over the following five years.¹⁰

¹⁰ A more meaningful measure would be provided by expressing programme exports and imports as a percentage of gross programme costs. But the later figures are not available for the industry as a whole.

That increase may understate the trend towards increased cost-sharing, because revenues for the industry are likely to have outpaced the growth of costs over the period.

To place UK television exports and imports in a global perspective, they can be compared to aggregate world trade in television programmes, estimated to be in the neighbourhood of £1 billion annually.¹¹ That would suggest that the UK currently accounts for close to 15 per cent of global exports and around 20 per cent of imports.

Table 4.4 Overseas transactions of UK TV companies by area (nominal £m) 1985–1990

	EC	North America	Other developed countries	Rest of the world	Total
Sales and co-production revenue					
1990	48	50	33	7	138
1989	68	77	34	14	194
1988	30	64	28	6	128
1987	28	54	28	8	117
1986	19	53	20	9	101
1985	14	64	22	9	110
Acquisitions					
1990	47	129	29	7	213
1989	33	117	23	12	186
1988	24	73	16	8	121
1987	20	82	20	8	130
1986	16	66	11	6	99
1985	14	59	8	5	86

Note: TV companies comprise the BBC, IBA, satellite and cable television companies.

Source: CSO Bulletin.

¹¹ Recent studies by two market research firms, CIT and Frost and Sullivan, suggest that worldwide international trade in TV programmes lies somewhere between £850 million and £1.1 billion.

Although North America remains the largest export market, the most rapid expansion of sales and co-productions has occurred in EC countries, which now collectively provide almost as much revenue as North America (see Table 4.4). As for purchases of foreign programming, North America remains the dominant supplier, accounting for 60 per cent of UK imports. Over 20 per cent of programme imports come from other EC countries, up from 15 per cent five years ago.

Broadband cable and satellite television channels, still in their infancy, are already playing a significant role in programming markets. In 1990, they accounted for over 10 per cent of programme sales abroad, and almost a quarter of all purchases of foreign programming (see Table 4.5). Their purchases in 1990, however, were inflated by unusually large payments to secure packages of American film rights, and it appears likely that their foreign purchases will be somewhat lower in the future.

These various compilations by the CSO are capable of providing only a general indication of trends in programme markets. Revenues from sales and co-productions (Tables 4.3 and 4.4) include merchandise sales (e.g., publications related to programming and video cassettes), and so overstate

Table 4.5 Overseas programme transactions of all UK TV companies (nominal £m), 1989–1990

	Cinema and video release	Terrestrial television	Cable and satellite TV	Total
Sales				
1990	3	97	12	112
1989	8	157	9	174
Acquisitions				
1990	0	110	36	146
1989	0	96	18	114

Note: TV companies comprise the BBC, IBA, satellite and cable television companies. These figures exclude co-productions and merchandising transactions.

Source: Business Monitor.

revenues from selling foreign exhibition rights to television programming. Overseas programme sales (Table 4.5), on the other hand, exclude revenue from co-productions. For 1990, the CSO reports industry-wide overseas revenue of TV companies at £138 million, and £113 million from the sale of foreign exhibition rights. The difference of £25 million therefore should represent a combination of co-production revenue and merchandise receipts, which are believed to be small.

Channel 4

Channel 4, by virtue of being a relatively recent channel, has enjoyed significant advantages in keeping its programming costs low. Launched in 1982, three years later it was broadcasting over 3,500 hours per year. Unlike the older terrestrial channels, which have had to adapt their activities in programme markets to greater competition, Channel 4 could arrange from the onset for programming that involved substantial elements of cost-sharing. It has particularly relied on acquiring rights to existing programming, which in most years has accounted for almost as many hours as programmes that are produced for it.

Since 1985, the average cost of programming produced for Channel 4 has increased from £40,100 to £54,800 per hour, which represents almost no change in real terms. It has succeeded in restraining production costs in part by altering its mix towards programmes less costly to produce (e.g., more news relative to drama). (See Table 4.6.)

A good deal of the programming commissioned by Channel 4 is produced by the ITV companies, which retain the secondary rights and obtain whatever revenues are generated by them. Much the same is true of the programming it commissions from independent producers. Thus, Channel 4 is usually not in a position to sell the secondary rights to its programming, but the prices it pays for commissioned work are lower because those secondary rights are left with the producers. In

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Table 4.6 Channel 4 programme cost and output by programme category, 1985 and 1991

	New production hours		Total broadcast hours	
	1985	1991	1985	1991
Programme costs				
/hour (nominal)	£40,100	£54,800	£25,000	£24,600
Hours	1,699	2,606	3,593	7,003
% Hours devoted to:				
New production				
Features	0.0	5.3	0.0	1.9
Lt entertainment	19.6	19.9	9.5	7.4
Drama	11.7	4.3	5.7	1.7
Sports	12.4	14.7	6.1	5.4
Current affairs	16.0	20.1	7.8	7.5
News	13.6	20.7	6.7	7.7
Religion	3.1	1.5	1.5	0.5
Educational	14.0	6.3	6.8	2.4
Others	9.7	7.2	4.8	2.7
Total	100.0	100.0	48.9	37.2
Acquired(new)			38.7	30.2
Schools and broadcast			0.0	4.8
Repeats			12.4	27.8

Source: Channel 4, as reported in *The Knowledge Report 1991*.

effect, therefore, Channel 4 sells most foreign rights to its programming indirectly.

Channel 4 has managed to reduce its average programme cost per broadcast hour over the last five years. In addition to shifting production away from more expensive types of programming such as drama, it has come to rely much more heavily on re-runs, which accounted for slightly over 12 per cent of its broadcast hours in 1985 and now account for almost 28 per cent.

ITV Companies

Most commercial channels are secretive about their dealings in programme markets, and the ITV companies are no exception. Little information is publicly available, beyond their overseas sales, as published in annual reports.

The average ITV company broadcast close to 7,500 hours in 1990, approximately 40 per cent more than 10 years earlier. ITV overseas revenue has increased almost sixfold since 1982. This overstates the growth of ITV programme sales, however, because overseas revenue includes sales of programming produced for Channel 4, which did not exist at the beginning of the period. ITV sales figures may be misleading also because, up until 1986, the levy on ITV companies gave them an incentive to restructure what normally would have been acquisitions (or reverse co-productions) so that they appeared on the books as programme sales.¹² Since 1985, ITV's overseas revenue has been growing at an average rate of 18 per cent per year in real terms.

Table 4.7 ITV Overseas revenue (nominal £m)

	1982	1983	1984	1985	1990
Overseas revenue	£20.0	£34.0	£47.3	£59.5	£118.3

Sources: IBA Annual Reports, Peacock Report. Revenue includes secondary sales of programmes produced by ITV companies for Channel 4.

The BBC

The BBC provides a unique opportunity to study the potential for sharing programme production costs. Data on programme market transactions for most channels are spotty at best, but are relatively comprehensive for the BBC. Moreover, the BBC faces considerable pressure to keep its programme costs in check. Since its expenditures absorb all of its revenues each year, it has no reserve to fall back on in the face of rising

¹² The incentive was created by limiting the levy to domestic profits. This made it profitable for ITV companies to structure cost-sharing arrangements with foreign producers so that the total cost of the project would appear on ITV books as a cost of domestic operations, with the contributions by the foreign partner(s) appearing as foreign sales or co-production revenue. When an equal levy was imposed on foreign profits, the incentive vanished.

production costs.¹³ As a public institution priding itself on a tradition of excellence in programming, it is likely to be particularly resistant to lowering quality standards or providing what might be perceived as a less meritorious mix of programming. So the pressure on the BBC to look towards ways of sharing programme costs would appear to be even more intense than the pressure on other channel operators.

In attempting to share production costs, the BBC is in a unique position. Programmes it produces have been much in demand abroad, no doubt in part because of its international renown. But its pre-eminent reputation as a producer is distinctly aligned with 'high-brow' and educational

Table 4.8 BBC sales and co-production revenue (nominal £m)

Year	Sales	Co-productions	Total	Annual growth (%)
1991	39.3	22.4	61.7	5.8
1990	36.4	21.9	58.3	24.3
1989	29.6	17.3	46.9	7.1
1988	27.0	16.8	43.8	25.1
1987	25.8	9.2	35.0	0.9
1986	27.4	7.3	34.7	18.8
1985	20.9	8.3	29.2	22.2
1984	18.0	5.9	23.9	36.5
1983	12.9	4.6	17.5	-15.9
1982	16.2	4.6	20.8	52.9
1981	10.9	2.7	13.6	14.3
1980	9.0	2.9	11.9	-13.1
1979	8.2	5.5	13.7	N.A.
1978	8.2	N.A.	N.A.	N.A.
1977	6.8	N.A.	N.A.	N.A.
1976	5.8	N.A.	N.A.	N.A.
1975	4.0	N.A.	N.A.	N.A.

Sources: BBC Television Facts and Figures, BBCE Programme Sales Analysis and Five Year Plan.

¹³ It has in recent years been able to supplement its licence fee revenue by earnings from publications and merchandise sales. But those contributions have been limited and, since the BBC typically spends all of its revenue, it has no cushion to insulate itself from increases in programme costs.

programming. That, of course, is entirely fitting for a public service intended to satisfy needs that commercial television channels cannot be relied upon to fulfil, but it does limit the scope of the BBC's appeal to foreign audiences.

Nevertheless, the BBC has enjoyed considerable success in recovering production costs through foreign markets. Over the last decade, revenue from programme sales has increased from £10.9 million to almost £40 million, representing a real growth rate, after removing general inflation, of 7.6 per cent per year. (See Table 4.8.) Co-production revenue has been growing even more rapidly, rising from £2.7 million in 1981 to £22.4 million in 1991. Co-production and sales revenues combined have quadrupled since 1981, in real terms growing at over 10 per cent annually.

The BBC's fastest growing market for programme sales has been Europe, which now provides over 35 per cent of its

Table 4.9 BBC programme sales by region (nominal £m)

Year	North America	Europe	Australasia	Middle & Far East	UK	Others
1991	5.4	14.5	6.6	(*)	(*)	12.8
1990	5.2	13.3	5.9	(*)	(*)	12.0
1989	4.3	10.0	5.1	(*)	(*)	10.2
1988	3.5	10.5	4.4	(*)	(*)	8.6
1987	5.5	7.3	4.7	(*)	(*)	8.3
1986	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1985	5.8	6.8	3.9	0.6	0.8	3.0
1984	4.8	5.7	3.9	0.4	0.6	2.6
1983	3.2	3.5	3.1	1.0	0.5	0.9
1982	6.1	3.6	3.3	1.6	0.5	1.1
1981	2.8	2.9	2.5	1.1	0.5	1.1
1980	2.2	2.5	2.4	0.9	0.4	0.6
1979	2.4	2.2	1.6	1.0	0.6	0.4
1978	2.3	2.4	1.7	0.9	0.5	0.4
1977	2.3	1.7	1.4	0.7	0.4	0.3
1976	2.3	1.3	1.1	0.4	0.4	0.3
1975	1.6	0.9	0.9	0.2	0.3	0.1

(*) Included within 'Others' caption.

Sources: BBC Television Facts and Figures, BBCE Programme Sales Analysis and Five Year Plan.

programme sales revenue. Sales to North America and Australasia have been relatively stable. America, however, remains the most important source of co-production revenues.

Despite this strong performance, the opportunity to defray production expenses by sales has necessarily been somewhat limited. Foreign sales impose on the BBC significant costs in the way of marketing, making new tapes (or films), 'versioning', paying residuals, and doing whatever dubbing is necessary. Even for exports that are relatively successful, these costs can absorb half of the revenues that are generated. For more marginal programming, marketing costs tend to be higher and gross revenues lower.

The incremental costs that the BBC incurs in order to sell its programmes must be subtracted from the gross revenues they generate to determine their net contribution to defraying production costs. The BBC's net revenue from programme sales runs at approximately 50 per cent of gross sales.

Table 4.10 shows the contributions of sales and co-productions to defraying the BBC's total production costs, after netting out the cost of sales. In recent years it appears

Table 4.10 Recovery of BBC production costs

Year	Gross production costs (nominal £m)	Percentage of gross cost recovered by		
		Sales	co-productions	Total
1991	595.8	3.3	3.8	7.1
1990	535.0	3.4	4.1	7.5
1989	477.6	3.1	3.6	6.7
1988	470.3	2.9	3.6	6.5
1987	431.9	3.0	2.1	5.1
1986	374.1	3.7	2.0	5.7
1985	341.1	3.1	2.4	5.5
1984	301.2	3.0	2.0	5.0
1983	270.0	2.4	1.7	4.1
1982	229.3	3.5	2.0	5.5
1981	192.9	2.8	1.4	4.2
1980	162.3	2.8	1.8	4.6
1979	122.7	3.3	4.5	7.8

Source: BBC Television Facts and Figures.

that the BBC has been able to recover between 2 and 4 per cent of the cost of all programming it originates through sales, with co-productions recovering another 1 to 5 per cent.

Although the BBC's co-production sales revenues have grown in real terms, the proportion of total production costs that they defray has been relatively stable. Significantly increasing its cost-sharing arrangements might be accomplished by producing programming more aligned to foreign tastes or by relying more heavily on imported programming. Both, however, could be seen as compromising the BBC's public service obligations. If the BBC is to increase its overseas revenues, its most promising opportunity may be to package its programming on a subscription channel for foreign distribution, something it is already beginning to do in a limited way. In addition to its current production, it has a substantial library of programming that could be drawn upon. Although many BBC series consist of too few episodes to be of much commercial interest to foreign television operators, with a deft packaging touch such programming could be worked into a 'Best of BBC' channel that should be of considerable appeal.

IV SUMMARY AND OUTLOOK

The intensification of competition in the 1980s was accompanied by increased sharing of production costs. Revenues from sales and co-productions, as well as expenditures on programme acquisitions, rose substantially faster than the general rate of inflation. But the proportion of domestic production costs recovered through exports did not increase sharply. Combined exports and imports for the industry as a whole rose to 12.7 per cent of total industry revenues in the second half of the 1980s, up from 11.5 per cent in the previous five years.

The general evidence suggests that cost-sharing has increased only moderately in the face of a considerable intensification of television competition. The most likely explanation is cultural differences in the tastes of TV audiences. Just as a

programme produced for a Birmingham audience will not always play well in the south of England or in Scotland, so there is a natural limit to how much programming produced for UK tastes can be successfully exported and, similarly, how much foreign-produced programming can be imported. Cultural differences impose a natural limit on the extent to which programme costs can be successfully distributed over wider audiences.

What about the future? Will the current extent of cost-sharing be preserved, and perhaps even increased? If the underlying incentives and impediments remained unchanged, it would be reasonable to suppose that cost-sharing patterns will remain much as they are now, as measured by the proportion of production costs recovered through sales and co-production revenues, and the propensity to import programming.

In actuality, pressures to share production costs are likely to continue to mount, spurred by ongoing increases in television competition. A new terrestrial service, Channel 5, is scheduled to be launched by 1995. Perhaps more importantly, the penetration of satellite and cable TV services will continue to grow. This is a matter of some significance to the terrestrial channels, which collectively attract over 95 per cent of all TV viewing, but only 62 per cent in homes subscribing to satellite and cable service.¹⁴ For channels supported by advertising revenue or subscriptions, the further intensification of competition is likely to mean lower revenues as well as higher programming costs. The BBC's revenue, although not directly affected by channel growth, is expected to grow less rapidly than in the 1980s, when it was stimulated by the strong growth of colour television sets, for which a higher licence fee is collected.

These considerations suggest that the incentive to distribute programme costs over larger audiences will continue to grow, although perhaps less rapidly than in the 1980s. That decade

¹⁴ Broadcast Audience Research Bureau, December 1991.

witnessed the introduction of two new terrestrial services (Channel 4 and TV-am), whereas only one new terrestrial service (Channel 5) is currently slated for the 1990s. Growth of satellite and cable TV penetration, which has been very rapid, will inevitably slow. If incentives were the only consideration, therefore, it would be reasonable to expect some slight increase in the proportion of production costs recovered from foreign markets (and some growth in imports), not much different from the trend observed in the 1980s. There are, however, other considerations suggesting that growth may be more limited.

Table 4.11 Growth of cable and satellite, 1988–1992

	Broadband cable penetration		DTH satellite dish penetration	
	%	% growth	%	% growth
1992	1.35	71	10.2	95.6
1991	0.79	84	5.2	100.9
1990	0.43	39	2.6	
1989	0.31	48	0.1	
1988	0.21	110	0	

Note: Cable figures pertain to March of each year, and satellite figures to January.

Sources: ITC (broadband cable), Continental Research/FT Satellite Monitor (DTH Satellite); both updated in *Cable and Satellite Express*, various issues.

Cultural Differences

Spreading programme costs across broader audiences typically involves exhibiting programmes in several countries, whose tastes inevitably differ. Carefully selected foreign programming can be of considerable appeal. But as its share of total programming grows, resistance to yet further increases is likely to set in. This suggests some natural limit to co-productions and the sales of UK programmes abroad and, symmetrically, to the proportion of domestic broadcasting that can safely rely on acquisitions of foreign programmes.

Domestic Content Regulation

In several parts of the world, governmental regulations are being adopted to limit domestic broadcasting of foreign television programmes. The EC, for example, has developed broad limitations on importation of programmes from outside the EC, and France has published guidelines limiting the proportion of broadcasting devoted to non-French programmes. If these regulations are effective, they threaten not only to limit increased sharing of production costs, but perhaps even to reverse that process.

Independent Production Quotas

Production quotas for independent producers will require replacing some in-house production with commissions to independent producers. Such substitution could affect secondary market sales, if independent producers decide to retain the rights to sell the programming in secondary markets. For the moment, at least, most independent producers are quite small, and appear less well positioned to exploit secondary rights than channel operators, who have extensive facilities for promoting foreign sales.¹⁵

Commercialization of Foreign Television

Most of the growth of TV channels around the world will be accounted for by commercial channels, which exhibit a lower propensity than public service television to acquire British programming, often regarded as high-brow. In many countries, commercial television is still relatively immature, but growing rapidly. As it takes market share from

¹⁵ This of course may change as the independent production sector grows in importance. Moreover, Thames, which has extensive production facilities, and has lost its ITV licence, could become a major force in independent productions and has good connections with foreign distributors.

traditional importers of British programming, foreign sales may become more difficult.¹⁶

All of this suggests that, although the 1990s are likely to see a further extension of cost-sharing arrangements, the increases are likely to be quite modest. Television competition will continue to intensify, much as it did during the 1980s. But cost-sharing increased only slightly over that period. Matching that game in the 1990s may prove difficult.

¹⁶ There may be, however, an offsetting consideration. In many countries, much of the growth in commercial television is associated with cable and satellite channels. Cable television, in particular, can make 'narrowcasting' economic, thus opening up new distribution channels for British programming appealing to relatively narrow segments of foreign audiences.

Subscription

National Economic Research Associates

Introduction

Traditionally, television in the UK has been freely available to all viewers, being funded by either licence fee or advertising revenue. Subscription or pay-television (i.e., charging viewers directly for each channel or programme they choose to receive) was not feasible in the early days of television because of the high costs involved in preventing non-paying viewers from receiving a particular service.¹

The development of cable distribution systems in the US provided the first means of delivering individual television channels, or packages of television channels, to those viewers prepared to pay for connection to the cable operator's network and a monthly subscription fee thereafter. Technological advances have since brought down the cost of scrambling and decoding equipment, and have made possible the economic provision of subscription television channels transmitted either terrestrially or by satellite. More recent developments have brought the introduction of pay-per-view systems which allow viewers to choose (and pay for) particular programmes rather than complete channels.

Within the constraints of terrestrial, cable and satellite television, the only way to expand the range of programmes

¹ For subscription television to be delivered over-the-air, it is necessary first to scramble the signals and then to provide subscribers with a decoding mechanism to unscramble the signals to provide a clear picture.

available at any one time is to increase the number of channels. With the development of video cassette recorders (VCRs), however, viewers are no longer constrained to choose between those programmes being broadcast at any one time. Instead they are able to buy or rent other programmes to watch on their own television, the only restriction being the range of titles available from local video retailers.

Freely available television still has its strong supporters, especially for the provision of public service broadcasting. Among the better arguments advanced in its support are the following:

- the 'public good' nature of television, which means that the marginal cost of serving one additional viewer is very low. In such circumstances, an efficient method of paying for the cost of programming is via a standing charge (such as a licence fee) or by advertising, hence excluding as few viewers as possible from the service;
- the importance of 'universality' which allows all viewers, whatever their income and wherever they live, to share in the experience of public service television.

Recently, though, the case in favour of subscription television has gained momentum, as a result of a combination of economic and commercial arguments. Many economists support subscription television because it creates a clearer link between viewers and broadcasters (i.e., consumers and producers). It is argued that viewers' tastes and preferences, in particular the strength of their preferences, can best be expressed within a system which allows the viewers themselves (rather than advertisers or politicians) to choose which programmes or channels to pay for.²

² Problems concerning less well-off viewers' ability to pay for subscription television should, it is argued, be addressed through the general tax and welfare system (as is the case with most other consumer goods and services), rather than the payment method for television.

In support of these arguments, the Peacock Committee³ recommended the active encouragement of subscription television for the UK in the immediate future, stating that:

subscription technology brings with it the opportunity for the viewers and listeners to pay for what they want to receive and to have a much greater choice of programmes. Subscription technology can on the one hand simply be used as a more convenient device for collecting the licence fee; on the other hand it can open the door to an almost infinite number of channels and programmes.⁴

Direct payment for television is now commercially viable. Evidence from around the world shows that there are clearly some types of television channel or programme on which viewers place a higher value than is reflected by licence fee payments or by the amount of advertising support a channel or programme is able to attract.

Channels which provide what these viewers want to see can charge profitable subscription rates for it, and video distributors are able to make profits from providing these types of programme on video cassette. Consumers' expenditure on pay-television and video software is now starting to rival advertising expenditure as the most important source of funding for television in Western Europe, the US and Japan. It is not clear, though, that direct payment would be commercially viable for all types of television.

The aim of this report is to analyse empirical and survey evidence from around the world on the nature and success of

³ *Report of the Committee on Financing the BBC*, HMSO, 1986.

⁴ The Committee's enthusiasm for subscription television is not unqualified. It explicitly recommends that any move to subscription finance would need to be accompanied by the establishment of some form of institutional protection to preserve 'public service' style programming. The report suggests setting up an organization which would distribute funds to channels and producers, by competitive tender, to make the sorts of programmes which would not otherwise be produced.

various types of direct payment for television. Using this research, we assess the likely scale of direct payment for television in the UK by the year 2000, the extent to which subscription funding could be used by the BBC, and the likely impact of this on both the BBC itself and the rest of the UK market. Even if the licence fee remains in place, we estimate that direct payment could easily overtake advertising expenditure as the main source of finance for UK programme providers.

Our findings are based on extensive research of world pay-television and video markets, most of which was carried out in mid-1991, followed by a small amount of work at the start of 1992. Inevitably, by the time of publication, some of this information will be out of date, and we cannot rule out the possibility of more fundamental structural change either in the UK or overseas, even in the short term. Partly for this reason, our financial projections attempt to model UK viewers' willingness to pay for certain types of television, instead of actual expenditure on particular channels.

Rather than a comprehensive report of our research, Section I seeks to draw together a number of common themes from pay-television and video markets around the world, in order to establish how much viewers are willing to pay for different types of programme. Based on this evidence, and assuming that there is no major change to terrestrial broadcasting in the UK (i.e., the licence fee remains in place), Section II sets out our projections of direct payment for television by UK viewers until the year 2000. Then in Section III, we consider the impact of BBC1 and BBC2 becoming a subscription service, and look at other ways in which the BBC might exploit the growing market for pay-television.

I PAYING FOR EXTRA TELEVISION

In the early days of television, all channels were available free of charge. Of course, viewers needed to purchase or rent a television set, but the channels themselves were funded either by public support (in the form of a licence fee or direct grant)

or by advertising. Even today, about 90 per cent of the world's television channels are delivered free of charge to viewers.

However, most if not all television households now have an opportunity to pay for access to a wider range of programme material. About one-third of television homes throughout the world have a video cassette recorder (VCR) and so are able to watch material from pre-recorded video cassettes, and we estimate that between 10 and 15 per cent of the world's television households pay to receive additional television channels, usually delivered by either cable or satellite.

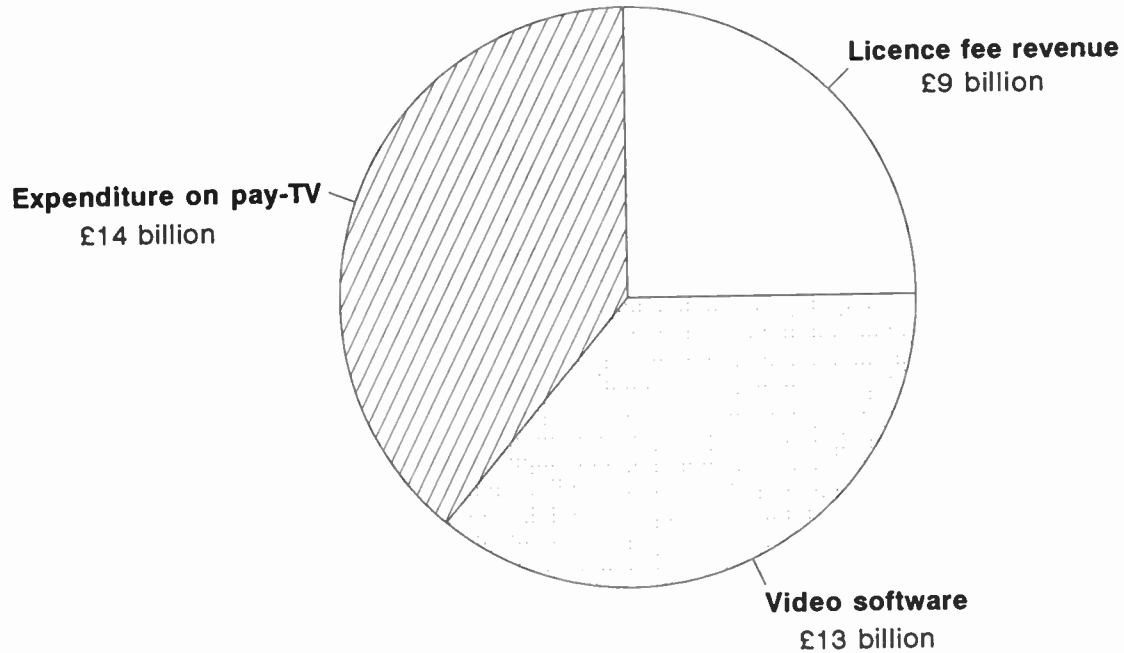
Figure 5.1 shows that households in Western Europe, the US and Japan now pay around £27 billion a year for television services (excluding licence fees), in addition to the cost of actually buying a television set or a VCR. This is equivalent to about £100 a year per television household. Direct payment now rivals advertising revenue in importance: broadcasters in Western Europe, the US and Japan receive another £35 billion from the sale of television advertising.

Overview of Pay-Television and Video Opportunities

Pay-Television Delivered by Cable Networks

Opportunities to pay for additional television services first arose because of reception difficulties with free terrestrial channels. In the US, this led to the development of cable television in the late 1940s as an alternative means of delivering signals to areas where terrestrial reception was poor. Not only were viewers willing to pay for the main terrestrial channels to be delivered by cable, but operators quickly realized that they were also willing to pay for additional channels.

At first cable operators were able to offer terrestrial channels from other areas, but eventually channels were launched which had no terrestrial transmission and relied



Source: NERA estimates based on data from BBC, Logica, *Screen Digest* and Paul Kagan. Expenditure on pay-TV includes basic and premium subscriptions and dish purchases/rentals.

Figure 5.1 Consumer Expenditure on Television in Western Europe, Japan and the US 1991

solely on cable distribution.⁵ We estimate that over 10 per cent of world television homes now receive cable television, with a penetration rate of over 20 per cent in Western Europe, and about 60 per cent in North America (USA and Canada). Cable networks are used both to deliver terrestrial channels from other areas (often from other countries) and to deliver specialist cable-only channels.

Cable television represents perhaps the ideal way of distributing pay-television channels, since cable network operators can easily control which viewers have access to which channels (i.e., it is easy to exclude non-payers), and the administration and billing costs per channel are relatively low since many channels are delivered from a single source.

In the US, which remains the largest pay-television market, 55 per cent of television homes are connected to cable networks. They paid around £10 billion in 1991 (almost £200 per cable household) to receive a wide range of additional channels. Cable networks are also used extensively to distribute additional channels in Canada and in many Western European countries, notably in Scandinavia, Benelux and Germany.

Programmes Delivered By Video Cassette

The next major development in pay-television came in the mid-1970s with the introduction of the domestic video cassette recorder (VCR). This enabled viewers to increase their viewing of free television, since they could record programmes for viewing at another time. In addition, they could either rent or purchase pre-recorded video cassettes from a wide range of retail outlets, thus expanding the choice of viewing available.

As the cost of both hardware (i.e., VCRs) and software (i.e., pre-recorded video cassettes) has fallen over time, and as VCR penetration has increased, large markets for video

⁵ Many such channels are now distributed to cable operators by satellite.

rentals, and more recently for sales of pre-recorded video cassettes (the 'sell-through' sector) have developed in many countries. In the five largest markets — US, Japan, France, Germany and the UK — over two-thirds of television homes have a VCR and total spending on video software in 1991 was over £10.5 billion (about £80 per VCR household).⁶ Video rentals account for 60 per cent of this total, but sell-through turnover is growing and now exceeds rental turnover in both Japan and France.

Like cable, video is a convenient medium for charging for certain kinds of programme, since it is very easy for the retailer to collect payments from viewers. However, it is impossible to distribute very recent material (for example, news and current affairs) by video, and because viewers must visit retail outlets and pay for video cassettes on a programme-by-programme basis, video is much more suited to formats where viewers attach a relatively high value to individual programmes.

Terrestrial or Satellite Delivery of Pay-Television

For many years, it was uneconomic to transmit pay-television channels over-the-air for general reception, since this meant that television signals would have to be scrambled (or 'encrypted') to prevent unauthorised reception, then unscrambled by those viewers who had paid to receive the channel. More recently, the development of effective and economic encryption and billing systems has enabled subscription television channels to be delivered over-the-air. The French subscription channel Canal Plus was launched in 1984 using conventional terrestrial transmission, and in 1990 a similar terrestrial subscription channel, Canal Plus España, was launched in Spain. Terrestrial transmission has also been used in New Zealand by Sky Network Television, which

⁶ Source: *Screen Digest*, December 1991.

offers a three channel subscription service, and will be used for a planned new pay-television service in Singapore.

More generally, it has been difficult for broadcasters to gain access to terrestrial frequencies, so many have taken advantage of new opportunities to deliver television signals from high- and medium-powered satellites. In this way, broadcasters can relay their signals both to cable television operators and directly to homes equipped with a suitable receiving dish ('DTH' homes). Although it is necessary to develop encryption and billing systems for DTH homes, this is worthwhile in countries such as the UK or Japan where cable television is available to only a small proportion of the population.

The main disadvantage of over-the-air delivery of pay-television is that, since the signal must be encrypted to stop unauthorized reception by viewers who have not paid, viewers need to obtain a special decoder before they can receive the channel – many subscription channels give potential viewers the opportunity to rent rather than buy decoders.⁷ In addition, satellite broadcasters must persuade viewers either to rent or to purchase a satellite receiving dish.

Pay-Television Channels

In this section we survey the current state of pay-television, both in the UK and overseas, to address three main questions:

- what programmes are viewers willing to pay for?
- how much are they willing to pay?
- is this sufficient to cover the costs of pay-television?

⁷ Where two or more channels employ the same encryption system, the use of 'smart cards' may enable viewers to receive more than one channel with a single decoder. Such decoders operate only when the smart card, which is supplied by the broadcaster and contains information on which encrypted channels the subscriber has paid for (and for how long), is inserted into the decoder.

The development of pay-television in different countries reflects a number of factors, most importantly the quality and range of competition from traditional broadcasters (i.e., free television), the availability of delivery and payment technologies, and government regulation. However, despite individual country differences, the economics of pay-television are such that we have been able to identify a number of common features of the services offered in each market.

What Programmes Do Viewers Pay For?

Few, if any, subscription channels offer the wide range of programming typically available on free terrestrial channels, instead specializing in one or two specific programme strands. This is possible since certain types of programmes are very highly valued by some viewers, but are under-supplied by many free channels. The objective of advertiser-financed television is to maximize audiences at least cost, which can often be achieved most effectively through a mix of programming such as game shows and light entertainment. As television advertising revenues are dependent more on viewer numbers than the intensity of viewer satisfaction, there is less incentive for free television channels to provide programmes that are highly valued but attract fewer viewers.

Subscription channels which specialize in particular types of programme include:

- *film channels* — such as HBO, The Movie Channel, Showtime, Cinemax (US); First Choice Canadian, Superchannel, Premier Choix (Canada); Sky Movies Plus, The Movie Channel, Home Video Channel (UK); Telepiù (Italy); Filmnet, TV1000-Succé (Scandinavia); Sky Movies (New Zealand); Star Channel (Japan) — these channels show

more feature films, sooner after cinema release, than traditional free channels;⁸

- *sports channels* – such as ESPN (US); Sky Sports (UK); Eurosport, Screensport (pan-European); Sky Sports (New Zealand); Japan Sports Channel (Japan) – almost all programmes on these channels are sports events, including many lesser known sports which are not covered by free television;
- *news channels* – such as CNN (worldwide); FNN (US); Sky News (UK); Sky News (New Zealand); NCN News, Nikkei Satellite News (Japan) – these channels have regular news updates, together with specialized coverage (e.g., international news, business news) and more general current affairs programmes;
- *children's channels* – such as Nickelodeon, The Disney Channel (US); The Children's Channel (UK) – often these channels broadcast for only part of the day, or show general entertainment programmes at other times;
- *music channels* – MTV, The Nashville Network (US); MTV Europe (pan-European); Space Shower (Japan) – pop music videos provide a ready source of material for most music channels;
- *minority channels* – such as Black Entertainment Television (US); Chinavision Canada (Canada); Indra Dhnush (UK).

In addition to these specialist channels, some subscription channels do offer a wider range of programming. Many of these channels concentrate on two or three specific programme strands, but some aim simply to expand the choice of general entertainment available beyond that offered by the free terrestrial channels. Such channels include:

⁸ Other subscription channels, such as Canal Plus (France), Premiere (Germany) and Wowow (Japan), show a high proportion of films, but also show other programmes, notably sports events, children's programmes and documentaries.

USA Network	US	General entertainment
TNT	US	Films, children's programmes
A&E	US	Arts, general entertainment
Discovery	US/UK	Entertainment & documentaries
Family Channel	Canada	Family programmes, general entertainment & films
Sky One	UK	General entertainment
Lifestyle	UK/Europe	General entertainment
TV1000-Succé	Scandinavia	Films, children's programmes, sports & music
NHK Satellite 1/2	Japan	News, entertainment, education & culture

Figure 5.2 shows the distribution of viewing amongst free television programmes and pay-television channels in the UK. The most striking difference is the high proportion of pay-television viewing taken by film channels, and also the lower proportion of news and current affairs compared with free television viewing.

Two other features of cable and satellite channels which are not revealed in Figure 5.2 are:

- the much wider range of programmes shown on each of the UK terrestrial channels, compared with the specialist remits of many cable and satellite channels; and
- the low proportion of specially produced first-run material on cable and satellite channels.

These features are not specific to the UK market, but are found in pay-television markets throughout the world.

How Much Are Viewers Willing to Pay?

Compared with the current BBC licence fee (less than £7 per month for two television channels and over 40 national and

local radio stations), some households are prepared to pay significant amounts for pay-television. A convenient classification is to think of most channels as either 'premium' or 'basic', according to how much subscribers are willing to pay for them:

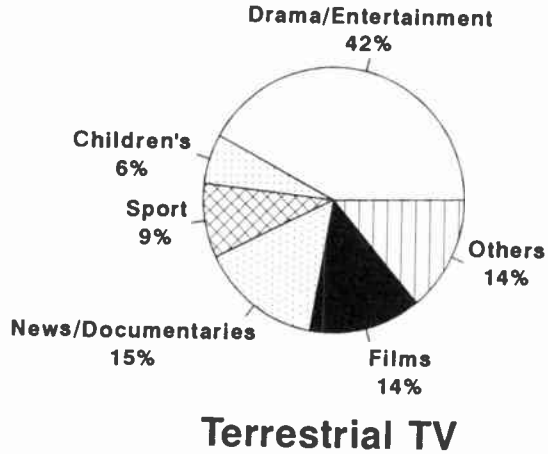
- *premium channels* – in the main these channels show feature films, sometimes supported by special events and light entertainment shows which are usually made specially for the channel; and
- *basic channels* – channels, often packaged together by cable operators and marketed to viewers at a bundled price, for which viewers are willing to pay to increase their choice of viewing – the programming tends to be either of mixed general interest (in which case the material shown is often second-run programming, first shown by other television channels), or specialist (for example news, sport).

In general, viewers can select which *premium* channels (if any) they would like to receive, and these are paid for on a channel-by-channel basis,⁹ usually by monthly subscription. Table 5.1 lists the prices of some premium channels, which range from £5 to £9 per month in the US and Canada, and from £10 to £19 per month in Europe.

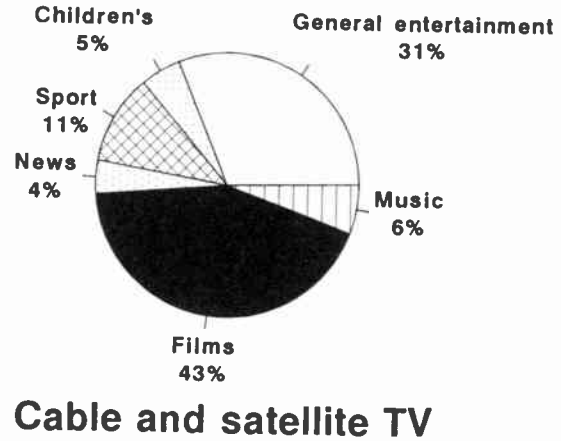
The lower prices for North American channels reflect both the greater number of premium channels available (so there is stronger competition between premium channels) and the extent of competition from basic channels and video rentals. In addition, several 'pay-per-view' channels are now available in the US and Canada, which allow viewers to pay to watch individual programmes, usually special events such as pop concerts, football games and major boxing matches.¹⁰

⁹ There are exceptions: for example Sky Entertainment in New Zealand provides a three channel package.

¹⁰ For example, a recent boxing match involving Mike Tyson, shown by the US pay-per-view channel Request TV, attracted 1 million spectators each paying around £25 to watch the fight.



(Viewing share by programme type)



(Viewing share by channel type)

Sources: BBC Research, BVA, BARB, and *New Media Markets*

Figure 5.2 UK Audience Share by Programme Genre

Whereas premium channels are almost always charged for separately, payment for *basic* channels varies according to which delivery mechanism is being used. For cable delivery, basic channels are usually packaged together and marketed at a bundled rate. Moreover, basic channels are bundled not only with a package of other channels, but also with the provision of access to cable television, so all cable homes are required to pay for at least some basic channels. In contrast, many basic channels are available free of charge to DTH homes.

Although news, sports, children's and other channels have some value to viewers, it is not generally as high as the value placed on premium channels. One reason for the bundling of basic channels, therefore, is that separate marketing and billing for each channel would not be cost effective. In addition, however, by marketing packages of basic channels and by requiring all cable homes to pay for at least some basic channels, cable operators can almost certainly increase their total revenues, since some viewers will be paying for channels which, if given a free choice, they would not choose to purchase.

Charges for packages of basic channels vary according to the range of channels offered, the socio-economic profile of the region, the commercial strategy of the cable operator and the capacity of the system. In the UK, for example, the number of channels offered in the basic package ranges from 5 to 20 or more, although most operators offer a basic package of 15–20 channels with a similar list of channels in each case.

The price of a basic cable package in the UK varies between £10 and £15 a month, which in most cases is equivalent to a cost per channel of 50p to £1 a month. This is more expensive than a typical US basic cable package which, although it costs over £9 on average, contains more channels and has an average price per channel of about 30p per month. The alternative for households in the UK is to purchase or rent an Astra dish and receiver (i.e., a once-off payment of between £200 and £400, or a monthly payment of £13–£17),

Table 5.1 Premium channels: subscription and number of subscribers, 1991

Country	Channel	No. of subscribers	Subscription per month
US	HBO	17,490,000	£ 6.70 ¹
	Showtime	7,320,000	£ 6.50 ¹
	Cinemax	6,230,000	£ 6.40 ¹
	The Disney Channel	5,620,000	£ 6.00 ¹
	The Movie Channel	2,790,000	£ 6.50 ¹
Canada	First Choice Canadian	517,000	£ 5.20 ²
	Family Channel	338,000	£ 5.20 ²
	Superchannel	216,000	£ 7.90 ²
	Premier Choix	152,000	£ 9.10 ²
France	Canal Plus	3,168,000	£16.00
Scandinavia	Filmnet	330,000	£19.00 ²
	TV1000 ⁶	125,000	£13.80
	SF Succé ⁶	30,000	£14.20
UK	Sky Movies Plus	1,059,000 ³	£ 9.99 ⁴
	The Movie Channel	160,000 ³	£ 9.99 ⁴
Spain	Canal Plus España	155,000	£18.70
Germany	Premiere	180,000	£13.20
New Zealand	Sky Entertainment	25,000	£20.00 ⁵
Japan	Wowow	340,000	£ 9.00
	Star Channel	24,000	£11.00

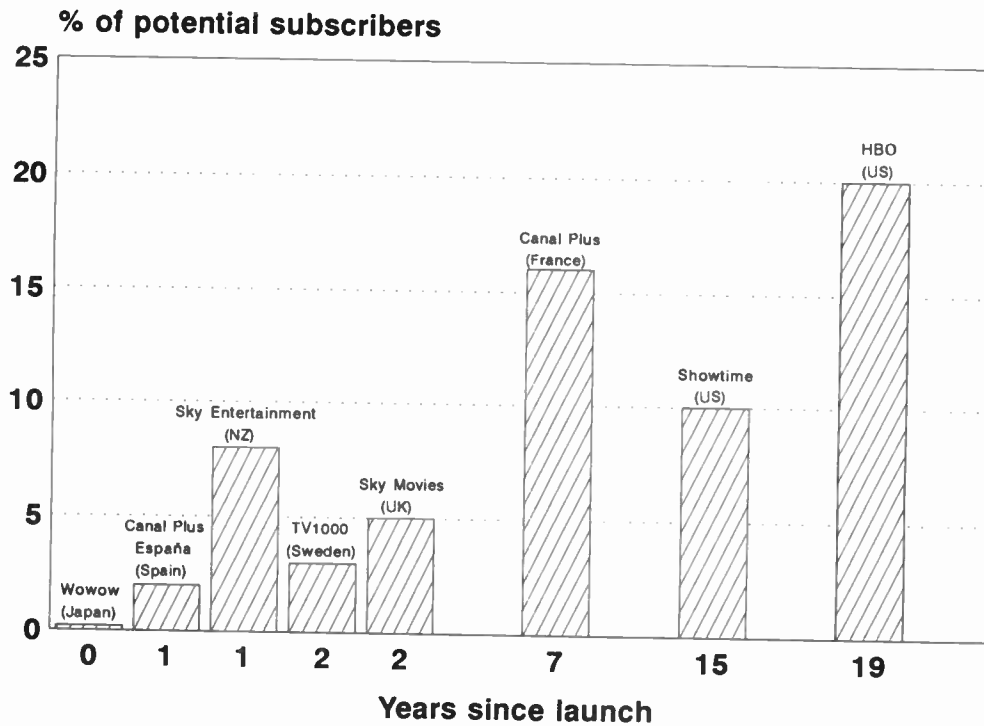
¹NERA estimates²Includes rental of decoder³Estimates of *New Media Markets*, 11 April 1991⁴Subscription varies between cable and satellite, sometimes being cheaper on the former⁵For a three-channel package⁶TV1000 and SF Succé merged in 1991 to form TV1000-Succé

which then gives access to at least eight basic channels free of charge.

Although subscription television fills a market need, it is by no means of universal appeal, and no subscription channel has yet achieved the near universal penetration of most freely available terrestrial channels. Some basic channels have achieved relatively high levels of penetration, but this is because all cable subscribers are required to pay for at least some basic channels, and many DTH homes can receive basic channels free of charge. In the US, for example, basic channels such as CNN, ESPN, MTV, Nickelodeon, TBS and USA Network reach almost every single cable home, or more than half of all US homes.

In contrast, the take-up of premium channels is much lower. The longest established premium channel, HBO, also has the highest take-up rate of any premium channel (20 per cent of potential subscribers). Apart from Canal Plus, almost all other premium channels are taken by fewer than 10 per cent of potential subscribers, although most take-up rates are still increasing. Figure 5.3 shows the take-up rate of a sample of premium channels, together with the number of years since their launch. Figure 5.4, which shows the take-up of all basic and premium services in the US during the 1980s, suggests that demand for US premium channels reached a plateau during the early 1980s (although the absolute number of subscribers continued to increase as more homes were passed by cable networks). For comparison, we also show the early take-up of Canal Plus, the French premium pay-channel.

Table 5.2 shows the typical monthly expenditure on (basic and premium) pay-television for cable and satellite households in the US and UK. For the US, where over 55 per cent of households now have cable television, this is simply the average price of a basic cable package and the average on premium channels. For the UK, however, the data shown in Table 5.2 are only indicative, based on the costs of the different methods of receiving basic channels.



Source: NERA

Figure 5.3 Take-up of Premium Channels in 1991

Table 5.2 Average household expenditure per month on pay-television

	US		UK	
	£/month	% of total TV households	£/month	% of total TV households
Households receiving basic channels only	10	27	12 ¹	3
Households receiving basic and premium channels	19	29	25	7

Sources: Kagan Media Index 1990, Cable TV Facts 1990, *New Media Markets* 1991, NERA

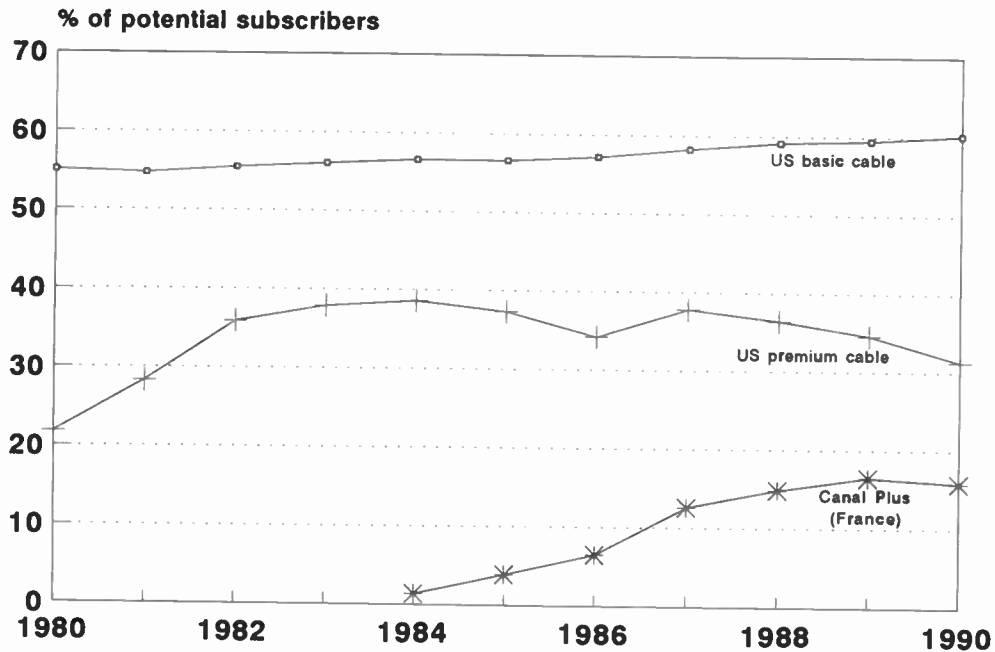
¹Average of Astra dish purchase price (written off over two years), basic cable subscription charge and Astra dish rental price.

Financial Viability of Pay-Television

Revenues

Most premium channels obtain almost all of their revenues from viewers' subscriptions. Indeed the absence of advertising is often used as a selling point in premium channels' marketing. Therefore their revenue is directly related to the number of subscribers and the price charged for each subscription. Although basic channels also receive subscription revenues, advertising accounts for over 50 per cent of total revenue for many basic channels, therefore their success depends not only on the number of subscribers, but how long these subscribers spend watching the channel, and whether they are attractive to advertisers.

In addition, it is important to note that where channels are delivered by cable, the relevant price for the channel provider is not that paid by the viewer, but the amount (per subscriber) paid by the cable operator to the channel provider. In the US, even the most popular basic channels receive at most 25p a month per subscriber, and many channels receive less than 5p a month per subscriber. Premium channels, however, are



Source: NERA

Note: Potential subscribers in the US are all homes passed by cable.

Before 1990 potential subscribers to Canal Plus were restricted by limited terrestrial coverage.

Figure 5.4 Penetration of Basic and Premium Channels in US and France

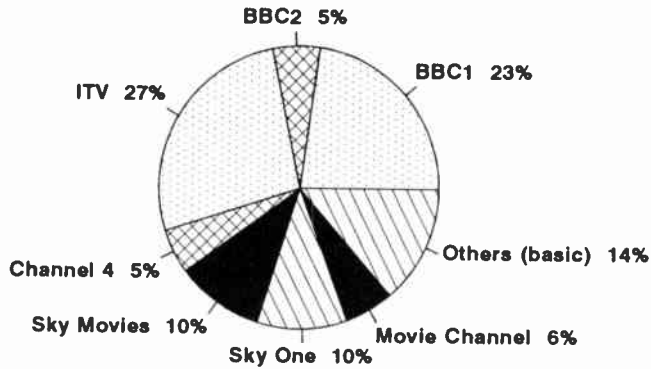
able to command fees of between £2 and £2.25. Charges are higher in the UK, where operators pay between 15p and 50p a month per subscriber for basic channels and between £3 and £4 a month per premium channel subscriber.

As discussed above, some basic channels achieve high levels of penetration by virtue of being included in most, if not all basic cable packages, but so far very few premium channels have achieved take-up rates higher than 10 per cent (of potential subscribers). Although most channels' take-up rates are increasing over time, some households are unlikely ever to subscribe to pay-television channels while there are general entertainment channels available free of charge.

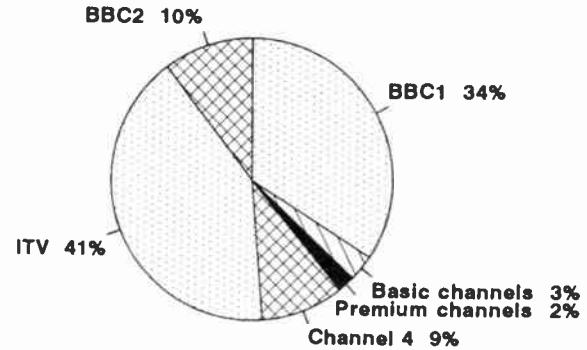
For basic channels, revenues will also depend on the viewing share and type of audience captured by each channel (hence the likely advertising revenues). Even the most successful basic channels (such as ESPN and USA in the US) have audience shares of only 2–3 per cent, although their audience profiles may be valuable to certain advertisers. Total viewing of basic channels accounts for less than 20 per cent of television viewing in the US, and is only 3 per cent of UK viewing. Figure 5.5 shows the viewing shares in UK cable and satellite homes and as an average over all television homes.

Costs

An important feature of the main pay-television channels is that, since most programming is acquired rather than own-produced, programme costs are relatively low. Although competition for feature films can lead to higher costs for some premium channels, even these channels' programme costs are significantly less than those of ITV and BBC. Figure 5.6 shows the average programme costs (per hour) of a number of basic and premium channels in the US and UK, compared with those of the BBC and ITV. Clearly, most cable/satellite channels' programme costs are very much lower than those of the terrestrial channels, which reflects the much higher proportion of acquired programming shown on these channels.



Cable/satellite households



All TV households

Source: NERA from BARB data for May to July 1991

Figure 5.5 UK Viewing Shares by Channel 1991

For basic channels, and even for some premium channels such as Sky Movies (UK) and The Disney Channel (US), programme costs are less than £15,000 per hour.

Delivery and transactions costs, on the other hand, can be substantial. Many of the additional delivery costs of pay-television channels are paid by viewers rather than channel providers. The annual cost of an Astra satellite transponder, for example, is very much lower than the cost of terrestrial transmission in the UK, but viewers need either to purchase or to rent a satellite receiving dish in order to receive channels broadcast from Astra.¹¹ This will, however, reduce viewers' willingness to pay for individual channels, since they also need to purchase hardware.

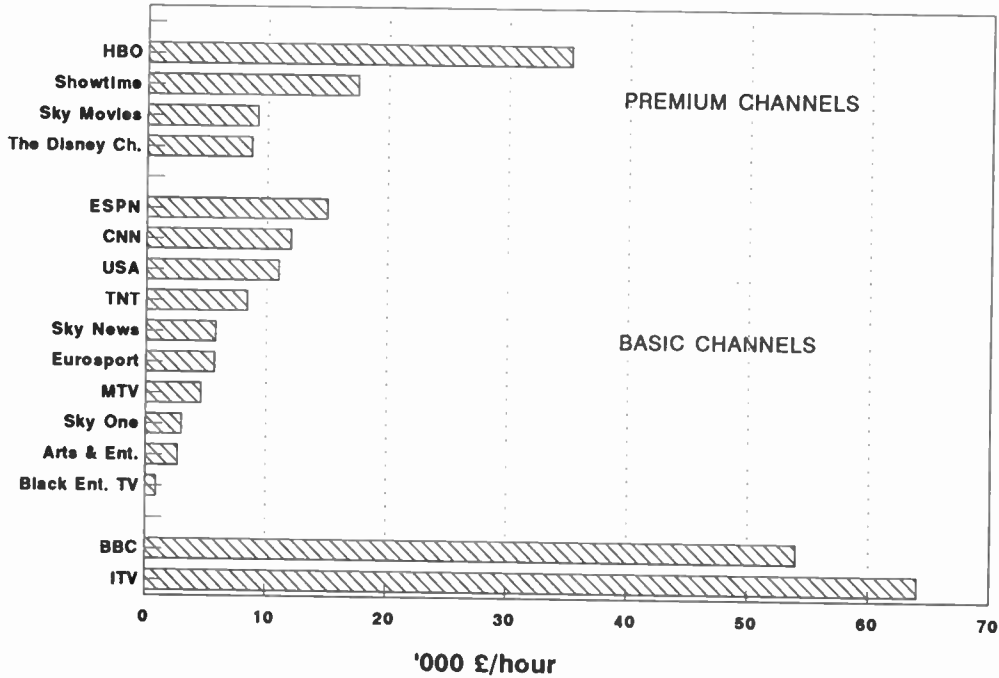
In addition, premium channels broadcasting to DTH homes will need to scramble their signals and offer billing and subscription management services. Recent estimates¹² suggest that subscription management costs might represent 25 per cent to 30 per cent of total subscription revenue, although there are likely to be both economies of scale (so the cost per subscriber falls with the number of subscribers) and economies of scope (so there are efficiency gains from collecting subscription payments for two or more channels from a single source).

In the case of cable television, the increased delivery costs mean that cable operators need to keep a significant proportion of the payments they receive from viewers in order to recoup network construction and operating costs. In the US, for example, only about one-third of viewers' subscription payments are passed on to premium channel providers, and for basic channels the proportion is even lower.

¹¹ The purchase price of an Astra dish and decoder is between £200 and £400, compared to a rental price of £13–£17 a month.

¹² See, for example, *Satellite TV Finance*, 16 May 1991, or *New Media Markets*, 5 December 1991.

Channel



Source: NERA

Figure 5.6 Indicative Programme Costs Per Hour 1991

Profitability

Figure 5.7 shows the revenues and costs of several US pay-television channels. Although most channels have relatively few subscribers, and those channels which show advertising have low audience shares, the high willingness to pay (for premium channels) and low programme costs mean that all these channels are profitable, even though most generate less than £200 million a year (from both subscription and advertising).

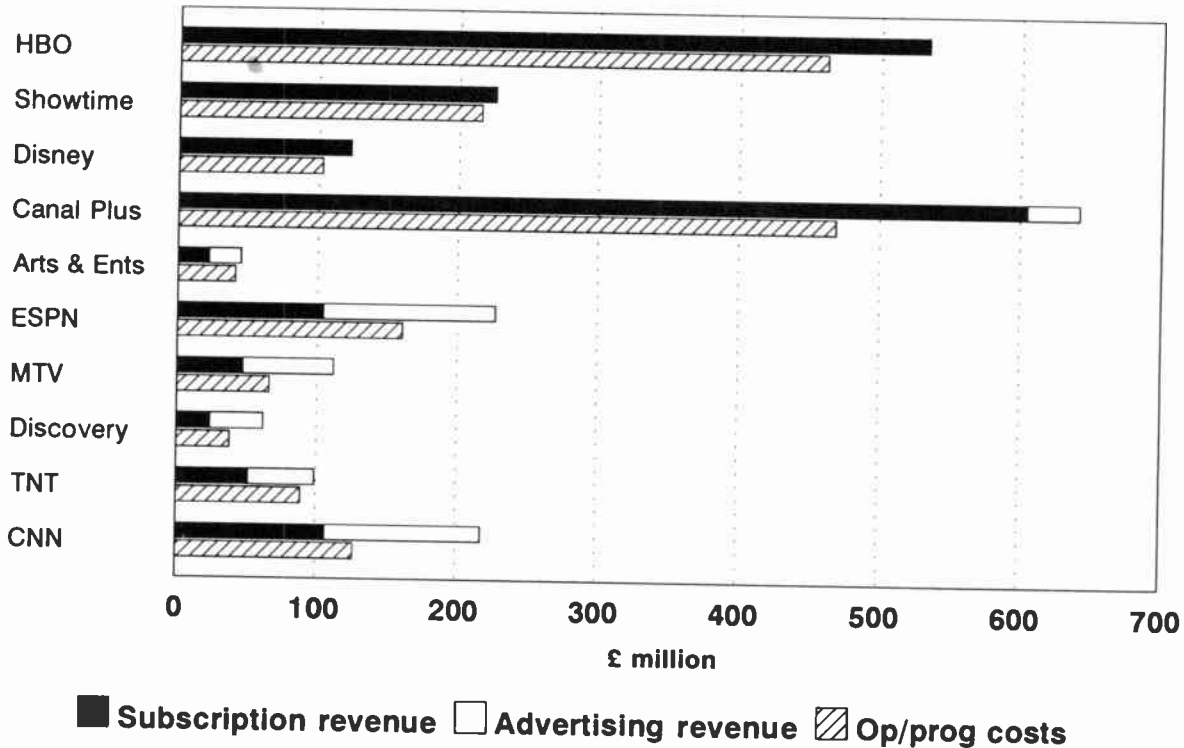
Figure 5.7 also shows the revenues and costs of the French channel, Canal Plus, which despite only being launched in 1984 is now the most profitable pay-television channel. The potential profitability of subscription television is illustrated by a comparison between the two most successful terrestrial channels in France, TF1 and Canal Plus: although TF1 has an audience share of 41 per cent, compared with only 4 per cent for Canal Plus, TF1's profits in 1989/90 were £22.4 million, compared with £79.3 million for Canal Plus.¹³

Although many subscription channels have now become profitable, it can be very difficult for a new channel to achieve profits in its early years of operation. Sky Movies, for example, is reported to have made losses in the UK for at least its first two years of operation, while the German channel, Premiere, is expected to break even only within three or four years. Similarly, operating losses and falling subscription receipts led to the merger of two competing film channels, TV1000 and SF Succé, in Scandinavia in 1991.

Video Software

During the 1980s, video software markets grew from almost nothing to a worldwide turnover of more than £15 billion. In Western Europe, the US and Japan, total expenditure on video software was about £13 billion in 1991, having grown by 20 per cent in real terms (or 6 per cent a year) over the previous

¹³ Source: Médiamétrie. *Screen Digest*, May and August 1990.



Source: NERA

Figure 5.7 Revenue and Costs of Pay-TV Channels 1991

three years. The UK market is particularly strong, accounting for over 30 per cent of total EC turnover, and is second only to the US and Japan in terms of total market size.

In this section, we describe the kinds of programmes which are distributed on video cassette, both in the UK and elsewhere, and the amount consumers are willing to pay either to buy or to rent pre-recorded video cassettes. Video retailers, ranging from specialist video shops to small newsagents and petrol stations, offer pre-recorded video cassettes either for hire (the rental sector) or for sale (the sell-through sector). There is relatively free entry into and exit from video retailing, and the survival of large numbers of different retailers is clear evidence of the profitability of video retailing.

What Programmes Do Viewers Buy or Rent on Video Cassette?

The ease of entry into video retailing and the wide availability of VCRs mean that, whereas the introduction of pay-television depended on regulatory and technological developments in each country, the development of video software markets has been consumer-led. Although this might suggest that video software provides a better indication of consumer demand for extra television, we noted earlier that video cassettes are suitable only for distributing certain types of programme, in particular those which are highly valued (on a programme-by-programme basis) by viewers and which have a long 'shelf life'.

It is not surprising, therefore, that feature films account for a high proportion of video rentals in all the major markets. In the sell-through sector, programmes more suited to repeat viewing, such as music and children's videos, take a higher proportion of sales, although films still maintain the highest volume of turnover even in the sell-through sector. Sports and educational videos also account for a small proportion of both rental and sell-through turnover.

Figures 5.8 and 5.9 show a breakdown of video software turnover in Japan, the US and UK, distinguishing between rentals and sales. Films accounted for 85–90 per cent of rental turnover, and between 49 per cent and 77 per cent of sales turnover in 1990. We note, however, that the data for Japan exclude sales of video discs, which are dominated by karaoke discs (73 per cent of all disc sales).

How Much Will Viewers Pay for Video Software?

The average cost of renting a video cassette is between £1 and £2 in most Western countries (although it can be as high as £4, for example in Scandinavia), while average purchase prices range from £8 to £16 per video cassette. However, many VCR households never buy or rent pre-recorded video cassettes — instead they use their VCRs only to record programmes delivered by terrestrial, cable or satellite channels. Almost 25 per cent of UK VCR households are thought to be ‘non-renters’, but another 22 per cent are ‘heavy renters’ who rent at least one video a week and who account for about 70 per cent of all video rentals.¹⁴

Table 5.3 shows the average monthly expenditure *per VCR household* on video software in EC countries, the US and Japan. Despite the wide range shown in this table, average expenditure on video software in most European countries (i.e., all except Ireland and the Netherlands) falls between £2.50 and £5 a month, compared with £8–£10 a month in the US and Japan.

Although total expenditure on video software has increased (in real terms) in most developed countries over the last few years, this has been the result of strong growth in the sell-through sector and an increase in the number of VCR homes. In the US, Japanese and all Western European markets, rental expenditure *per VCR household* has fallen in real terms over the last three years, in most cases by between 30 per cent and

¹⁴ Source: *Screen Digest*, December 1991.

60 per cent, and the increase in sell-through turnover has been insufficient to prevent a real decrease in total expenditure per VCR household in most of these markets.

The current level of monthly expenditure on video software in most European countries is significantly less than the cost of a basic cable package, let alone the additional cost of subscribing to a premium film channel. In the UK, however, this is partly a reflection of the substitutability between video rentals and pay-television, as the rising penetration of premium film channels has led to a sharp reduction in video rentals by previously high-spending households.

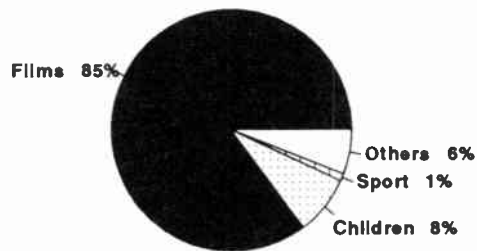
Table 5.3 Monthly spending on video software in 1991

	% of TV homes with VCR	Average monthly expenditure per VCR home (£)		
		Rental	Sell-through	Total
Belgium	50.7	1.36	1.41	2.77
Denmark	45.7	2.14	0.94	3.08
France	51.6	0.60	2.79	3.39
Germany	58.4	1.71	0.78	2.49
Greece	30.4	1.32	—	1.32
Ireland	55.0	5.78	1.61	7.39
Italy	31.1	1.32	3.08	4.40
Netherlands	51.9	7.20	5.69	12.89
Portugal	32.2	2.79	0.81	3.60
Spain	48.7	2.38	0.76	3.14
UK	71.5	2.74	1.85	4.59
Japan	70.0	4.32	5.39	9.71
US	71.0	5.69	2.34	8.03

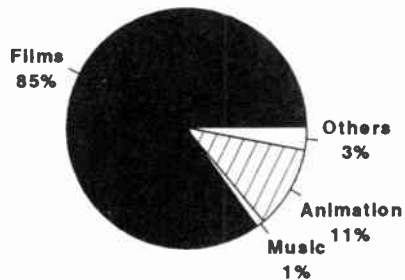
Sources: *Screen Digest*, June and December 1991, NERA

Conclusions

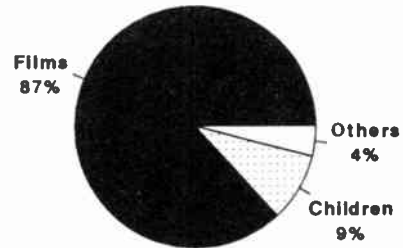
Despite the widespread availability of free television channels, many viewers pay to watch programmes other than those shown on free television. These can be delivered by cable, terrestrial or satellite television, or by playing a pre-recorded video cassette. Total expenditure on pay-television and video software in Western Europe, the US and Japan was about £27 billion in 1991, and this total is likely to grow as an increasing



UK



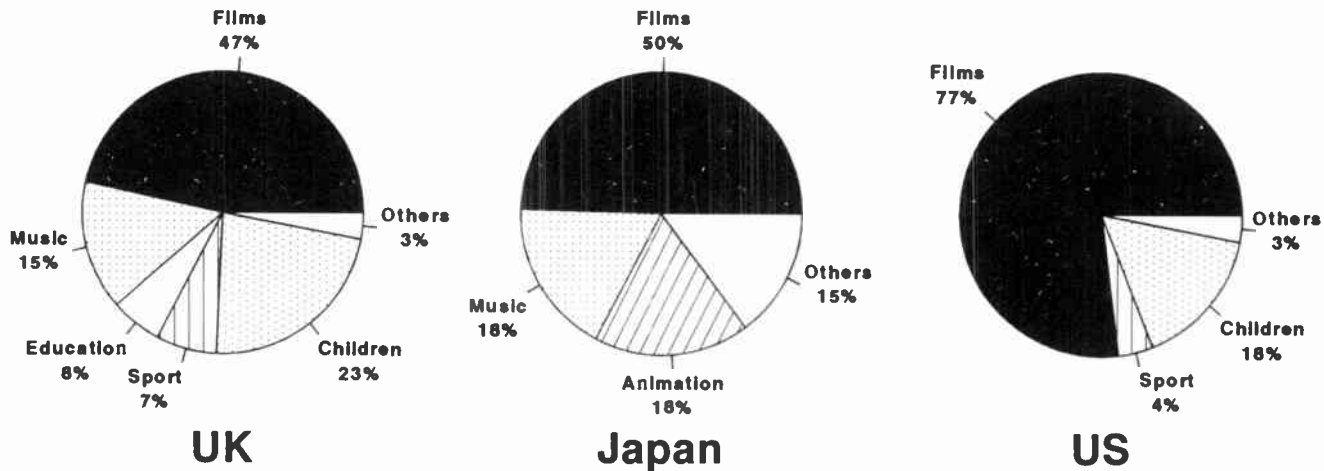
Japan



US

Sources: BVA, JVA and US video retailer
 Japanese data do not include laserdisks

Figure 5.8 Video Software Rentals by Genre 1990



Sources: BVA, JVA and US video retailer
 Japanese data do not include laserdiscs

Figure 5.9 Video Software Purchases by Genre 1990

number of households take cable/satellite television services and as VCR penetration continues to rise.

A small number of pay-channels offer similar kinds of programmes to those available on free television, and some viewers are willing to pay simply for a wider choice of viewing. However, most pay-channels specialize in one or two programme areas, seeking to appeal to viewers who feel that certain types of programme are under-provided by free television channels. Clearly, the availability of free television limits the amount which viewers are willing to pay for additional programming, nevertheless many viewers are willing to pay between £5 and £15 a month (and sometimes more) for specialist film channels. Feature films also dominate both rentals and sales of pre-recorded video cassettes.

Although a few 'premium' channels, such as the French channel Canal Plus, show programmes other than films for part of their schedule, there are very few viewers willing to pay significant amounts of money for other types of programme. In practice, other specialist channels, including news, sports, music, children's and minority interest channels, are bundled together, usually with some general entertainment channels, in a basic cable package which costs less than £1 per month for each channel (and this payment also includes a contribution to the cable operator's costs of constructing and maintaining the network).¹⁵ Many basic channels obtain a significant proportion of their income from advertising rather than subscription revenues.

To date, only two pay-television channels — Canal Plus in France and HBO in the US — have been able to generate revenues much above £200 million a year, and many channels earn significantly less than £100 million a year. Nevertheless, since almost all pay-channels rely on acquired programming to provide most if not all of their schedules, programme costs

¹⁵ For DTH homes, basic channels are often provided free of charge, but the consumer is required to fund the entire cost of the receiving equipment.

are also low. Consequently, many pay-television channels are profitable even with a very low share of total viewing.

II PROSPECTS FOR SUBSCRIPTION TELEVISION IN THE UK

In this section we draw on the experience of pay-television and video markets set out in Section I to assess the potential growth of the UK pay-television and video markets. The aim of our modelling work is not to predict the actual size of the market in the year 2000, since this would depend on particular assumptions about the exact number and range of basic and premium channels available, but rather to derive an illustrative projection of UK viewers' willingness to pay for additional television services (including pre-recorded video cassettes), which might be exploited both by current players and by new entrants. Importantly, we assume that there is no change in the format of the existing four UK terrestrial channels, which continue to show high quality general entertainment programmes free of charge, and that Channel 5 is also an advertiser-financed general entertainment channel.¹⁶

We go on to describe the current state of the UK pay-television and video markets. We then consider the factors which are likely to impact on future growth, and set out the assumptions used in our assessment of the total market from now to the year 2000 — the Appendix, page 162, describes the model constructed by NERA for this purpose. The final section presents our projections and assesses the implications of the results.

¹⁶ Although the Independent Television Commission has not ruled out the possibility that Channel 5 could be (partly or wholly) subscription-financed, the requirement for the new channel to provide a range of programmes 'calculated to appeal to a variety of tastes and interests' (Broadcasting Act 1990, Section 16(2)) suggests that an advertiser-financed service is more likely.

The Current Situation

All UK households are potential subscribers to pay-television (either through video sales and rentals or via transmissions from the Astra satellite, which cover the whole of the UK). Most households currently paying for extra television do so by either renting or buying video cassettes — total expenditure on video rentals and sales was about £850 million in 1991,¹⁷ compared with estimated cable and satellite subscription payments of £230 million.¹⁸ This is not surprising, since over 70 per cent of UK homes now have a VCR, compared with just over 10 per cent receiving cable or satellite television.

In 1991, UK consumers spent about £510 million and £340 million respectively on video rentals and sales — this means that an average VCR household hired almost 2 videos per month and bought about 2.5 videos during 1991, spending just over £4.50 a month in total on video software.¹⁹

Pay-television occupies a smaller, but expanding role in the UK market. By the end of 1991, there were 1.9 million DTH/smatv²⁰ homes in the UK, and a further 220,000 broadband cable homes. For homes equipped with individual Astra dishes, there is no charge for the basic channels

¹⁷ Source: *Screen Digest*, December 1991.

¹⁸ NERA estimate, excluding satellite dish rental/purchase costs, based on information from *Cable Authority Annual Report* (1990), *Satellite TV Finance* (8 August 1991), and *New Media Markets* (21 November 1991).

¹⁹ As shown in Figures 5.8 and 5.9 above, films account for 85 per cent of video rentals and almost 50 per cent of sales, and children's videos account for a further 8 per cent of rentals and over 20 per cent of sales. The remaining 30 per cent of sales are mainly music, sports and educational videos.

²⁰ A satellite master antenna television (smatv) system enables a block of flats, for example, to receive satellite television with a single dish.

transmitted from Astra 1a and 1b,²¹ though there is an initial outlay of £200 or more for the dish and decoder.²² In the case of cable subscribers, a payment of a monthly subscription of £10–£15 provides access to the cable network and pays for a package of usually 15–20 basic channels.

An estimated 1.3 million (or 69 per cent of) DTH/smatv homes subscribe to at least one film channel (either Sky Movies Plus or The Movie Channel), and about 860,000 (or 45 per cent) subscribe to both BSkyB film channels.²³ At prices of £9.99 a month for one channel, and £14.99 a month for both channels, this means that each premium channel household spends, on average, £13.25 a month on premium film channels.

Although similar data are not available for cable homes, the average number of film channel subscriptions per home (1.14)²⁴ is identical to that in DTH/smatv homes, which suggests that the take-up of individual channels is likely to be similar to that in DTH/smatv homes.²⁵

Importantly, there is a growing body of evidence which suggests that viewers regard watching premium film channels or films on pre-recorded video cassettes as substitute activities, so we might expect an increase in the take-up of film channels to lead to a reduction in video rentals and sales (although total spending on pay-television and videos may well increase). A recent survey found that Sky Movies

²¹ These include Sky One, Sky News, Sky Sports, Lifestyle, Screensport, MTV Europe, Eurosport and The Children's Channel.

²² Alternatively, it is possible to rent Astra receiving equipment at a cost of £13--£17 a month.

²³ Source: *Satellite TV Finance*, 14 November 1991.

²⁴ Source: *New Media Markets*, 21 November 1991.

²⁵ The proportion of Sky Movies Plus subscribers in broadband cable homes (62.6 per cent) provides a lower bound for the proportion of homes taking at least one film channel.

subscribers now rent an average of 1.1 films a month on video, compared with 6.7 a month before they became subscribers, and that 98 per cent of subscribers have a VCR.²⁶ As well as demonstrating the substitutability of pay-television and video rentals/sales, this indicates that early subscribers to Sky Movies had been very heavy video users, both renting and buying more than three times the average number of videos per month.

In summary, therefore, 71.5 per cent of television households in the UK have a VCR and spend just over £4.50 a month on video software. Nine per cent of households have either paid £200 or more to buy an Astra dish or they rent a dish at a cost of about £15 a month, and 1 per cent of households pay £10–£15 a month to receive a package of basic channels delivered by cable. Finally, an estimated 7 per cent of UK television households (or about 70 per cent of cable/satellite households) pay an average of over £13 a month to receive one or more premium film channels, and survey evidence suggests that these households were formerly high spending consumers of video software. Excluding dish purchase or rental payments, this gives a total market size of about £1.1 billion in 1991.

While this gives some indication of consumers' current willingness to pay, it is based on the rather limited range of channels available. In particular, only two premium channels were available to DTH/smatv homes in 1991, both of them showing similar kinds of film. Perhaps significantly, we note that two further pay-channels, HVC-The Adult Channel and

²⁶ Source: *Satellite TV Finance*. 17 April 1991. The survey also found that average purchases of films on video fell from 0.6 a month to 0.3 a month.

TV Asia,²⁷ are planned for 1992, and The Disney Channel may also launch a DTH service in the near future.

The Determinants of Future Growth

Consumer acceptance of cable/satellite television now seems well established, and the main area of uncertainty for the future relates to the number of basic and premium channels which will be provided, and the timing of entry by new channels. As with any new product, there is a degree of circularity involved in trying to predict future growth. This is because total consumer spending will depend on the range of products available, while the decision whether or not to launch a new product itself depends (among other things) on the size of the potential market.

Rather than attempting a detailed forecast of actual spending, which would depend to a large extent on particular assumptions about the number, range and price of channels available at any one time, we have constructed a model which projects consumers' total willingness to pay for the extra choice provided by pay-television and video rentals/sales. Clearly, it is impossible to escape from the fact that willingness to pay depends on what is being offered. We have asked the question, therefore:

How much might UK consumers be willing to pay, in total, for a range of pay-television channels and pre-recorded video cassettes similar to that provided already in the US, and to a lesser extent in the UK and other countries?

This means that the current terrestrial channels are assumed to continue very much as at present, and that Channel 5, the

²⁷ HVC-The Adult Channel (an adult film channel) and TV Asia (a minority channel) both plan to transmit encrypted channels from the Astra 1b satellite, although only TV Asia will be available to cable homes as well as DTH homes. HVC plans to charge DTH homes £15 per quarter, while TV Asia is likely to charge just under £10 per month to DTH homes, and about £6 a month per subscriber to cable operators. (Source: *New Media Markets*, 19 December 1991).

new terrestrial channel due to be launched in 1995, is also an advertiser-financed general entertainment channel. Any departure from these assumptions would have a significant impact on the size of the market.

Given these assumptions, the main determinants of future potential growth are:

- the increase in the number of UK homes with VCRs and cable or satellite television;
- changes in the average willingness to pay (for additional television) of VCR and new media households.

Whether or not this potential growth is realized will then depend on the extent to which new players enter the market in response to any unsatisfied demand, for example for specific types of niche channel.

Penetration of VCRs and Cable or Satellite Television

The proportion of UK television households with a VCR has increased from 8 per cent in 1981 to 53 per cent in 1987, 64 per cent in 1989 and 71.5 per cent in 1991.²⁸ This is higher than in other EC countries, but in terms of both the level of penetration and the rate of increase, the UK experience has been very similar to that in the US, Canada, Japan and Australia. It seems likely, therefore, that the expansion of VCR ownership will continue in the medium term, though at a slower rate, and we would expect to see some levelling off at a near-saturation level at 85–90 per cent penetration.

We have assumed that VCR penetration reaches 80 per cent by 1995, rising to 85 per cent by the year 2000.

Clearly, the take-up of cable and satellite television will depend on the range and cost of channels available, as well as macroeconomic trends in household income and expenditure. Nevertheless, a number of independent observers have produced forecasts of the take-up of new media over the next

²⁸ Source: *Screen Digest*, June 1991.

few years, all assuming either little or no change in the current market structure, with any new cable/satellite channels being similar to those available at present.

Table 5.4 Forecasts of new media penetration

Forecaster and date of forecast	1995			2000		
	% of television homes taking					
	Cable	Satellite	Total	Cable	Satellite	Total
Putnam, Hayes & Bartlett						
November 1990	10.5	15.6	26.1	23.5	24.3	47.8
Saatchi & Saatchi						
February 1991	10.5	31.5	42.0	26.1	38.7	64.8
SES						
February 1991	9.2	23.4	32.6	18.1	36.1	54.2
NERA						
April 1991			28.0			45.0
Continental Research						
June 1991		35.7			45.6	
PA						
December 1991	10.1	25.7	35.8	23.5	32.5	56.0

Source: NERA

A sample of these forecasts is shown in Table 5.4. The consensus view suggests that by the year 2000 there will be a combined penetration rate of about 45 per cent — 55 per cent is plausible, although there are differing views on the split between cable and satellite delivery.

We have assumed that 36 per cent of UK homes receive cable or satellite television in 1995, rising to 50 per cent by 2000. Cable accounts for just under half of these homes, based on the assumption that cable network construction proceeds as currently planned, and that penetration (as a proportion of homes passed by cable) increases slowly from its current 19 to 33 per cent by the year 2000.

Consumers' Willingness to Pay

From the predicted number of homes with VCRs and cable/satellite television, projections of the potential market size then depend on an analysis of viewers' willingness to pay for:

- cable/satellite hardware and basic channels;
- premium subscription channels; and
- video software.

Starting from the base of actual expenditure in 1991, the following factors are likely to affect the average willingness to pay in each cable/satellite or VCR household:

- economic growth (measured here by real consumers' expenditure per household) will increase the funds available for all consumption, including payments for extra television;
- as the total market expands (if only as a result of more homes having VCRs and/or cable/satellite television) new channels are likely to enter, increasing the range of pay-channels available to UK viewers;
- in the case of cable and satellite television, the current population of 'early adopters' is likely to value the new service more than those taking cable or satellite television at a later date, so we might expect *average* willingness to pay to fall with the projected increase in cable and satellite penetration;
- in the case of video, increased take-up of premium film channels is expected to decrease average household expenditure on video software, particularly in the rental sector.

The first two of these suggest that average willingness to pay (per receiving household) will increase over time, while the last two suggest that it will fall.

In order to develop suitable assumptions for changes in UK viewers' willingness to pay in the 1990s, and to isolate the impact of rising consumer expenditure and increasing cable, satellite and VCR penetration, we considered the average

expenditure on pay-television or video software *as a proportion of total expenditure in receiving households*.²⁹

To inform our assumptions, we compared current UK expenditure patterns with those in the more mature US market, where over 50 per cent of households have cable television and can choose from a very much wider range of channels. This is shown in Table 5.5.

The pattern of US expenditure, shown in Table 5.5, has been quite stable during the 1980s. Since 1981 there has been a small increase in the share of expenditure on cable television, some of which was almost certainly due to the introduction of new channels, and a fall in the proportion of consumers' expenditure on video software (though this was starting from a low base of 4 per cent VCR penetration in 1981).

Table 5.5 Pay-television and video's share of consumers' expenditure

	% of consumers' expenditure <i>in receiving households</i>	
	US 1990	UK 1991
Cable/satellite television ¹	0.82	1.27
(% of homes)	(56)	(10)
Video software	0.40	0.35
(% of homes)	(68)	(71)

Source: NERA analysis

¹Average expenditure on basic and premium channels per cable/satellite household. For the UK, expenditure on basic channels is derived from a weighted average of cable subscription charges and Astra dish purchase/rental prices.

As a proportion of total expenditure, spending on cable/satellite television in the UK is much higher than in the US, while spending on video software is slightly lower in the UK than the US. This means that pay-television and video software account for about 1.6 per cent of total spending in

²⁹ That is, the proportion of expenditure on pay-television, averaged over all cable and satellite households; and the proportion of expenditure on video software, averaged over all VCR households.

UK 'multi-media' households, compared with only 1.2 per cent in the US.³⁰ Over time, we would expect the proportion of spending on pay-television and video software in the UK to fall, as later adopters spend less on cable/satellite channels and as higher penetration of premium film channels continues to depress the video rental sector, but to remain above US levels.³¹

We have assumed that by the year 2000, UK cable/satellite households and VCR households devote respectively 1.1 per cent and 0.3 per cent of their total expenditure to pay-television and to video software. This is assumed to have the same proportionate impact on viewers' willingness to pay both for basic channels/hardware and for premium channels.

While spending in each pay-television or VCR household accounts for a lower proportion of total expenditure, the amount spent by each household will depend on changes in total expenditure. Our projections of average household expenditure growth are based on independent economic forecasters' views of short to medium term economic prospects, the long run growth of consumers' expenditure in the post-war period, and OPCS projections of UK population growth.

³⁰ We have assumed that households with both cable/satellite television and a VCR spend the same amount on each medium as those with either cable/satellite television or a VCR. Although this might seem unlikely, we note that VCR households which subscribe to premium film channels in the UK now spend about the same amount on video software as other UK VCR households. This is because premium channel households were previously very high spenders on video software, but after subscribing to a film channel they have become only average spenders.

³¹ The higher share of expenditure on cable/satellite television in the UK might be explained by the current small population of early adopters. However, this argument is weaker for cable households, which devote on average 1.5 per cent of household expenditure to pay-television, since the current population of cable households represents over 20 per cent of homes passed (i.e., those which could receive cable television if they wanted to).

*We have assumed that the number of television households increases by 1 per cent a year, and average household expenditure by 1.8 per cent a year in real terms, between 1991 and the year 2000.*³²

The net impact of these assumptions is that willingness to pay for cable and satellite television (per cable/satellite household) increases at just over 0.15 per cent a year (in real terms), while willingness to pay for video software (per VCR household) rises by slightly less than 0.1 per cent a year between 1992 and 2000.

Division of Total Spending

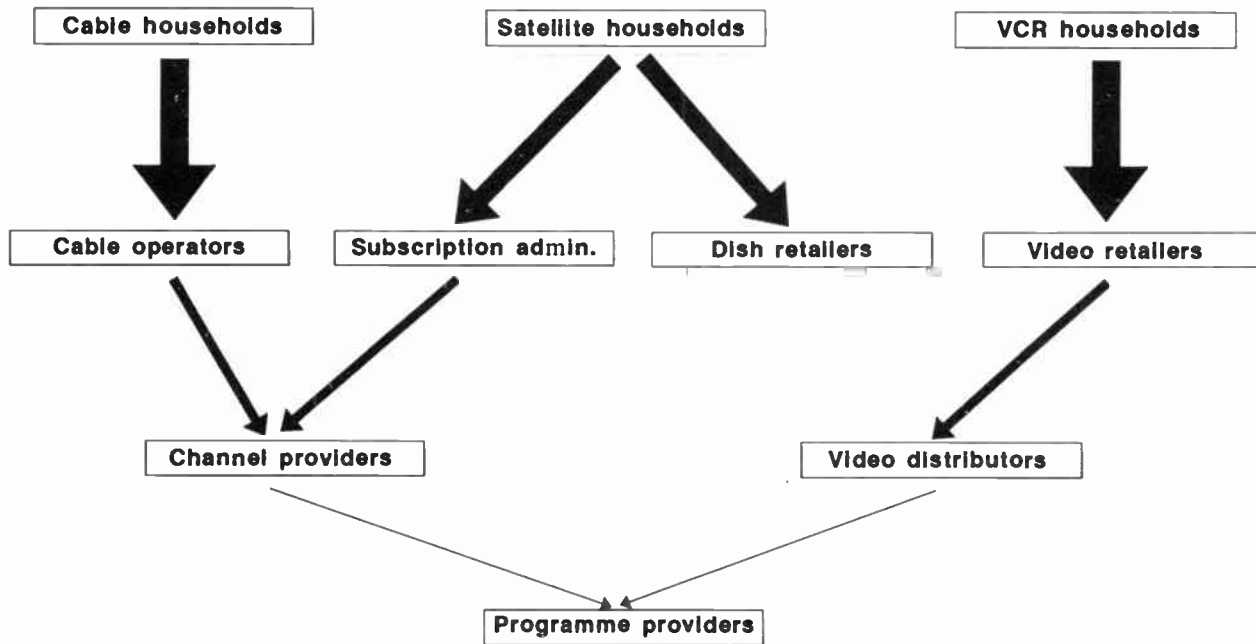
Having projected total willingness to pay for basic channels/hardware, premium channels and video software, the final part of our modelling exercise is to divide this total between the different players in the UK market, in particular to identify the amount available to channel providers (net of any subscription administration and billing costs).

Figure 5.10 shows the chain of payments for programmes delivered by pay-television or VCR. We have divided our projections of total spending between cable operators; dish retailers; subscription administration; video retailers; basic channel providers; and premium channel providers.³³

Importantly, we have assumed that basic channels remain available free of charge to DTH homes. If this situation were to change, then DTH households' willingness to pay for basic channels and hardware would be shared between dish

³² This means that *total* real consumers' expenditure grows at about 2.8 per cent a year.

³³ Except for deducting the costs of subscription management for DTH homes (even though some premium channels may perform this function themselves), therefore, we have not attempted to estimate the proportion of channel providers' revenue which is spent on programmes, or the proportion of video software turnover which accrues to either video distributors or programme providers.



Note: Certain channel providers may also undertake some programme production and/or subscription administration

Figure 5.10 Destination of Subscription Payments

retailers, subscription administration costs and basic channel providers.

To allocate viewers' willingness to pay between the different participants requires assumptions on the proportion of cable operators' revenues passed on to basic or to premium channel providers, and the costs of subscription administration and billing. These are based on our assessment of the current situation, then allowing changes over time to reflect the following factors:

- for basic channel providers — an increase in the number of basic channels might increase cable operators' payments to channel providers, but this could be offset by the impact of increased competition between channel providers;
- for premium channel providers — the introduction of new premium channels is likely to put downward pressure on charges to cable operators;
- for subscription administration and billing costs (relating to DTH homes subscribing to premium channels) — there are likely to be both economies of scale (i.e., the cost per subscriber falls with the number of subscribers) and economies of scope (i.e., the cost per channel falls with the number of channels), however, the latter are likely to be realized only if most channels sub-contract their subscription management functions to independent agencies.³⁴

*Our assumptions are as follows:*³⁵

- *throughout the period, 30 per cent of basic cable subscriptions are paid to channel providers;*

³⁴ Despite any potential cost advantage, it is unlikely that a premium channel would allow a competitor to undertake its subscription administration and billing.

³⁵ These refer to the proportion of revenue after the deduction of VAT.

- *premium channel providers' share of premium cable subscription payments falls from 50 per cent to 45 per cent by 2000;*
- *subscription management costs fall from 30 per cent to 15 per cent of total subscription revenue.*

Results

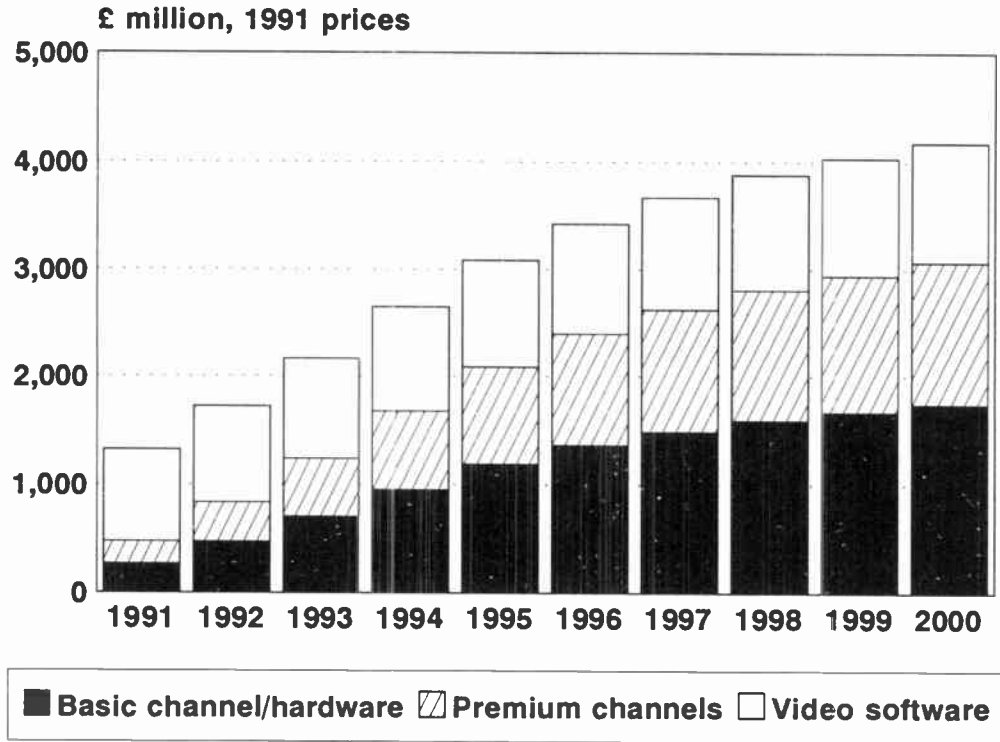
Total Market Size

Figure 5.11 shows our projections of total willingness to pay for cable/satellite television and video cassettes. By 2000, based on the assumptions set out above, we expect the total size of the potential market to be slightly more than £4 billion (in 1991 prices), compared to £1.3 billion in 1991³⁶ — this represents real growth of about 13.5 per cent a year between 1991 and 2000. Whether or not this potential growth is realized will depend on the extent to which new channels emerge to take advantage of the opportunity.

The main driving force behind this projected growth is the increase in the number of homes receiving cable or satellite television, expected to rise from 1.9 million to almost 12 million by 2000. By the year 2000, we expect consumers to be willing to pay up to £3 billion (in 1991 prices) to receive pay-television services, although this will include the cost of any hardware required (such as satellite dishes and receivers).

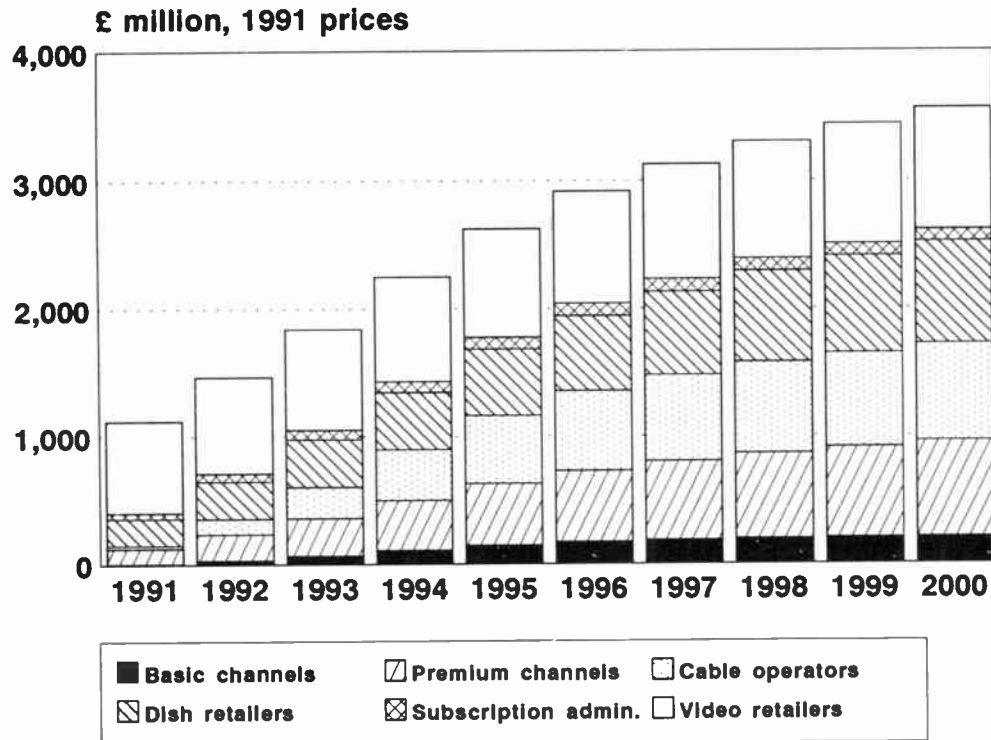
In contrast, we expect the video software market to grow at a much slower rate. This is mainly the result of economic growth, a modest increase in the number of VCR homes and continued growth in the sell-through sector, which offsets the adverse impact of increased take-up of premium film channels on the rental sector. Total spending on video software is projected to increase from £850 million in 1991 to

³⁶ This figure includes dish purchase and rental payments by DTH households.



Source: NERA analysis

Figure 5.11 Projections of Willingness to Pay for Cable/Satellite Television and Video Software



Source: NERA analysis

Figure 5.12 Who Gets the Money?

about £1,100 million in 2000 (both in 1991 prices), much of which will be passed on by retailers to video distributors.

Division of Revenues

Figure 5.12 shows the breakdown of the total market (after deducting VAT) between channel providers, video retailers, cable operators, dish retailers and subscription management costs (for DTH homes). Basic channel providers are expected to receive up to about £200 million from subscription revenue in 2000 (compared with less than £10 million in 1991), even though we assume that they are still provided free of charge to DTH homes. It is important to note, however, that we expect these channels to earn a high proportion of their revenues from advertising (which is not shown in Figure 5.12) rather than subscription revenues.

For premium channel providers, even after deducting total subscription administration and billing costs of around £90 million, we expect potential revenues in 2000 to be about £750 million, about five times the revenues generated in 1991, though this would be shared between a greater number of channels. Some premium channels might also take a small amount of advertising, although this would be limited by the risk of an adverse impact on take-up rates, particularly for film channels, if advertising was shown.

If this potential market growth is realized, then cable operators and dish retailers might each receive between £750 million and £800 million in the year 2000. In the case of dish retailers, however, the actual outcome is more likely to reflect the amount DTH households need to spend either to purchase or to rent a dish. If by the end of the period, most DTH homes own (rather than rent) dishes, actual expenditure will be much less than that shown in Figure 5.12.³⁷ Moreover, if basic channels were to encrypt their signals and to charge a (small) subscription fee to DTH homes, channel providers

³⁷ Dish retailers' turnover will be derived from a small proportion of rentals and a few new purchases (or upgrades).

would appropriate some of the willingness to pay attributed to dish retailers in Figure 5.12.

Video retailers would receive almost £950 million (net of VAT) by the year 2000. At present, for every £1 of expenditure on video software (excluding VAT), distributors receive an average of about 45p.³⁸ Since there is relatively free entry into video retailing,³⁹ we would expect the retail margin to reflect only a normal rate of return. It is more difficult, however, to determine the returns to either video distributors or programme providers, particularly since there is a high degree of vertical integration in this sector. Moreover, this relationship is liable to change over time in response to any change in the relative power of programme providers (mainly film producers) and distributors.

Discussion

Our results indicate that, since a relatively small number of UK homes have cable or satellite television at present, the potential willingness to pay for pay-television and video cassettes in the year 2000 might be more than three times the size of the current market, or around £4 billion. This compares with a current US market size estimated to be over £16 billion, and would exceed even the most optimistic projections for UK television advertising revenue by the end of the decade.

In other words, direct payment could be the most important source of television funding (including video software) by 2000, and there is likely to be sufficient consumer demand to justify the launch of several new satellite channels during the 1990s, including new premium channels. We have not assessed the many difficulties which some of these channels might face, for example in gaining access to programme

³⁸ Source: NERA, from data in *Screen Digest*, December 1991.

³⁹ Either by opening a specialist video shop, or by selling videos in an existing outlet such as a petrol station or a newsagent.

material. If such barriers were to prove insurmountable, then realized expenditure is likely to be significantly less than that shown in Figure 5.11.

Clearly, there are a number of other developments which might lead to a significantly different outcome from that shown in Figures 5.11 and Figures 5.12. These include:

- cable and satellite penetration in 2000 is substantially higher or lower than 50 per cent;
- total consumers' expenditure grows much faster or slower than 2.8 per cent a year between 1991 and 2000;
- there is a fundamental change in the nature of the current terrestrial television channels; or
- new cable or satellite services offer something much better than is available at present in the UK or US (for example, if a satellite sports channel managed to secure exclusive coverage of UK football and the Wimbledon tennis

championships).

III SUBSCRIPTION FINANCE AND THE BBC

When considering alternative funding mechanisms, the BBC cannot afford to ignore the possibilities offered by subscription television. Our assessment of the UK market shows that viewers will be prepared to pay considerable amounts of money to watch extra television channels and pre-recorded video cassettes, even if they still have to pay for a television licence and there are four or five channels available free of charge to all households.

Clearly, one of the most radical options would be to abolish the licence fee and to make both BBC1 and BBC2 subscription channels, so that viewers who did not pay would not receive them. Other, perhaps more promising, options include the use of the BBC's off-peak transmission hours for the broadcast of specialist subscription programmes, and participation by the BBC in new satellite-delivered subscription channels.

specialized channels and low-budget general entertainment channels. There is less evidence to indicate the likely take-up of a subscription-financed BBC television service — we discuss below several recent surveys which have addressed this question. We then consider the likely impact of a switch to subscription funding for BBC1 and BBC2, then examine other possible ways in which the BBC could exploit the potential market for subscription-funded television. The final section sets out our conclusions.

Surveys of Willingness to Pay for BBC Television

Survey Results

Three recent surveys have examined how much viewers would be willing to pay for BBC television if the licence fee was abolished and BBC1 and BBC2 became subscription channels. Table 5.6 lists these three studies and describes their basic methodologies, and Figure 5.13 summarizes their results for the case where ITV and Channel 4 remain free advertiser-financed channels, as at present.⁴⁰

A striking feature of Figure 5.13 is the difference between Ehrenberg and Mills' results and those of NOP and Booz Allen and Hamilton. One possible reason for this is the difference in survey methodologies: Ehrenberg and Mills argue that surveys based on the 'many price' approach, as used by NOP and Booz Allen and Hamilton, will lead to lower estimates of willingness to pay than surveys (like theirs) based on the 'single price' methodology.⁴¹

⁴⁰ Figure 5.13 shows the Ehrenberg and Mills' *average* results for each of three price ranges — within two of these ranges, individual results may lead to a backward-sloping demand curve.

⁴¹ Respondents in the Ehrenberg and Mills survey were given a single price for each channel, and then asked which (if any) channels they would subscribe to. In contrast, interviewees in both the NOP and Booz Allen and Hamilton surveys were asked to respond to a number of different prices for each channel.

Table 5.6 Surveys of willingness to pay**NOP, *Financing the BBC – A Survey of Public Opinion*, HMSO, 1986**

NOP surveyed 2,047 individuals, asking a range of questions about viewing and listening habits, attitudes to advertising on BBC television and radio, and willingness to pay for BBC television.

Respondents were asked whether, if the licence fee was abolished and they had a choice between paying a weekly subscription or not receiving BBC television, they would be prepared to pay 60p per week. Those who said they were prepared to pay, were then asked if they would pay first £1.20 a week, then £1.50 a week, finally £2.00 a week for BBC1 and BBC2.

Booz Allen and Hamilton, *Subscription Television*, HMSO, 1987

As part of a wider study for the Home Office, BAH constructed demand curves for BBC1 and BBC2, based on in-depth interviews with 84 individuals about their viewing habits and their willingness to pay for BBC1, BBC2, ITV and Channel 4.

Interviewees were presented with a range of prices from £100 to 10p a month per channel, and for each channel were asked to cross out those prices which they would *not* consider paying for each channel (assuming that all four channels were scrambled). A second set of questions, answered during discussion groups, addressed viewers' willingness to pay for BBC1 and BBC2, assuming that ITV and Channel 4 continued to be available free of charge.

A.S.C. Ehrenberg and P. Mills, *Viewers' Willingness to Pay*, Broadcast, 1990

Ehrenberg and Mills based their results on 27 separate surveys of almost 100 households (2,500 households in total), asking about willingness to pay either for BBC1 and BBC2 (when ITV and Channel 4 remain free) or for all four terrestrial channels (when there are no free channels).

All households within a particular sample were asked to respond to a single price package, saying which channels they would subscribe to. Price packages differed between the 27 samples according to the maximum price, the ratio between prices for BBC1 and BBC2, the payment period, and whether ITV and Channel 4 were also encrypted (and charged for).

Both Booz Allen and Hamilton and Ehrenberg and Mills found that viewers were willing to pay much less for BBC2 than for BBC1, which is consistent with the audience shares of each channel,⁴² although Ehrenberg and Mills' results

⁴² Ehrenberg and Mills also examined the impact of different ratios between the prices of BBC1 and BBC2, but their results do not seem sufficiently robust to shed much light on the degree of substitution between the two channels. Comparing samples which were offered

suggest a much larger difference between viewers' willingness to pay for the two channels.

Implications of Results

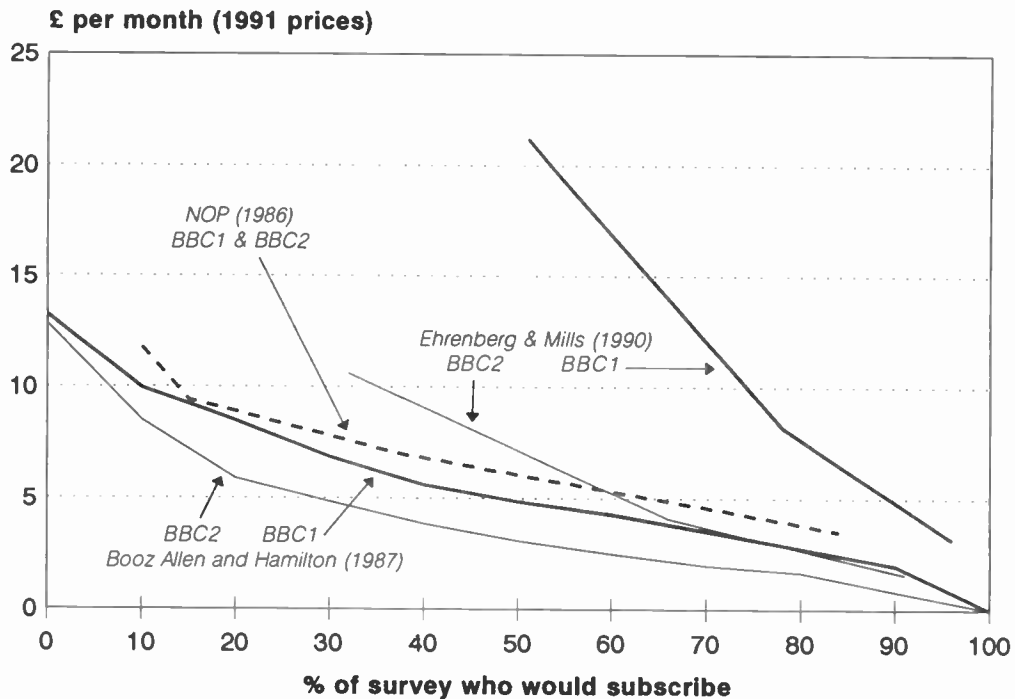
In Table 5.7, which summarizes Ehrenberg and Mills' main results, we have calculated the BBC's implied subscription revenue if the predicted take-up were realized. Even if we consider just the 'average of range' results, these suggest that the BBC might be able to earn revenues of something like £2 billion from subscription payments,⁴³ compared with licence fee income of £1.35 billion in 1990/1 (to fund both radio and television services). The main drawbacks are that this would mean over 35 per cent of the population not receiving the full BBC service, and almost 20 per cent receiving no BBC channels at all, while there would be substantial additional costs associated with subscription management and the provision of decoders.

Although we have not performed similar calculations from the results of either the NOP or the Booz Allen and Hamilton surveys, it is clear that both of these would imply a much lower level of subscription income than that shown in Table 5.7. Indeed, the results of the Booz Allen and Hamilton survey (as shown in Figure 5.13) suggest that the BBC would struggle even to raise £1 billion a year as a subscription television service, and would probably exclude almost half the population in doing so.⁴⁴

different prices for BBC1 and BBC2 within the same overall total (so the prices of BBC1 and BBC2 move in *opposite* directions), Ehrenberg and Mills' results often show the take-up of each channel moving in the *same* direction.

⁴³ Clearly, if the results from individual samples (i.e., rows other than the 'average of range' in Table 5.7) were realized, the BBC might earn substantially more.

⁴⁴ Source: NERA analysis of Booz Allen and Hamilton (1987).



Note: Ehrenberg and Mills' results for BBC1 and BBC2 are interdependent - those shown above are based on a 2:1 price ratio between BBC1 and BBC2

Figure 5.13 Surveys of Willingness to Pay for BBC Television

Table 5.7 Implied revenues from Ehrenberg and Mills' results

Price per year for (£): % of households subscribing to:							Implied total revenue (£m) ¹
BBC1 only	BBC2 only	Both channels	Neither channel	BBC1 only	BBC2 only	Both channels	
24	12	36	1	6	—	93	751
36	18	54	5	9	4	82	1,037
48	24	72	—	7	1	92	1,502
Average of £36—£72 range			2	7	2	89	1,095
60	30	90	17	21	3	59	1,432
72	36	108	17	18	3	62	1,742
96	48	144	24	9	5	62	2,157
144	72	216	16	11	2	71	3,669
Average of £90—£216 range			19	15	3	63	2,219
240	120	360	49	19	—	32	3,457

Sources: Ehrenberg and Mills (1990), NERA analysis

¹ Assuming 21.5 million television households in UK.

The conclusion to be drawn from these surveys is far from clear. In addition to Ehrenberg and Mills' argument that 'many price' surveys, such as those of NOP and Booz Allen and Hamilton, will lead to lower results, we note that the Peacock Committee (commenting on the NOP survey) concluded that '[t]hese numbers are awkwardly inconsistent, and we cannot place much reliance upon them',⁴⁵ while Booz Allen and Hamilton observed of its own survey: 'the purpose ... was not to generate statistically valid quantitative results, but to survey a small number of users in considerable

⁴⁵ *Report of the Committee on Financing the BBC*, HMSO, 1986.

depth in order to gain an insight into some typical viewers' preferences.⁴⁶

Although Ehrenberg and Mills claim a more reliable methodology, their use of the 'single price' approach means that the results for each price package are based, on average, on the replies of fewer than 100 households. It is not surprising, therefore, that some of the individual results shown in Table 5.7 seem inconsistent.

More generally, there are several reasons why any such research evidence needs to be treated with caution:

- viewers' reactions to hypothetical questions may bear little relation to their behaviour when faced with real-life situations, or they may have a strategic interest in giving biased replies;
- such surveys are inevitably based on the services currently provided by UK broadcasters, and ignore the likely competitive responses of both the BBC and its rivals to such a fundamental change;
- as more and more viewers gain access to cable and satellite channels, many of them also paying for additional film channels, their willingness to pay for BBC television may change — since an increasing number of channels will be making demands on both viewing time and expenditure.

The second and third of these points are considered in more detail below.

It is also difficult to draw firm conclusions from the experience of pay-television channels outlined in Section I, particularly in the case of BBC1. The main lessons from Section I were that, provided some free television is available, it is only premium film channels (or those showing a high proportion of films) for which viewers are willing to pay significant amounts of money on a channel-by-channel basis. Although total spending on other channels may be relatively high, the implied price *per channel* is very much lower,

⁴⁶ Booz Allen and Hamilton (1987).

usually less than £1 per month. Only two pay-television channels (HBO in the US and Canal Plus in France) have been able to generate revenues of the scale required by the BBC, and both of these rely on feature films to provide much of their programme material.

Although this seems to suggest that viewers would be unlikely to pay much to receive a general entertainment/public service channel such as BBC1, we note the following differences between a subscription-funded BBC and the pay-television channels discussed in Section I:

- the BBC has a large, well-established audience (more than 90 per cent of UK households watch BBC1 in any week) and has been broadcasting two national channels for more than 25 years, whereas almost all subscription channels are launched with no audience and no proven product (except for film channels, since individual films will have acquired a reputation during cinema exhibition);
- most subscription channels have very low programme costs and rely almost exclusively on acquired programming — whereas the BBC showed more than 9,700 hours of newly produced/commissioned programmes in 1990/1, including 6,000 of new network programmes at an average cost of more than £80,000 an hour.⁴⁷

Implications of Subscription Finance for BBC Television

Impact on BBC Revenues

Neither the experience of other pay-television channels described in Section I nor the surveys of viewers' willingness to pay for the BBC considered in the previous section are sufficient either to prove or to disprove that BBC television could survive in something like its present form as a subscription service. The success of Canal Plus in France

⁴⁷ Source: *BBC Annual Report and Accounts 1990/1, Guide to the BBC 1991*.

(albeit with a film-based programme mix) and the results of Ehrenberg and Mills' recent survey both indicate that the BBC might be able to maintain or even increase its revenues, but there is no precedent for a major, well-established public service broadcaster *switching* to subscription finance for channels previously available free of charge.

Whatever the level of the BBC's income, there is no doubt that there would be far greater *uncertainty* concerning future revenues than there is with the BBC's current licence fee income. In switching from licence fee to subscription funding, the BBC might expect some increase in its revenues, it might even perceive a small chance of a very large increase in revenue, but it would also be taking on at least some risk of a much less favourable outcome.

There is a risk that not only will the BBC earn less revenue than expected, but that a significant proportion of viewers will choose not to receive BBC television, so the BBC might become increasingly marginalized. This risk might increase as cable and satellite penetration increases, decreasing viewers' willingness to pay for the BBC over time. Our projections of cable and satellite penetration (see Section II) suggest that almost 45 per cent of UK television homes will be receiving cable or satellite television by 1997 (which, we assume, is the very earliest that BBC1 and BBC2 could become subscription channels), and over 30 per cent might already be paying £10 a month for one or more premium channels.⁴⁸ Many households, therefore, will have a large number of channels vying for both their leisure time and their income, so there is a danger that the BBC would be squeezed out by these purely commercial broadcasters.

More generally, both the Booz Allen and Hamilton and Ehrenberg and Mills surveys suggest a conflict between

⁴⁸ In contrast, we note that Ehrenberg and Mills' main survey was carried out between April 1989 and March 1990. Even by the end of this period, less than 5 per cent of UK households had cable or satellite television, and less than 2 per cent were paying for a premium film channel (i.e., Sky Movies).

maximizing the BBC's revenues and the principle of universality, since revenue maximization would require a level of charges high enough to exclude large numbers of viewers.

Of course, if it had to rely on subscription income and was maximizing its revenue, the BBC would almost certainly have to consider changes to its programme policy. At present, there is only an indirect link between the BBC's programming performance (or rather, the government's perception thereof) and its licence fee income. However, where there is a stronger link between viewer satisfaction and revenue (whether through advertising finance, subscription payments or voluntary donations), it is inevitable that broadcasters will pay careful attention to the revenue implications of any proposed programme schedule.

We noted that one weakness of all three willingness to pay surveys is that they relate to the programme mix currently provided both by the BBC and by its competitors. From the BBC's point of view, it would almost certainly be possible to 'tweak' its programme mix to give more airtime to those programmes, such as feature films and certain sports events, for which viewers (both in the UK and overseas) have already demonstrated their willingness to pay. Other possible changes are less clear: on the one hand the BBC might attempt to 'popularize' its schedules, hoping that this would increase the take-up of the subscription service, on the other hand it might do precisely the opposite, attempting instead to differentiate BBC1 and BBC2 from ITV, which would still be available free of charge to all UK viewers.

In addition to altering its programme mix, the BBC might employ more imaginative pricing policies than those investigated by the three surveys described above. For example, there may be scope for limited use of 'pay-per-view', whereby viewers are charged for individual programmes (such as major sports events or rock concerts). Alternatively, it might be possible to allocate some airtime, perhaps on BBC2, for specialized services, in much the same way as BBC SELECT is offering a night time subscription service (see below).

In summary, neither the willingness to pay surveys nor the experience of pay-television in the UK and elsewhere provide convincing arguments for or against a switch to subscription funding for BBC1 and BBC2. The BBC might enhance its revenue earning prospects by changing its programme mix, although the result might be very different from the service provided today. By 1997, though, it will face much stronger competition from commercial cable and satellite channels, and viewers' willingness to pay may be much less than that reported in recent surveys. What *is* clear however, is that subscription funding provides a much less certain stream of revenue than the BBC's current licence fee income.

Impact on BBC Costs

Even if subscription were to lead to an increase in the BBC's revenues, substantial costs would be incurred in the provision of decoders and the administration and collection of subscription payments. However these costs are funded in practice (for example, subscribers might need to purchase decoders, or the BBC might provide a subsidy), the net result will be that a proportion of viewers' willingness to pay will be absorbed by these extra costs, leaving less available for the running of BBC1 and BBC2.

The significance of this will depend on the state of the market in 1997, since there would be no need for cable households to install special decoders (the BBC service could be delivered over cable networks). However, other households would need to obtain a special decoder (this could be either a stand alone device or built into new television sets) in order to receive BBC television.⁴⁹

⁴⁹ We understand from the BBC that whatever encryption standard is used, it would be impossible for viewers to receive a scrambled terrestrial channel with an existing satellite decoder, or vice versa. Therefore, existing DTH homes would need an additional decoder to receive BBC, and other households wishing to receive both the BBC and premium satellite channels would need either two separate

Whatever the level of cable penetration, the BBC would still need to introduce a subscription management system. Cable operators could perform this function for homes connected to their networks, presumably at a charge to the BBC, but the BBC would need to deal directly with non-cable homes.

We have not attempted to quantify the additional costs of decoders and subscription management, since these will depend on technological developments between now and the launch of a BBC subscription service, the take-up of the BBC pay-service and the split of subscribers between cable and other homes. However, this cost is likely to be very substantial. Even at a very low price of £20 to £50 per home, the cost of equipping just 50 per cent of non-cable homes would be between £175 million and £450 million.

Impact on the UK Market

The introduction of subscription funding for BBC1 and BBC2 would have a considerable impact on the UK television industry. ITV and Channel 4 would benefit in two main ways:

- it would, we assume, remove the threat that BBC television would be allowed to carry advertising; and
- it would almost certainly increase the total viewing of ITV and Channel 4, depending on the number of viewers not subscribing to one or both of the BBC channels, and also any changes in the BBC's programme mix.

Assuming that Channel 5 is an advertiser-financed channel, then it would probably experience a similar beneficial effect.

For cable and satellite channels, the picture is less clear. Among households which already receive cable or satellite television, those which decide not to subscribe to the BBC service will presumably increase their viewing of other channels, including cable and satellite channels. Indeed the

decoders or, if these became available, a single (and presumably more expensive) box containing both sets of decoding equipment.

additional choice available (and the fact that some of them already pay perhaps £10 or more each month to receive premium channels) may make cable and satellite households much less likely to take a subscription-financed BBC, in which case they might subscribe to even more cable/satellite channels with the money saved by not having to pay a television licence fee.

Among other homes, the impact may be either positive or negative. A subscription-funded BBC service might benefit cable and satellite channels because:

- some viewers may decide to subscribe to cable or satellite channels *instead* of paying for BBC television;⁵⁰
- from the consumers' point of view, if subscribing to cable television represents a cost effective way of receiving the BBC (since no decoder is required), cable penetration may increase.

On the other hand, the introduction of a subscription-funded BBC might represent a serious setback to cable and satellite channels:

- if consumers view the licence fee as a lump-sum tax (rather than a payment for television), they may react to its removal in the same way as they would to, say, a reduction in income tax, i.e., an increase in general consumption, rather than an increase in discretionary expenditure on television. Some households will, as a result, use money previously spent on cable/satellite television to pay for the

⁵⁰ For many viewers, it is not worthwhile to subscribe to cable/satellite channels when both BBC and ITV/C4 are available free of charge. However, when faced with a choice *between* BBC and cable/satellite channels as a possible supplement to the free ITV/C4 service, we would expect some of these viewers to choose cable/satellite channels rather than the BBC. This is because the relative price of cable/satellite channels *vis-à-vis* the BBC has decreased.

BBC, thereby reducing the take-up of cable/satellite channels.⁵¹

The impact on video software markets is even more difficult to predict. In addition to the direct impact of a subscription-financed BBC (consumers may rent/buy videos instead of paying for the BBC, or they may rent/buy fewer videos since they have less money left over to spend on home entertainment), any change in the take-up of premium film channels would almost certainly have a further impact on video software markets.

Other BBC Subscription Options

As an alternative to financing BBC1 and BBC2 by subscription, the BBC could set up new subscription services which, if profitable, might contribute to the costs of operating its main (licence fee-funded) service. The options would include:

- a 'niche market' subscription service — using off-peak hours on BBC1 and BBC2 to broadcast narrowly targeted services to identified groups of viewers;
- new subscription channels — using satellite and/or cable to deliver one or more new channels in addition to the BBC's existing terrestrial service.

For each of these options, we examine briefly the type of programming which might be suitable and discuss, in broad terms, the likely viability of any new service. Clearly there are other possibilities open to the BBC which we have not considered here, for example a limited use of pay-per-view on BBC2 (and perhaps BBC1) for major sports and other events, and further exploitation of sales of pre-recorded video cassettes.

⁵¹ In technical terms, if consumers have separable utility functions, this effect is likely to outweigh the substitution effect of BBC television now being more expensive.

A Niche Market Service

The first option, that of a niche market service, is already under development in the form of the BBC SELECT service. This will use the night hours on BBC1 and BBC2 to deliver a range of subscription services aimed at particular interest groups.

Initially, BBC SELECT will provide some unscrambled services, mainly of a public service nature, together with a range of subscription-financed professional/educational services. The latter will be targeted at groups such as managers, lawyers, farmers, accountants and caterers, while future services might cover such areas as leisure activities, community programmes for minorities, educational services, and perhaps even a larger scale service based on BBC archive material.

This service illustrates the thin dividing line between pay-television and video software. Assuming that, since BBC SELECT will broadcast during the night hours, subscribers will simply record programmes onto video cassettes for watching during the day time, the new service represents an alternative way (and for a sufficiently large audience a cheaper way) of distributing video cassettes to households.⁵²

Although some BBC SELECT services might earn additional revenue from advertising and sponsorship, the BBC's current projections indicate that about 90 per cent of revenue will come from subscription payments. We understand that some high value-added SELECT services could be viable with a subscriber base as low as 1,000, while others may need 25,000 to 50,000 subscribers to break even. However, the new service will need to overcome a number of potential disadvantages, including:

- the high cost of decoding equipment relative to the value that potential consumers might place on each service;

⁵² In this context, we note that several UK cable television channels operate by distributing video cassettes to cable network operators.

- the need to achieve high take-up rates within the small target markets identified for each service.

Such 'narrowcasting' takes place in the much larger US market, but few channels other than sports and ethnic channels have been able to achieve financial security while providing a narrowly targeted service. Although the experience of specialist publishing suggests that there is a potentially large market for niche channels, to date broadcasters have struggled to reproduce the concentrated audience profiles and the high take-up rates achieved by some specialist publishers.

A niche market subscription service has the advantage that it extends choice for particular groups of viewers without diverting significant funds from existing channels. Indeed much of the revenue generated may be new to television. However, there may be relatively few sectors where such a service is likely to be viable — the audience must be sufficiently large that it is cost effective to broadcast rather than simply to send video cassettes by post, but any attempt to widen the target audience, for example by extending the subject range covered, may simply lead to lower take-up rates.⁵³

While the revenues from BBC SELECT are never likely to rival those from the BBC's mainstream broadcasting service, we note that the BBC enjoys an important advantage over potential competitors since it has free access to terrestrial frequencies (i.e., night hours on BBC1 and BBC2). This may enable the new service to achieve quite a high level of profitability before it becomes worthwhile for potential competitors to enter the market.

⁵³ However, we note that a widening of the target audience, even if it depresses the willingness to pay (per viewer), might increase revenues as a result of cross-selling between different services.

New Subscription Channels

An alternative option for the BBC might be to launch one or more pay-television channels in the UK, in addition to its existing terrestrial service. Given the slow growth of UK cable, the use of an Astra transponder would seem the most suitable means of delivering such a channel in the near future.

The BBC's decision as to what type of channel to provide would be affected not only by the likely audience take-up and operating costs, but also a consideration of any comparative advantage it might enjoy over new entrants or other potential competitors. It would also need to take account of the competitive impact of any new channel on its existing terrestrial service.

Although the most successful pay-television channels have been specialist film channels, it is hard to see any comparative advantage for the BBC in the provision of a film channel, except perhaps if there are economies of scope between subscription management/billing and the collection of the licence fee for the BBC's main terrestrial channels. The BBC's reputation and experience is probably more suited to the provision of basic channels, for example a channel (or channels) based on sports, news and other important 'events' may well attract a paying audience and would allow the BBC to exploit its particular strengths and unrivalled reputation as a public broadcaster. In addition, economies of scope with the BBC's existing operations could enable news or sports coverage, for example, to be provided more efficiently than would be possible for a new entrant. Other possibilities might include a 'best of the BBC' channel, a children's channel, or a channel showing arts programmes and documentaries.

Equally, instead of offering a different mix of programmes to that available on free television, a new subscription service might offer a different technical quality. One possibility might be a channel broadcasting in wide screen (16 x 9 inch) format, while a more ambitious scheme would be a subscription channel broadcasting in high definition television (HDTV). Clearly, an HDTV channel would not be feasible for several years, and the Japanese experience of HDTV

broadcasting is not encouraging, but consumer resistance to paying for television (even if the channel simply shows the same programmes as BBC1) might be reduced by offering a service which is seen to be technically superior to free television channels.

One extension of this option would be to enter into joint ventures with other broadcasters to provide a pay-television service. Co-operation with other European broadcasters might open up new programme sources and expand the potential market for the new channel(s), while co-operation with existing satellite broadcasters might provide access to marketing expertise and help to solve any technical or administrative problems.

Certainly, the projections set out in Section II suggest that the UK market will be able to support more pay-television channels than are provided at present, and any new channels may be able to supplement their subscription income with advertising revenue. However, the following factors suggest that, even so, there may be limited demand for the types of channels described above:

- evidence indicates (see Section I) that viewers are not prepared to pay large amounts for basic channels;
- competition already exists in many of these areas (e.g., Sky News, Sky Sports, Screensport, Eurosport, The Children's Channel, The Comedy Channel);
- the costs of decoding equipment, especially if incompatible with decoders currently used by BSkyB, could be a significant disincentive to potential viewers.

If the BBC is to minimize the impact of these problems, it may need to act quickly (before the competition becomes firmly established) or to form partnerships with existing operators. An alternative strategy would be to act mainly as a programme producer and supplier, rather than a channel operator.

More generally, there may be tensions between the BBC's role as a major terrestrial broadcaster and its behaviour in more competitive markets. In addition to the competitive

impact of its new services on BBC1 and BBC2, the BBC would need to be careful to avoid accusations of:

- anti-competitive practices — for example, if the BBC were to advertise its satellite channels on BBC1, or if it were to insist on being granted satellite broadcasting rights as a condition of sports and other events being shown on BBC1, it is likely that other satellite broadcasters would complain to either UK or EC competition authorities;
- favouring its satellite channels — any perceived deterioration in the output of BBC1 and BBC2 might be blamed on the BBC favouring its satellite channels, for example by reserving some of its best programmes for first-run satellite rather than terrestrial transmission.

Conclusions

It is extremely difficult to predict how much revenue BBC1 and BBC2 might earn as a subscription-financed service. The evidence of pay-television services in other markets, most of which are small scale specialist channels, is difficult to apply in the case of a major terrestrial broadcaster such as the BBC. Although several surveys have addressed the specific question of viewers' willingness to pay for the BBC, it might be dangerous to suppose that viewers' behaviour in 1997, by which time many of them will be paying for a wide range of cable and satellite channels, will bear much relation to their response to hypothetical questions asked in 1990.

Even if the BBC were to achieve an increase in its total income by switching to subscription finance, it would incur three significant costs in doing so:

- a subscription-financed BBC would face far greater *uncertainty* over future income levels than it does at present;
- there would be substantial costs associated with *subscription management* and the installation of *receiving equipment* in subscribing households;

- there would be a *loss of universality*, as some viewers would inevitably choose not to receive the BBC service.

Additionally, the programme services offered by a successful subscription-financed BBC would almost inevitably be significantly different from those currently financed by the licence fee. There may be other ways for the BBC to exploit the market growth projected in Section II. At present, it plans to launch a range of niche market services, broadcast during the night hours on BBC1 and BBC2. Although some of these services might well prove profitable, there may be only a small number of groups willing to pay a sufficient amount to make their own specialized service viable.

Perhaps the most promising way for the BBC to enter the pay-television market would be to launch one or more new subscription channels, broadcasting by satellite to DTH and cable homes in the UK and perhaps the rest of Europe. The main disadvantage of this option is that the BBC would be competing in a market with relatively free entry and limited profit opportunities. A careful evaluation would be required of the BBC's comparative advantages as a satellite broadcaster and the likely demand for any new service, and the BBC would also need to ensure that any such venture did not conflict with its role as a major terrestrial broadcaster with a public service remit.

APPENDIX

MODELLING TOTAL WILLINGNESS TO PAY

NERA's model projects UK viewers' willingness to pay for extra television (i.e., pay-television and video software) to the year 2000. Although the primary function of the model is to predict the total market size, we also estimate the division of potential revenue between channel providers, cable operators, dish retailers, video retailers and VAT payments.

1. *Total Market Size*

The total market size is derived from projections of the number of UK households with pay-television and/or VCRs, and the willingness to pay of each of these households. Thus:

$$\begin{aligned} & \text{Total willingness to pay for pay-TV/video software} \\ & = \\ & \quad \text{No. of households with pay-TV/VCR} \\ & \quad \times \\ & \quad \text{Willingness to pay per household for pay-TV/video software} \end{aligned}$$

For expenditure on pay-television, we distinguish between willingness to pay for basic channels/hardware and for premium channels, so total willingness to pay is the sum of potential expenditure on three components: basic channels/hardware; premium channels; and video software.

In order to calculate the number of homes with pay-television and/or VCRs, the model requires assumptions on the proportion of television households with pay-television/VCR and the total number of television households:

$$\begin{aligned} & \text{No. of pay-TV/VCR households} \\ & = \\ & \quad \text{No. of TV households} \\ & \quad \times \\ & \quad \% \text{ of TV households with pay-TV/VCR} \\ & \quad \text{(i.e., the penetration rate)} \end{aligned}$$

In practice, we used separate assumptions for cable and satellite penetration, and also for the proportion of cable or satellite households taking premium channels.⁵⁴ This gave the numbers of: basic cable homes; premium cable homes; basic satellite homes; premium satellite homes; and VCR homes.

For each of these categories, we estimated current expenditure on pay-television/video software *per household*, then applied an annual growth assumption:

$$\begin{aligned} \text{Willingness to pay for pay-TV/video software per household}_t & \\ = & \\ \text{Willingness to pay per household}_{t-1} & \\ \times & \\ (1 + \% \text{ change in w.t.p./household}_t) & \end{aligned}$$

In each case, the annual growth assumptions was itself derived from assumptions on:

- the (real) growth of total consumers' expenditure per household;
- changes in the *proportion* of total expenditure devoted to pay-television or video software.

2. Distribution of Total Revenues

Having projected total willingness to pay, we first deducted VAT (assumed to be 17.5 per cent throughout the period) from this total, then divided the post-tax revenue as follows:

- *willingness to pay for basic channels/hardware* — for cable homes, the model requires an assumption on the proportion of basic cable subscriptions retained each year by cable operators, with the remainder being passed on to basic channel providers. For satellite homes, we assumed that

⁵⁴ In the model, it is also possible to distinguish between VCR households which subscribe to premium cable/satellite channels and other VCR households. However, this was not used since we found no difference in the average expenditure on video software between these two groups.

basic channels are available free of charge, so all willingness to pay for basic channels/hardware accrues to dish retailers;

- *willingness to pay for premium channels* — for cable homes, the model requires a further assumption on the proportion of premium channel subscriptions retained by cable operators; again the remainder is passed on to premium channel providers. For satellite homes, premium channel providers receive the total willingness to pay, except for a percentage deducted to cover subscription management costs;
- *willingness to pay for video software* — all accrues (in the first instance) to video retailers.

Part II

The Public Funding of Broadcasting

The Public Funding of Broadcasting

*Andrew Graham & Gavyn Davies*¹

I INTRODUCTION

The structure of this chapter necessarily follows a different course from the others in this volume. The primary task is not, for example, to forecast how much revenue the licence fee might raise but to address three inter-related policy issues. These are:

- 1 Should public funds be made available for broadcasting?
- 2 If public funds are justified, how should they be *spent*? Should they support an institution such as the BBC or go instead to particular programmes (or programme-makers)?
- 3 If public funds are justified, how should the funds be *raised*? In particular is the licence fee the best that is available and, if so, how should it be updated?

¹ We would like to acknowledge the extent to which this chapter draws on earlier work (Graham and Davies, 1990; Graham and Mulhall, 1991) and, in so doing, to thank particularly Stephen Mulhall – the section on citizenship, culture and community has benefited greatly from his contribution. Thanks are also due to Stephanie Flanders, Peggotty Graham, Patricia Hodgson, Mark Oliver, Joseph Raz and Adam Swift who have all contributed to our thinking. As usual the errors and omissions that remain are all our own work.

Only after these questions have been addressed does it make sense to discuss the possible size of public funding.

The answers to the questions above cannot be found simply by looking at what the BBC has done in the past. Even if broadcasting has been organized in the past on the right lines in the UK, there are three reasons why this is, at best, a weak guide to the 1990s. First, technical changes, such as the growth of broadcasting from satellites and cable television, are eroding the dominant position of the BBC. Second, technical change is also making it possible to charge consumers for individual transmissions so that a larger commercial, or free market, sector is now much more feasible.

Third, the increasing integration of the UK into the European economy, both in general and within the broadcasting market itself, must call for a re-assessment of the role of any primarily 'national' broadcaster such as the BBC.

This chapter therefore proceeds as follows. First, in Section II it asks whether a free market would provide the broadcasting that is required. Four reasons are provided why this would not occur. However, this is not sufficient to establish that broadcasting should be publicly funded. It would still be possible, at least in principle, to regulate the market through a variety of rules. In Section III, therefore, 'rules-based' interventions are compared with public funding as a form of intervention, and it is shown that in the particular case of broadcasting some 'rules-based' intervention would be necessary but not sufficient. Direct public funding is therefore required.

Having established the case for public funding, the chapter considers (in Sections IV and V) the ways in which this funding should be used and the ways in which revenue might be raised. Finally, after reviewing in Section VI what has happened to public funding in the past, the empirical consequences over the next decade of a range of alternative regimes for public funding are set out in Section VII. Section VIII summarizes the arguments and concludes.

One other introductory remark may be helpful. Less space is devoted than might be expected to the merits or otherwise of funding public broadcasting by advertising. There are two reasons for this. First, the case for using advertising as the main source of revenue has been examined exhaustively in numerous government inquiries, yet they have all rejected this either as a substitute for public broadcasting or as a source of funds for public broadcasting. Second, the most recent inquiry by the Peacock Committee (1986) regarded advertising as suffering from far more disadvantages than pay-TV. It therefore seems more relevant to ask whether commercial television via pay-TV will deliver the broadcasting required rather than to examine a system widely acknowledged to be worse than this. Nevertheless, since broadcasting funded through advertising is widespread and likely to remain so until the next century, and since it is not identical to pay-TV, the main arguments about its effects on the commercial sector are considered briefly in Section II.5 below, and its possible role as a source of finance for the public sector is covered in Section V.1.

Finally, it is worth emphasizing at the outset that, for the most part, this chapter concentrates on the long run, that is on analysing the fundamental issue of what the role of public service broadcasting might be on a time scale which would allow the full development of a market in broadcasting. However, the broadcasting market is currently in a state of transition and three aspects of this transition are of special importance. First, the transition will take some time. Even on the assumption of a rapid growth of cable and subscription services, by the year 2000 it is likely that only about half of all viewers will have access to pay-TV (see Chapter 5). It follows that the existing terrestrial broadcasters and the policy adopted towards these will remain important for many years to come. Second, it will be *during* the transition that the fundamental policy decisions will be needed. Third, one decision in particular, namely the decision to run down public service broadcasting either quickly or gradually, might well prove to be either irreversible or only reversible at prohibitive

cost. It is for this reason more than any other that it is essential to form a clear view now of what is desirable in the longer term.

II CAN BROADCASTING BE LEFT TO THE MARKET?

Much recent argument has focused on the extent to which new technology affecting both transmission and reception is making a purely market-based organization of broadcasting far more possible. In the case of transmission there is, or soon will be, no longer 'spectrum scarcity' and thus no need for a monopoly to exist. The range of broadcasting frequencies that is becoming available means that competition could, at least in principle, exist amongst a spread of private broadcasters. Similarly in the case of reception the new technology makes it possible in principle to charge each consumer for each broadcast. Programmes could now, if required, be transmitted for reception on normal, non-satellite aerials, but with the signal jumbled up and the consumer's receiving device could be fitted with a device which would both unscramble the signal and keep a record so that the consumer could be charged for each signal received.

The fact that a market-based solution is technically *feasible* does not, however, make it necessarily *desirable*. In the case of broadcasting it will be shown that there are four areas in which the market, left to itself, would not produce what is desired. First, economic analysis suggests good grounds for thinking that while the market will undoubtedly produce some excellent programmes, it will, overall and taken over the longer term, provide lower quality broadcasting than consumers either individually or collectively would desire. Second, the market, being by definition the mere aggregation of individual decisions, takes no account of the community and of the complex relations between citizenship, culture and community -- all of these being areas where the form that broadcasting takes is of great concern. Third, it can be argued that broadcasting has a special role to play in a democratic society -- a role which cannot be left just to the

market. Fourth, there is the particular context of the UK which has bequeathed us the BBC, widely regarded as the best public service broadcaster in the world. This has not been a market outcome and is not one which the market could now reproduce. Each of these arguments is developed below. It should, however, be noted that no attempt will be made to assess how much importance should be assigned to the different arguments as this is a matter on which reasonable people may reasonably differ either in the light of their own value judgements or in their assessment of the relevant evidence.

II.1 The Quality of Television: Market Failure and Individual Enrichment

The main reason that even a so-called 'perfect' market is unlikely to produce high quality television is that the broadcasting market would be characterized by what economists call 'market failures'. These can be divided into those concerning consumption, those concerning production and those arising from the interaction between consumption and production. The third of these will be shown to be potentially the most important.

Market Failure in Consumption

There are three main causes of possible market failure in the consumption of broadcasting. First, there are 'externalities'. These are the effects of one person's purchase on someone else, but which the market ignores. The effects may be either harmful as in the case of traffic congestion arising from private car use or beneficial as in the case of vaccinations — everyone benefits from the fact that *other* people are vaccinated. The existence of externalities means that left to itself the market produces too many car journeys and too few vaccinations (which is one reason why petrol is taxed particularly heavily and why there are public health programmes for vaccinations).

The 'externalities' of broadcasting are less immediately obvious, but may be even more important. They exist once we suppose (as both common sense and much research suggests) that television has some influence upon the lifestyles, habits, interests, etc., of those who watch it and, as is self-evident, that we are all embedded in social relations and thus that our habits, tastes, interests and sympathies have implications for those around us.

Admittedly the social effects of broadcasting have been a matter of much controversy and it has proved extremely hard to establish totally conclusive evidence of their existence and still more difficult to quantify them. Nevertheless, even just the *belief* that television affects behaviour is sufficient for externalities to exist. An elderly person may become more fearful of walking down the street at night if he or she believes that the portrayal of large amounts of irrational violence on TV encourages such behaviour, irrespective of whether in fact it does or not — the possible falseness of the belief does not alter the genuineness of the fear. In other words the television that is broadcast ought to reflect the preferences not only of those who watch it but also those affected by it indirectly — yet the market cannot do this. It follows that, if left just to the market, more 'bad' TV (bad in the sense of being judged to have harmful side effects) and less 'good' TV will be purchased than consumers in aggregate would have wished if they could have acted collectively.

Of course it is well known that it is extremely difficult to take the indirect effects of consumption into account. However, the point is that, whereas the market is bound to ignore them, a public service broadcaster is, at least in principle, intended to be responsive to the concerns of the public at large. And, while it is hard to quantify such concerns, this is not sufficient reason to ignore them altogether — especially not in the case of broadcasting which occupies such a prominent place in most people's experience.

Second, the market does not work well where what is being sold is information or experience.² People do not know what they are 'buying' until they have experienced it, yet once they have experienced it they no longer need to buy it! Of course it can be argued that in such information-based markets consumers are often willing to experiment by paying for the right to access a bundle of information with the chance that some might prove useful. But this argument does not remove the problem. If the right long run choices are to be made, the cost of the initial experiments should only be the marginal cost of disseminating the information, and in the case of broadcasting this is zero.³

Third, and most important, in the particular case of broadcasting, consumers may be unavoidably myopic about their own long term interests. Some, such as the Peacock Committee, have discounted this and the preceding argument in relation to broadcasting on the grounds that television unlike, say, a pension policy, is purchased every day, so any mistakes that a consumer may make can be quickly corrected. That much is true, but what is at issue here is both more subtle and more important. Consumers cannot be other than ill informed about effects that broadcasting may have on them, *including effects on their preferences about television itself*. Moreover, such effects may well be spread out over a period of years after the present reception of broadcasting.

The point being made here is not that television may have great power for good or evil over society as a whole, but that television has the capacity either to cramp or to enrich the knowledge, experience and imagination of individuals.

² The seminal article was Arrow (1962).

³ It should be noted that the usual economic argument for charging for something (whether this is a 'price' or a 'subscription') does *not* apply to broadcasting because there is no question of anything being *scarce*. Broadcasts are a public good because one person's consumption does not compete with another person's consumption. It would therefore be perverse to insist that broadcasts become 'narrowcasts'.

Television fictions, Tim Mepham has said, 'can expand the viewer's sense of what is possible and enhance his or her vocabularies and repertoires of words, gestures and initiatives ... *only if they are of high quality*' (emphasis added).⁴ In other words, if all television is elicited by the market, there is a very real danger that consumers will under-invest in the *development* of their *own* tastes, their *own* experience and their *own* capacity to comprehend. This is not because consumers are stupid but because it is only in retrospect that the benefits of such investment become apparent.⁵

Market Failure in Production

Market failure can also arise in the production of broadcasting. Two potential problems exist. First, there is the danger that, if the industry were to be fully privatized, the outcome would not be a competitive one, but be dominated by a few large broadcasters (with the consequent exploitation of consumers via monopoly pricing). Both economic analysis (given the likely costs of entry) and the evidence from other countries (e.g., the dominance of Berlusconi in Italy) point in this direction. It has been said that, 'There are economic and business advantages to being a multimedia enterprise. A characteristic of many cultural commodities, like television programmes, is that they can be repackaged into different forms' and 'the global entertainment, information and cultural industries are

⁴ Mepham (1989), p.67.

⁵ It should be noted that throughout this chapter we distinguish 'quality', which, by definition, cannot be measured, from 'standards', which might be measurable. A good discussion of the different meanings of quality and how they should be applied in very different contexts can be found in Pfeffer and Coote (1991).

becoming dominated by a small number of large firms. The costs of entry to the broadcasting market are substantial.⁶

Second, and in the long run more important, there is the question of whether a purely private broadcasting industry would carry out the necessary research and development. What is required is investment in technology, in people and in good programmes. All three of these are needed if UK television and radio are to continue to merit their reputation.

The need for sufficient investment and especially for high levels of training in a high-tech industry like broadcasting is easy to state, but hard to achieve — particularly within a private market. If the broadcasting industry consisted of a large number of small firms they will have neither the profits needed nor the incentive to carry out R & D (because of the fear that any breakthroughs they make will be rapidly captured by their competitors). Conversely, if, as seems far more likely, the industry is relatively concentrated, the results of R & D will be insufficiently disseminated.

Furthermore, in the particular case of the UK, there is a considerable body of evidence that over a long period many UK industries have failed in four related areas. They have taken too 'short' a view;⁷ they have not innovated sufficiently;⁸ they have given insufficient attention to quality;⁹ and they have failed to invest sufficiently in training.¹⁰ The explanation of these failings is complex, but one factor pinpointed in recent research is the structure of the UK financial markets which places a premium on corporate control, so that UK firms are forced to pay higher dividends

⁶ Locksley (1989), p.16.

⁷ Department of Trade and Industry (1990).

⁸ See NEDC (1983), Mowery (1986), and Cox and Kreigbaum (1989).

⁹ See Greenhalgh (1989).

¹⁰ See Finegold and Soskice (1988).

than their competitors abroad in order to resist the threat of takeover.¹¹ Broadcasting companies tradeable on the stock exchange would be subject to precisely these pressures.

Indeed these pressures have already begun. At the start of the 1980s the ITV companies had a narrow and, typically, privately controlled share ownership. But, since the Broadcasting Act of 1981, their share ownership has been widened and they are now traded on the stock exchange. The result has been a much sharper conflict than in the past between, on the one hand, the quasi-public service obligations placed on them by the IBA and, on the other hand, the need to generate cash flow and to increase dividends.

Sustaining good quality broadcasting therefore faces a number of sharply conflicting concerns which it is difficult to meet simultaneously within a purely commercial structure. The economies of scale and scope which characterize much of the industry produce strong pressures towards concentration. Such concentration is desirable to the extent that it produces the profits to finance investment, and because it allows firms to capture some of the benefits of their own investment. In a democratic society undue concentration of media ownership is, however, highly undesirable. There therefore have to be cross-ownership rules to restrict it. Yet, if the threat of takeover is *permanently*, or near permanently, removed, and no other competitive pressure is put in its place, then there is nothing to keep the big commercial broadcasters on their toes.

In the past these conflicting considerations have been reconciled, at least to some extent, by the existence of the BBC. Being large, it has been able to carry out much of the R & D and, being driven by non-commercial considerations, it has been willing to see the results of the R & D disseminated to the commercial sector. Not that the situation was perfect. The 'comfortable duopoly' of the BBC and ITV was almost certainly too comfortable in some respects. In the past the BBC has spent heavily on engineering technology, but

¹¹ See Mayer and Alexander (1990).

not always to good effect (some of the major breakthroughs came from the commercial sector). There may also have been an element of keeping production standards artificially high to make entry by competitors more difficult.¹²

Nevertheless, there is little doubt that, on balance, the system has worked rather well. In particular the BBC has been willing and able to take risks with programmes which purely commercial producers would probably have avoided and, in so doing, has helped the commercial sector to expand its range of programmes.¹³ *Black Adder*, for example, was not popular on its first showing and few people would have predicted the extensive appeal of the *Antiques Road Show*. Moreover, the influence of the BBC has been especially beneficial in training where it has acted as a 'talent conveyor belt', attracting many of the best staff early in their careers, training them well and then allowing the benefits of this training to spread throughout the broadcasting industry. In other words the 'externality' problem in this area has been largely solved. Thus, even if the past system has been too uncompetitive in some respects, any move to a totally commercial system could well lead to market failures that would be more significant in the longer run.

Market Failure: The Interaction of Consumption and Production

The possibility of market failure is yet more worrying when the interaction of the production with consumption is considered. It has been suggested above that in a pure market system consumers will, taken overall, buy less good programmes than is collectively desirable and that individual consumers may under-invest in their own long term

¹² For further discussion of the 'comfortable duopoly' see Peacock (1986), chapter 4.

¹³ Katz and Ordovery (1990) show how a purely private market will under-invest in innovation that has complementary effects on competitors.

development because the beneficial effects are only recognized in retrospect. It has also been argued that private sector broadcasters are likely to take too short a view, under-investing in training and in the production of good programmes.

Given these undesirable effects it is easy to imagine further adverse feedback effects. If consumers do not buy a sufficient range of good programmes, broadcasters do not have the incentive to invest in producing such programmes. Conversely, if broadcasters are not providing certain good programmes, even well-informed and far-sighted consumers cannot buy them. To this may be added the possible external effects from one broadcaster to another via the consumer: each broadcaster may well consider his own (good) programme not commercially worthwhile unless other broadcasters are also transmitting good programmes that are gradually extending consumers' tastes.¹⁴

These theoretical concerns find support in practice both from experience abroad and from the history of broadcasting in the UK. Admittedly, there is no *direct* evidence on exactly how a fully commercial system based largely on pay-TV would operate as no country has such a system. Even those with large commercial sectors gain by far the greatest part of their revenue from advertising. Nevertheless, the inferences that can be drawn are not encouraging. Other countries with a low element of public service broadcasting typically display poor quality, concentration of ownership plus frequent battles over ownership, flouting of regulators' rules and more or less subtle forms of government interference.

In France, for example, Canal Plus was launched in November 1984 as a subscription channel, but only six months later it was in financial trouble and so was allowed to accept advertising, and 'Its major shareholder is the state-owned advertising company Havas, whose chairman ... has been a

¹⁴ See Katz and Ordovery (1990).

close friend and associate of François Mitterrand since 1950.¹⁵ Although Canal Plus later became profitable, La Cinq, launched in 1986, filed for bankruptcy on New Year's Eve 1992 — and this in spite of offering quality news at one end and late night soft porn at the other, plus financial support from Silvio Berlusconi. Moreover, with four new channels opened since 1984 it was found that 'Between 1983 and 1988 the number of game shows screened jumped from four or five to fifteen or sixteen a week, ... the amount of light entertainment doubled [and] the number of feature films quadrupled.'¹⁶ The *Financial Times* recently described the effects of deregulation on French television as having heralded 'an anarchic scenario of dozens of different channels pumping out soft porn and pulp programming punctuated by virtually unrestricted advertising.'¹⁷

Experience in Italy might offer some similar warnings. On the face of it there is intense competition with some 30 local channels, but, in practice, they are virtually all controlled by Fininvest, owned by Silvio Berlusconi, and the Fininvest channels have been much criticized for their downmarket programming (consisting of some 90 per cent of entertainment and with over 50 per cent of total programming imported from the USA). Moreover there are extensive links between Berlusconi and the Italian government.

Of course this evidence of the market producing low quality television is not conclusive. The commercial broadcasting market in Europe has only begun to develop in the last few years and it can be argued that commercial television is most likely to go downmarket when the revenue base is small. Certainly it will be a decade or more before it is clear how many channels of what type can be supported. Nevertheless, even then, each language market will suffer from the problem

¹⁵ Forbes (1989), p.29.

¹⁶ Forbes (1989), p.33.

¹⁷ *Financial Times*, 27 December 1991.

of being relatively small and there must at least be a question about what happens to consumer tastes during the transition to a more fully developed market.

The case of the USA which already has extensive commercial television and a vast market is more interesting. Here there is a wide choice of channels, a lively news coverage and some outstanding programmes. However, the USA is not noted for the overall quality of its television, nor especially for the range and quality at the more demanding end. Moreover, even with such a large market, it has only recently begun to develop its own significant original productions for cable channels, such as Discovery or Arts and Entertainment, offering more serious programming. It is also notable that it has a particularly small share of public service broadcasting, achieving only about 3 per cent of the audience and these public channels have had to rely heavily in the past on importing programmes made abroad (especially from the UK).

UK experience, in contrast, with a strong public service presence and ethos is widely acknowledged to have much good quality broadcasting and to have raised the quality over time. In his study of broadcasting in the 1980s Tim Madge refers to the extent to which the television programme-makers have enhanced the sophistication of their audiences so that 'programmes are made which simply could not have been "read" correctly a few years ago.'¹⁸

Of course the current high quality of British television is partly the result of extremely good ITV programmes (the three programmes most commonly quoted as examples of high quality *Brideshead Revisited*, *The Jewel in the Crown* and *The South Bank Show* — were all broadcast on ITV). However, the context is crucial. As 'ITV executives admit, without the BBC as a constant reminder — and threat to their audiences — the best ITV programmes would be rarely made. Producers in commercial television unashamedly use the BBC

¹⁸ Madge (1989), p.59.

to argue their case for the equivalent of public service programming.’¹⁹

II.2 Citizenship, Culture and Community

The argument, so far, has been that there is a case for public service broadcasting so as to make good the deficiencies of the market in providing what well-informed *consumers*, acting either individually or in aggregate, would wish to buy over the longer term. A quite separate argument arises from the fact that there are parts of our lives to which the market is simply not relevant. To be more concrete, we watch television and listen to the radio, not just as consumers, but also as *citizens* — that is as members of a community. It has been said that while we are all individual we are also all individual *somebodies*. In other words our sense of our own identity derives from how we see ourselves in relation to society and from where we ‘locate’ ourselves within it.

The crucial importance of broadcasting in this context is that for the great majority of people it is today their major source of information about the world, beyond that of family, friends and acquaintances. Television provides not only the hard facts, but also the fuzzy categories — the social, ethnic, psychological, etc., concepts within which we must make sense of the world. It also supplies a set of fantasies, emotions and fictional images with which we construct our understanding (or misunderstanding) of all those parts of society beyond our immediate surroundings. It is therefore part not just of how we see ourselves in relation to the community, or communities, within which we are embedded, but also part of how we understand the community — indeed part of where the very idea of community arises and is given meaning.

The general importance of community and of a common culture to the well-being of a society and its citizens is widely

¹⁹ Madge (1989), p.209.

recognized. Stated simply, there is intrinsic value to individuals if they have a sense of community — to be alienated is literally to lose a part of oneself. Culture and community provide a common frame of reference in terms of which to comprehend the history, present and future of one's society and of one's own place within it, and so to make sense of the decisions one has to take both as an individual and as a citizen. Moreover, the texts, practices and traditions which make it up function as sources of aesthetic and moral understanding and empowerment, as well as providing a focus for communal identification.

There is little doubt that in today's society the viewing of television is part of what creates any sense of commonality that we may have. This is true as much of low as of high culture. The latest episode of a soap opera or a recent football match can function as a topic upon which all members of the society can form an opinion or converse with one another regardless of the differences in their lifestyle, social class or status group. Given that any society must embody such socio-cultural differences, the value of a community where people have things in common and can interact on that basis is or should be obvious.

The value of commonality, the value of shared experience, the value of self-identity and the value provided by non-stereotypical portrayal of other cultures are not considerations that do, or could, enter into the transactions of the marketplace — but they are values nonetheless. For all of these reasons there is a case for a public service broadcaster, one of whose objectives would be the provision of those broadcasts which we are entitled to as citizens. Moreover, a genuinely national public service broadcaster could provide the material for such commonality in ways that other broadcasting organizations, with a less extensive and penetrating reach, could not match.

This general point about commonality takes on added importance as well as a different form in the context of a pluralist society, such as Britain in the 1990s. As the processes of technological, economic and social change

increase in rapidity, traditional forms of social unity can break down and new sub-cultures based on partially overlapping but less widely shared and equally deep commitments to certain forms or styles of life (ones based on class, region, religion, race, sexual orientation and so on) can proliferate. In such a context, the risks of socio-cultural fragmentation are high, and so is the value of any medium by means of which that fragmentation could be combated.

An entirely appropriate role for a public service broadcaster in 1990s Britain would therefore be to contribute towards the (re)construction and maintenance of a common national culture that is accommodating enough to accept on equal terms as many as possible of the minority group cultures that go to make up such a pluralist society, and thereby minimize its tendency towards fragmentation.

What would be shared by the members of such a culture would not be a particular form of life, but rather a common knowledge of the forms of life of other citizens, together with a shared acknowledgement of their worth or validity. And it is this latter requirement which specifies the sense in which the various sub-cultures are accepted within (form part of) a common culture on equal terms with one another.

The importance of a public service broadcaster in this process would be that by broadcasting informed and accurate representations of minority cultures, it would help to maintain the culture's shared emphasis upon respect for human life — it would do so by disseminating the knowledge that forms the essential basis for acknowledging those aspects of the minority cultures which make them worthy of respect. Moreover, the extent and penetration of a national broadcaster would be both a requirement and a significant advantage; for in modern society, the key way of ensuring the legitimation of a given sub-culture by conferring a public profile upon it is through television.

One final area under the heading of citizenship and community where a public service broadcaster should be expected to play a special role is in the broadcasting of national events. Here, the idea would be that a public service

broadcaster should be given the responsibility to broadcast events which, going beyond questions of purely sub-culture specific interests, are of genuinely national interest. The events in question would include happenings anywhere in the world that are of significance to virtually anyone (e.g., the moon-landings) or to this country in particular (e.g., the UK athletics team in the Olympic Games), as well as events in the UK that are primarily of importance to its citizens (e.g., royal weddings or a general election). Such a broadcasting service would help to maintain a sense of national identity which transcends more local communal identifications and allows individuals to understand themselves as members of a particular nation. And a public service broadcaster's relative advantage here would derive from its experience and expertise at performing such functions, together with its capacity for genuinely national dissemination.

II.3 Democracy and Empowerment

It is a basic principle of a democratic society that votes should not be bought and sold. This alone is sufficient justification for broadcasting not being entirely commercial. It is, by the same token, the major reason why broadcasting should not be directly under the control of the state. There has to be a source of information which can be trusted to be accurate in its news, documentaries and current affairs programmes and to be impartial between different social and political views. It is a necessary, but not sufficient, condition for this to be possible that some at least of the broadcasters be independent of any political party and of any business interest.

In the 1990s there are good grounds for thinking that the need for a public service broadcaster to exist and to uphold the principles of accuracy and impartiality will be even greater than in the past. Two factors in particular stand out. First, the pluralism that characterizes 1990s Britain, together with the very speed and extent of social change which makes information so vital, have ensured that many traditional networks for the dissemination of information (ranging from

the extended family through the close-knit neighbourhood to stable, apprenticeship-based workplaces) have disappeared or been severely weakened. Second, there will soon be many more purveyors of information — of hard news, soft news, of fact and of faction.

It is not enough, however, for the value of accuracy to be upheld. Accurate information must also be available, and here the point is not so much that social change has eroded traditional networks, but rather that technology has *outpaced* them. The growth of information sources accessible electronically is creating a potential new division between the haves and the have-nots: those with the technology are informed, those without it are not. In this new context the informational role of a public service broadcaster operating universally is more important than ever. As the local public library declines, so the ever present broadcaster must fill the gap — and for zero charge at the margin.

The advantages of the BBC in these circumstances as an important alternative network are manifold. It has national scope and is easily accessible; its tradition of dedicated public service together with its worldwide reputation provide the basis for trust without which much information is just propaganda; and its independence from both government and commercial or marketplace pressures should make it more capable of representing unpopular or otherwise unpalatable truths. These arguments are not, however, absolute ones, but contingent upon the behaviour of the BBC. While the BBC's reputation is mostly deserved, there have been times when it has been justifiably criticized for being too much under the influence of the government. Moreover, a number of supposedly 'public service' broadcasters in other countries have been little more than mouthpieces for the state. It follows that the reputation of the BBC has to continue to be *earned*.

Thus far the arguments under this heading merely reinforce the case for the BBC to exist as a major source of independent, accurate and impartial information. However,

the ideas of accurate information and of impartiality may, in the future, need to be seen in a wider context.

First, the term 'information' should be understood as including much more than is dealt with by news programmes; it also covers the discussions of news and trends that are to be found on radio phone-in shows, chat shows, *That's Life* and so on, as well as the scientific and cultural matters typically dealt with by programmes such as *Horizon*, *Arena*, and the *Late Show*.

Second, central to the idea of the democratic society is that of the well-informed and self-determining individual; but, if individuals are to be genuinely autonomous, it is not sufficient for them merely to receive information (no matter how much and how impartially presented); they must be able to *understand* it. They must be able to make sense of it in ways that relate to their own lives and decisions. Neither facts on the one hand nor opinions on the other (although both are important) are sufficient; for neither are utilizable by those who absorb them unless they are made the subject of reasoned analysis — unless, in other words, they are not merely transmitted but presented (organized, submitted to informed and coherent criticism from as many perspectives as possible) in a way which allows them to be understood and thereby incorporated into the audience's own judgements.

In brief, a fully functioning democracy requires a public service broadcaster and the key principle for a public service broadcaster to follow on this count is that it *empower* those who watch.

It is important to emphasize that this core principle is not restricted in its application to certain types of current affairs or documentary programming (although of course it does apply to them). Drama, soap operas, chat shows, children's programmes and situation comedies could all contribute to the task of empowering as large a body of the citizenry as possible.

A public service broadcaster performing this function would therefore be a central forum (perhaps *the* central forum) within which a society engages in the process of illuminating

and either re-affirming, questioning or extending its already existing values.

II.4 History and Comparative Advantage

One final argument in favour of public service broadcasting remains. The BBC should continue to produce and broadcast in those areas in which it has developed a *comparative advantage*. No amount of abstract theorizing justifies throwing success away. It would be even more foolish to duplicate (or to try to duplicate) in other broadcasting organizations the strengths that the BBC already possesses — the attempt would probably damage both the old and the new.

Many of the areas in which the BBC probably has a comparative advantage have, of course, emerged purely contingently through historical commitments. For example, the BBC has long standing connections with specific events and areas of programming (e.g., the Proms, Wimbledon, coronations, music, sport, nature programmes, news and current affairs). In some of these areas it is likely that through the process of 'learning by doing' the BBC has developed genuine advantages quite irrespective of its particular concerns as a public service broadcaster. Where the BBC has such an advantage, but only where it has such advantage, the accumulated experience, expertise, economies of scale and intimacy with the relevant organizational bodies should be capitalized upon, not ignored nor regarded as optional.

Of course there is a danger that this argument could be misused, being deployed as a defence of everything that the BBC now does, but this is not the intention at all. The point is a simple one. Activities that the market might support should not be stripped away from the BBC just because it is a public broadcaster. Equally, activities that the market might handle better should not be left with the BBC just because they have been with the BBC in the past. The decision should be pragmatic not ideological.

II.5 The Commercial Sector and the Role of Advertising

The great majority of the analysis above has concentrated either on the ways in which pay-TV would fail or on how a public service broadcaster could meet the various requirements of broadcasting in a better way. However, it is also necessary to consider the merits (or otherwise) of advertising, for the simple reason that most commercial terrestrial broadcasting worldwide is funded by advertising, not by pay-TV, and this is likely to remain the case for at least the next decade.

Three main points must be made about advertising. First, it is necessarily less efficient than direct pay-TV as a method of registering consumer preferences. What matters to advertisers is not how *much* anyone appreciates a particular programme but simply how *many* people watch it. There is therefore bound to be a constant pressure to win the 'ratings war'.

Second, the empirical evidence shows clearly that, in systems where advertising predominates and there is only a relatively small element of public service broadcasting, these ratings wars are associated with a narrower range of choice for the consumer. Research carried out for the Peacock Committee shows that in the USA 'the "Big Three" networks (ABC, CBS and NBC) rely heavily in peak time on series, serials and soaps.'²⁰ The study conducted for the Peacock Committee by Leeds University also stated that 'On this option [complete reliance on competitive advertising], the international lessons are full and unambiguous. They warn that competition for advertising on any scale would be quite destructive of programme range and a threat to many facets of programme quality.'²¹ And, as they add later in a comment on the USA, 'The creative community is coopted to [the] goals of delivering maximum audiences via programmes that will not

²⁰ Peacock (1986), p.75.

²¹ Peacock (1986), p.199.

disturb or upset ..., such a television system tends to cater for a much narrower set of satisfactions (chiefly those of passing time, relaxation and escape) than the full range of communications, gratifications, interests and needs to which programming could respond.'²²

Third, there is no reason at all why broadcasting driven by advertising would pay any attention to democratic principles or to the individual as citizen rather than consumer. Of course, the need for popular appeal might, on some occasions, give such a system the *appearance* of universality, especially when compared with pay-TV which would respond to a more diverse and more specialized range of tastes, but, at best, this would be no more than chance. More fundamentally, it would not reflect any real concern with true universality in the sense that the broadcaster wished to play a part in representing all parts of the society accurately and fairly to all other parts of society.

Despite these objections to advertising, two questions remain. First, could advertising be a useful source of funds for a public service broadcaster? This is dealt with in Section V.1 below. Second, could either advertising or pay-TV, when combined with a set of rules and regulations, produce the broadcasting that is required? This is the subject of the next section.

III RULES-BASED INTERVENTION VERSUS PUBLIC SERVICE BROADCASTING

Economists have shown that the existence of market failure generates a *prima facie* case for intervention, but such arguments provide no guidance on the *form* that intervention should take. It follows that, while Section II above has raised severe doubts about relying entirely on commercial broadcasting (whether funded by advertisers or by pay-TV), such doubts do not in themselves prove the case for public

22 Peacock (1986). p.199.

funding nor that for public production of programmes. Why, one has to ask, could the market failures not be dealt with by regulation as occurs, for example, in the case of health and safety legislation? Moreover, this question is particularly pertinent in the UK because the regulation of the commercial sector through the IBA is thought by many to have worked rather well in the past.

The answer is that in some cases regulation *is* appropriate. For example, if the *only* concern were concentration of power, rules on cross-ownership of media outlets might make an important contribution. However, in the particular case of broadcasting, while some rules-based intervention may be necessary, there are three reasons why this is not sufficient, especially not in the new environment of the 1990s.

The first reason is that many of the issues concerning broadcasting are qualitative rather than quantitative in nature. This is self-evidently true of quality itself, but it applies equally to the discussion above of the importance of maintaining a sense of community as well as valuing a democratic society. These broad principles which should guide part of broadcasting could not be incorporated in any *precise* set of rules — indeed it is the impossibility of doing so that differentiates qualitative from quantitative assessments.²³

Of course, it would still be possible for there to be a legislative framework containing these principles and for the *judgements* about the principles to be delegated to a broadcasting authority as was the case with the IBA. However, once rules are discretionary, a new set of issues arises. The regulators, unable to appeal to a firm rule, may give in to pressure from those they are regulating. If so, the

²³ Some of the problems of regulating public utilities where there is an element of quality are discussed in Rovizzi and Thompson (1991). However, they frequently mean not 'quality', but 'standards' and therefore treat quality as quantifiable. Even so, the regulators have found the problem of monitoring industries which have an element of service far more complicated than had been anticipated.

apparent attraction of rules-based intervention is much diminished. Similarly, if producers are required to act in necessarily loosely defined ways against their commercial interests, it may be more efficient to establish a public body with explicitly non-commercial goals than to police a complex and imprecise set of regulations. Moreover, to be more specific, it will be argued below that any solution based on a Broadcasting Council, working in a manner analogous to that of the Arts Council, fails to provide what is required as far as broadcasting is concerned.

Second, the new environment of the 1990s reinforces the case against relying exclusively on rules-based intervention. At the moment the government retains the ability to allocate frequencies and so regulation can be enforced. However, once satellite broadcasting becomes widespread this will no longer be the case. It will therefore become more, rather than less, important to have other ways of ensuring that the consumer has the choice that is required. An additional factor is the new commercial climate. As noted earlier, the ITV companies are now traded on the stock exchange. They are also operating under the new franchise system. Both of these developments have increased the pressure to maximize profits and, frequently, short run profits at that. This is a marked change from the position in the 1960s and 1970s when the system had a degree of slack in it which allowed the private companies to strike a balance between their commercial concerns and the public service obligations placed upon them by the legislation. In short, any purely regulatory system will be operating under far more strain than in the past.

Third, and most important, regulation is, at best, negative — especially when regulating *against* strong commercial forces. While regulation may, therefore, be able to protect standards, for example by preventing the display of excessive violence or sexual material considered offensive, it is much less well suited to promoting quality.

This is of fundamental importance because what broadcasting requires is a *positive* pressure within the system. This is why, corresponding to each area in which the market

would fall down, it has been possible in Section II above to identify a primary *objective* that a public service broadcaster should pursue. *To offset market failure it should aim to enrich individuals; to meet the requirements of citizenship it should provide for the needs of community (or communities); to sustain democracy it should empower those that watch it or listen to it; and, given its history, it should concentrate on those areas in which it has already established a comparative advantage.*

Moreover, none of these objectives is genre specific. Neither enrichment, nor our ideas of community, nor empowerment, nor comparative advantage are restricted to some 'high-brow' ghetto. What will matter most of the time is not *what kinds* of programmes are made, but *how* they are made — hardly the task for a regulator.

To put the same point another way, regulation may be used to require broadcasters to meet a quota for certain kinds of programme (e.g., news in peak times), it may stipulate standards (e.g., about language), it may even enjoin quality as an aim, but it cannot, on its own, ensure that quality actually *occurs* either within individual programmes or across an evening's schedules. There is no way that the regulator, no matter how talented or well intentioned, can have the same direct effect on the creative process as a channel controller with the task of commissioning and scheduling a range of quality programmes and with the people and the funds to do so.

Nevertheless, at the risk of repetition, it should be emphasized that the structure of broadcasting envisaged here would *include* some regulation. Indeed one fundamental point of this section is that, in the particular case of broadcasting, regulation and public production can be and should be complementary to one another.

It is beyond the scope of this chapter to spell out in detail how such complementarity might work, but it could contain the following elements. First, the general law of the land on matters such as incitement to violence, or racial discrimination, or the sexual exploitation of minors, would

apply to all broadcasters. Second, there might be specific legislation on cross-media ownership. Third, if it were thought necessary to tighten control of the BBC's expenditure, there would be a variety of ways in which this could be done (e.g., by occasional references to the Monopolies Commission or by investigation by the National Audit Commission).

It would, however, be important not to establish an excessively elaborate structure of regulation nor to over-do the search for cost cutting. Unless this is avoided an essential part of the complementarity between the BBC and the commercial sector will not work. In the 1990s the commercial sector will be more competitive than in the past. This will put more pressure on the BBC (both directly through competition for audiences and indirectly through making it easier to use cross-industry measures of efficiency). This is desirable and itself reduces the need for other forms of regulation to control the BBC's costs. However, at the same time the BBC has to have sufficient funds, as well as sufficient certainty of future funds, to be able to innovate and take risks in ways that both challenge the commercial sector and stretch the opportunities of that sector.

Many years ago²⁴ it was found that a key feature in the growth of firms was to provide managers with enough spare capacity in their time for them to be able to think and plan. There is a danger, especially in the aftermath of the cost conscious and public expenditure squeezing 1980s, that this insight will be forgotten.

One final point about the role of a public service broadcaster remains to be underlined. Each of the first three grounds for public service broadcasting – the need to promote high quality broadcasting, the need to generate a sense of community and the need for citizens to have and understand the information essential for the functioning of democracy – exist independent of the particular set of choices made *now*.

²⁴ Penrose (1959).

Suppose, purely hypothetically, that everyone today had full information and full autonomy and that they chose a particular (narrow) mix of programmes. This outcome would then have occurred without market failure. Nevertheless, given the potential interdependence between the broadcasting on offer and the preferences of consumers, there would still remain the requirement that the *next* generation of consumers should be presented with a diverse, informative and enriching range of programmes so that *their* right to exercise *their* choice with full information and full autonomy would be ensured. The market, left to itself, would not guarantee this right. Consumers with their taste unexposed to, and underdeveloped by, a richer fare would not and could not demand programmes that did not exist and so producers, for their part, would experience no unfilled demand. There would be no driving force towards better quality.

Similarly, suppose, again hypothetically, that the interaction of today's consumers with the market produced a myriad of channels each with its own format, each differentiated (however marginally) from the others, presenting an endless stream of diverse information and diverse lifestyles without apparent connection. Here again there would remain the case, many would say the imperative need, to present within one universally available channel the idea of a society (or societies) with which future generations of individuals could identify if they so wished. We cannot choose to belong to a society unless a society exists to which we may choose to belong. To deny future generations this would be to deny them a choice, not just between brand A and brand B, but about how they might wish to lead their lives and the kinds of people they might wish to become.

On all three grounds, therefore, a major argument for public service broadcasting today is that it provides an insurance policy for the desires, needs and rights of the generations of tomorrow. Moreover, this is not an insurance policy that any form of rules-based intervention will provide. What is required, especially within the increasingly deregulated environment of the 1990s, is a public service broadcaster,

widening and extending choice, both by its own existence and by its influence on other broadcasters. In other words, public production and public broadcasting is needed for the health of the *whole* system. Thus the BBC, or something very like it, is central, not an optional add-on. In short, such a public service broadcaster is a real public good and the true justification for public funding is not the 'financing of the BBC', but the financing of the quality of the system.

IV WHAT FORM OF PUBLIC SUPPORT – THE BBC OR A BROADCASTING COUNCIL?

Having established the case for public support for broadcasting, the next question to ask is whether this should be organized as at present through the BBC or whether there should be, as the Peacock Committee recommended, a Public Service Broadcasting Council subsidizing 'programmes of merit' from independent producers for broadcasting on commercial channels. Three main considerations led the Peacock Committee to this conclusion. First, their recommendation in favour of a Public Service Broadcasting Council was embedded within a view of broadcasting in which pride of place would be given to consumer sovereignty. This conception made it possible to see the public service element as something that could be added on by financing particular programmes. Second, they attached importance to competition amongst the producers of programmes as a spur to efficiency. And third, they argued that public intervention 'should be of a positive kind and transparent, to help finance additional production, rather than a negative, censorious kind, oblique and undetectable.'²⁵

In contrast, the analysis above of what a public service broadcaster should be doing in the UK in the 1990s leads to the inescapable conclusion that there should be a 'centre of excellence', such as the BBC, which both makes and

²⁵ Peacock (1986), p.128.

broadcasts programmes. It is possible that there could be more than one such centre (as it could be argued there is now with the BBC and Channel 4), but the need for a critical mass suggests that at most there would be two or three such institutions rather than a series of independent producers. Four reasons in particular point in this direction:

- a. The trust and reputation that the BBC already has is an invaluable asset which should not be discarded. Moreover this reputation is attached to the institution as a whole not to individual programmes.
- b. It has been emphasized above that, if the quality of British broadcasting is to be sustained over time, there must be an institution investing in R & D, innovation and training. For this to occur it has to take a long term view, but, for the reasons given earlier, no private producer selling individual 'programmes of merit' would have the security to do this. Of course there need to be independent programme-makers — there is no presumption here that the BBC should produce everything in-house — but they need a regular and reliable outlet. The 'casualization' of production is not conducive to the development of skills. In addition the stability of the institutional framework is essential for the maintenance and extension of standards and practices. Moreover, the 'conveyor belt' of training provided by the BBC provides a culture of quality and a commitment to the ideals of public service broadcasting contained within the BBC that should not be thrown away. It requires an institutional context to sustain it and it benefits the whole of broadcasting.
- c. In the conception of a public service broadcaster put forward here it must be large enough to influence the market. Without this it cannot act as the guarantor of quality. A series of separate small producers sustained by public money would be beside the point and, on their own, would have no influence whatsoever on the broadcasting by the commercial channels.
- d. Only an obviously *national* broadcaster would be able to generate the complex and rich sense of community that

citizens have a right to expect in the pluralistic society of which the UK now consists.

One final point on which there is much misunderstanding should be emphasized. It is clear that the fear of censorship and, in particular, of hidden censorship played a large role in persuading the Peacock Committee of the merits of a Public Service Broadcasting Council. A similar idea reappears in many other criticisms of public service broadcasting and in attacks on the paternalism of the BBC. Such fears and criticisms were understandable in the past when spectrum scarcity prevailed and when, as a result, access to televisual media was, as the critics would have said, exclusively under the control of either state-funded or state-authorized institutions. But this will not be the broadcasting world of the 1990s. Satellite, cable and video mean that private televisual media will expand considerably irrespective of the role played by public broadcasters and so, in this new world, provided only that the costs are met and the general law of the land is respected, no-one will be *denied* making or seeing anything they wish. On the contrary in the 1990s it will be the existence of a public service broadcaster which *widens choice* and which, through its commitment to empowerment, provides the *means to make the choice for oneself*. Thus in the 1990s public service broadcasting would be the very opposite of either censorship or paternalism.

V WHAT FORM OF PUBLIC FINANCE?

Other countries which operate public service broadcasting use a wide variety of types of finance. France, Germany, Italy and New Zealand have licence fees, whereas Australia, Canada and the USA have various forms of government grant. However, Canada supplements the government grant with advertising and the USA (with a very small public service element) relies partially on private donations, while France, Germany and Italy combine licence fee revenue with advertising. Of the major western countries only the UK (relying entirely on the licence fee) and Australia (relying

entirely on grant) have what might be described as 'pure' systems.

The next two questions to be decided are therefore:

- a. Should the funding take the form of a direct grant from Government and thus be part of the annual programme of public expenditure or, as now, be provided through a licence fee or an hypothecated tax? And, in either case, should the public funding provide the whole revenue or should some come from the private sector?
- b. If a special tax were appropriate, what form should it take?

These issues are discussed in turn below. The questions of both the potential yield and the desirable yield are left until Sections VI and VII.

V.1 Direct Grant or Special Tax?

Looking first at the comparison between 'pure' systems, there are four considerations which suggest that public funding should *not* take the form of a direct grant from government and thus be part of the annual programme of public expenditure.

First, there is the need for the institution to be seen to be, and to believe itself to be, at arm's length from the government. This is a prerequisite for its sustaining a reputation for impartiality and for fearless reporting. Its independence from government is just as important as its freedom from immediate commercial pressures. It is notable that Australia (relying just on grant) is a country where the scale of funding has been increased or decreased for political purposes.²⁶ Furthermore, there would be an ever present likelihood that the grant for the BBC would be squeezed in order to create room for extra spending in areas which were particularly pressing politically at the time.

²⁶ See Harding (1985).

Second, it is essential for any broadcaster's ability to maintain and extend quality that it be able to take a medium to long term view of its future plans. It must therefore be able to count on a reasonably predictable and reliable source of income over at least the next three to five years. Direct annual funding would not meet this.

Third, the annual negotiations involved in direct funding not only create uncertainty, but absorb a significant amount of the time of senior managers which could be better devoted to running broadcasting.

Fourth, it is only with secure funding over a run of years that a public service broadcaster will be able to avoid the opposite temptation of starting to boost its income from commercial sources (as the BBC, faced with a squeeze on its public revenue, has recently begun to do with the formation of BBC Enterprises Ltd) and then finding itself, as a result, being faced with a confusion of purpose.

The last of these considerations is highly pertinent to the merits, or otherwise, of 'mixed' public and private systems of finance. An organization such as the BBC can either be asked to maximize its profits or it can be asked to maximise the effectiveness of its public service broadcasting. It *cannot*, however, sensibly be asked to serve two masters, attempting to maximize both simultaneously. Moreover, in the future when the industry will be more deregulated the commercial pressures from the rest of the industry will be higher than in the past (when even ITV has been constrained by law to take account of public service obligations). In the new environment there will therefore be an *increased* need for the BBC to concentrate on its public service role and for it to be neither pulled by commercial considerations nor pushed by short term pressures of a different kind from government. These arguments suggest that it would be as much a mistake to go for 'mixed' public and private finance as to go for a direct government grant.

There is one further reason for being particularly cautious of the mixture which includes advertising. The conclusion of the Peacock Committee was that competition between the BBC

and the private broadcasting companies for the same pool of advertising revenue would inevitably drive the BBC, and indeed the whole broadcasting system, downmarket to an unacceptable degree. One of the great and lasting benefits of the Peacock Report was that it showed the advertising route for BBC finance to be a treacherous cul-de-sac.

The force of this point now seems even stronger than it did in the mid-1980s because the buoyancy of the entire advertising market in the early 1990s looks much more questionable. In a declining or static advertising market, the cut-throat competition among an expanding number of private broadcasters would be likely to be even more devastating for the public service ethos than seemed to be the case when Peacock reached his conclusions — and the earlier analysis indicates that in the 1990s there will be an increased need for precisely this ethos.

The arguments so far lead to the conclusion that a successful public broadcaster, large enough to make a significant contribution to the totality of UK broadcasting output, must be primarily funded from sources which are not either (i) based on charges at the 'point of sale' (because of the ways in which the market fails) nor (ii) advertising-based. Indeed, any form of commercial finance, if it becomes too large, should be viewed with suspicion. So, if the UK is to have a successful public service broadcaster, we simply have to resort eventually to public finance.

V.2 What Form of Special Tax?

Ideally, the form of finance for public service broadcasting should fulfil the following characteristics:

- a. It should be related in some way to receipt of the service, so that consumers make a direct link between the benefits they receive, and the outlays they make. This maximizes the likelihood that the charge will remain politically acceptable.
- b. It should be at a flat rate so that there is a direct link between the level of the service received by everyone, and

the level of the charge made on everyone. (This makes the charge regressive in its distributive effects, but this might be acceptable provided that the charge can be kept fairly low. In any case, it is doubtful whether income distribution should be one of the concerns of the system of broadcasting finance. This is better left to other areas of public finance. In addition there is no good reason for exempting particular categories of consumers from paying the charge.)

- c. There should ideally be some form of income elasticity in receipts from the charge, so that they grow at least in line with nominal GDP (i.e., the growth in the receipts should cover both economy-wide inflation, and should contain an element of real growth for the increased provision of services in an expanding economy).
- d. As noted above, the setting of the charge should be subject to minimum interference from the government of the day.
- e. The charge should be relatively easy to collect, enforce and administer.

Although the licence fee has been widely criticized in the past, and although it no longer fulfils the third of the above requirements now that the move from black and white to colour television is reaching its natural limitations, it is doubtful whether there is a form of public finance which is likely to prove generally superior — though a number of alternatives that have been suggested are discussed in Part VII below. If the licence fee continues, therefore, to be the best form of public funding available, and, if the licence fee has to be set at a level that gives a public service broadcaster a significant influence on the broadcasting market, it is necessary to look at what has been happening to this source of revenue in the recent past and at how it might grow (or decline) on a variety of assumptions about the future. To this we now turn.

VI THE HISTORY OF THE LICENCE FEE

The BBC licence fee is something of an anomaly in the history of British public finance. Very few of Britain's public services have in the past been financed by fixed rate levies. Most have been financed either from general taxation (like the National Health Service) or from charges on the end user (like public transport), with the latter often being topped up by subsidies coming from general taxation. However, the licence fee is not entirely unique – until privatization, domestic water charges were levied at a fixed rate for all houses attached to the mains water supply. The licence fee operates on the same principle – all homes equipped with at least one colour television are expected to make a flat rate contribution to the cost of providing the BBC's services.

Whatever the arguments about the merits of the licence fee, there is no questioning its longevity. It was first introduced for radio in 1922, and it has formed the basis for the financing of the BBC ever since. Many times, governments have seriously considered replacing it, but they have always been driven back to the status quo. Even in the changing circumstances of the 1990s there are good reasons why the same may happen again. Apart from the manifest problems with all the suggested alternatives to the licence fee, politicians of all parties have been influenced by the fact that, unlike almost all other taxes, it is not particularly unpopular with the electorate. Most voters seem able to connect the payment of the licence fee directly to the receipt of the BBC's services, and there is a clear perception that they are getting value for money.²⁷

The amount of revenue received from the licence fee is determined by the following factors:

- a. The number of households in the UK.

²⁷ Strong evidence in favour of this can be found in Ehrenberg and Mills (1990).

- b. The proportion of those households which owns a colour television, and (to a much lesser extent) the number which owns a monochrome set.
- c. The extent of evasion of the licence fee.
- d. The costs of collection.

In the past ten years, although the government has generally attempted to keep the BBC on a tight financial rein (especially since the middle of the decade), the buoyancy of revenue from the licence fee has been increased by growth in the number of households, and more particularly by the penetration of colour TV sets. The number of households has risen by 10.2 per cent from 20.5 million in 1980 to 22.6 million in 1990, while the penetration of colour TVs has risen over the same period from 72 per cent of all households to 92 per cent. Alongside this the number of monochrome licences has been falling sharply. As a result of these factors, the number of licence payers has risen by 7 per cent, and this has been the main factor explaining the growth of licence revenue in real terms. Neither the extent of evasion, nor the costs of collection, have changed very much. In fact, the licence fee remains an efficient and cheap-to-collect form of taxation. Licence fee collection, inclusive of anti-evasion measures, costs only about £3 per household. This is much less than water rates, vehicle licences or gas, electricity and telephone charges. Moreover, evasion of the licence fee is only about 6–8 per cent.²⁸ These licence fee collection costs would also be far less than the cost of pay-TV (the annualized cost of the decoding equipment has been estimated at £15–30 per year).²⁹ Further savings (of perhaps as much as 20 per cent of the total cost) on licence fee collection are also in prospect now that the BBC has taken over responsibility from the Post Office; clearly a sensible move as the BBC, unlike the Post

²⁸ See Ehrenberg and Mills (1990).

²⁹ Ehrenberg and Mills (1990).

Office, has an obvious incentive to obtain as much licence fee revenue at as low a cost as possible.

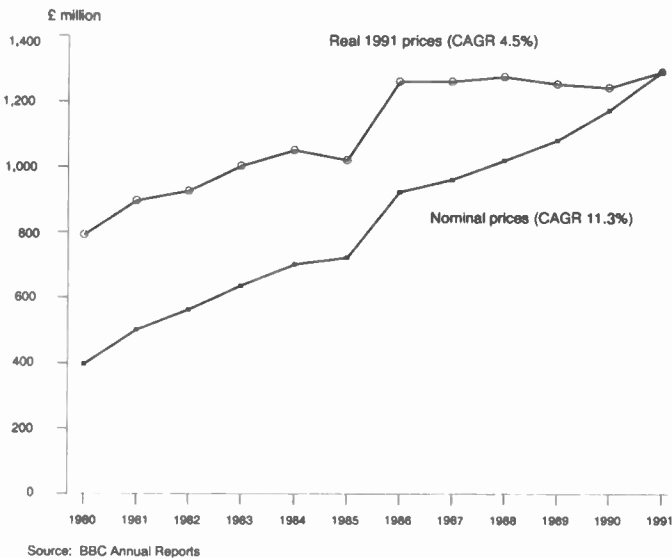


Figure 6.1 BBC Licence Income, Real and Nominal 1980–1991

As can be seen in Figure 6.1, which shows licence fee income in real and nominal terms since 1980, the effect of the factors mentioned above has been that licence fee revenue grew quite rapidly both in real and nominal terms up to 1986, but has risen hardly at all since then. This slow down after 1986 was the conjunction of two effects. Until the mid-1980s the number of households with colour televisions was growing rapidly (the proportion almost doubled from 1975 to 1985), but by 1985, when the proportion had reached 86 per cent, this natural buoyancy was coming to an end. Then, from 1986 onwards, the government pegged the increase in the licence fee to the Retail Price Index (the RPI).

As a consequence over the period as a whole licence fee receipts, deflated by the RPI, have risen by 4.5 per cent per annum and this has enabled the BBC substantially to increase its provision of real services. But this overall picture covers

two regimes: the first when the rapid growth in real revenues may have made life for the BBC too easy, the second when it will certainly have become more difficult.

However, while there was undoubtedly a change in the mid-1980s, it is necessary to look a little closer before deciding what has really happened. This is because, as will be seen in the next section, there is little logic in using the RPI as the relevant deflator when assessing the growth of licence receipts in real terms. The reason is that the BBC's costs, over the medium term, are likely to rise more rapidly than the RPI. Since the costs of the corporation are overwhelmingly labour costs and since such costs in the service sector of the economy generally rise more rapidly than the RPI, the 'real' revenue available to the BBC for the provision of services is not as great as is suggested by the 4.5 per cent per annum growth rate quoted above.

There is no official index of labour costs in the service sector of the economy published by the Central Statistical Office, but it is possible to derive such an index from the published numbers on services output, average earnings and employment. The resulting index shows an annual average rate of increase of 7.1 per cent from 1980–91, compared with a rate of 6.5 per cent for the RPI. Although the difference between the two indices in the whole of the 1980s was not great, the difference from 1985–91 was much larger at 1.3 per cent per annum. As we shall see below, this is closer to the rate which we would expect to see maintained over the medium term.

If labour costs in the services sector are used as the relevant deflator, then real licence fee revenue from 1980–91 grew, not by 4.5 per cent per annum, but only by 3.9 per cent per annum. This is perhaps the best measure of what was available to increase the real provision of services by the BBC — or at least what would have been available if the corporation had achieved the undemanding target of increasing its labour costs in line with other services in the economy.

This rise in available resources does not seem unreasonable, but the picture looks very different when account is taken of the break in 1986. From 1986–91, the real licence fee receipts, deflated by the labour cost index, actually *fell* by 0.9 per cent per annum. Furthermore, as Figure 6.2 shows, since 1986 licence fee income has fallen sharply relative to the yields on other taxes such as income tax and VAT. This is a warning of what may well happen in the future if the licence fee is uprated only in line with the RPI, while the number of households with colour television stagnates.

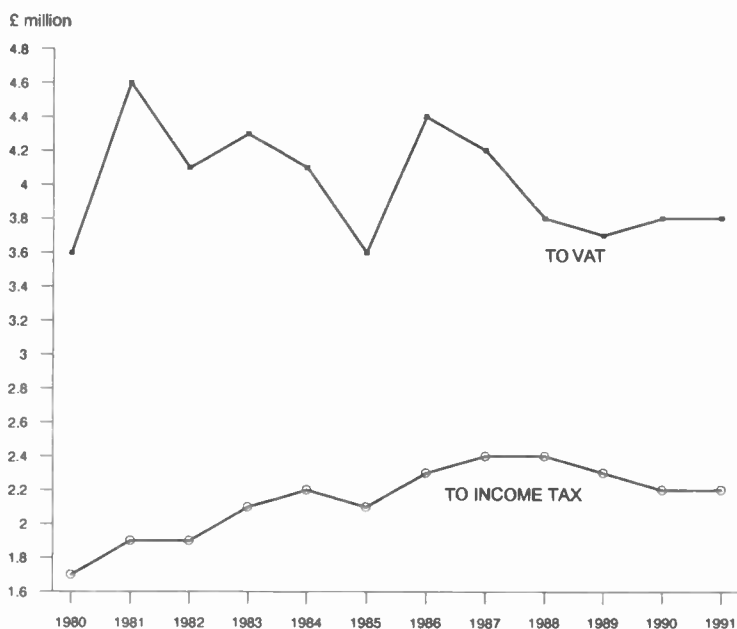


Figure 6.2 Ratio of Licence Fee Income to Income Tax and VAT

VII POSSIBILITIES FOR THE FUTURE

It has been argued that the BBC is a 'public good', for which public finance of some sort or another is perfectly justified. We have further seen that the licence fee fulfils many, but not all, of the attributes which are to be desired in a money raising mechanism for the BBC. However, as will be seen

later in this section, the licence fee also has the severe disadvantage that the present uprating system will not allow the growth of revenue to keep pace with the growth of private sector television, so that the BBC would be condemned to fill a diminishing role in the broadcasting market unless the uprating system is changed. This latter problem means that it is worth considering whether a superior form of public finance is available. Several suggestions have been made, of which the following are the most frequently discussed.

First, it would be possible to fund the BBC out of general taxation. However, as discussed in Section V.1 above, there are compelling arguments against this.

Second, it would be possible for the BBC to be given a fixed share of the revenue from another tax, such as VAT or income tax. There would be clear advantages in such an approach. It would provide the BBC with a source of revenue which would grow roughly in line with nominal GDP, and this would ameliorate the recent tendency for revenue to be squeezed relative to costs. Furthermore, it would take the subject of BBC financing firmly outside the political arena. However, this form of finance would be likely to run into an immovable stumbling block — the entrenched opposition of the Treasury to any form of direct subvention of general tax revenue for specific spending purposes. This objection to 'hypothecation' (i.e., the tying of expenditure to a particular part of taxation) is most unlikely to change.

Third, it has been suggested that the BBC should receive a direct share of some form of revenue which is broadly related to the provision of broadcasting services, such as electricity bills. This, too, would represent a form of hypothecation, but this time of private rather than public sector revenue. It is just possible that this idea might have been viable if the electricity industry were still in the public sector, but its recent privatization makes it difficult to see how the government could justify taxing its output to pay for the BBC — especially when it simultaneously levies no VAT on the domestic consumption of electricity. Furthermore, there is only the very loosest connection between the consumption of

electricity and the use of the BBC's services, so the acceptability by the electorate of such a charge would be questionable.

Fourth, and most promisingly, it has been suggested that a licence fee should be charged on the purchase or use of new forms of electrical equipment such as videos or high definition televisions (HDTV). The latter seems to present no real difficulty; in much the same way as people were willing to incur a higher licence fee for colour TV because of the obvious improvement in the service, they are likely to be willing to pay extra for HDTV. If this technique were to spread widely, it could solve the BBC's problem of revenue buoyancy for many years ahead. The licence fee could be uprated in line with the RPI, and the real growth in the service would be dependent on how rapidly HDTV penetrated the population. The problem, however, is that no-one can be sure whether or when this technique will become an important factor in domestic entertainment. In the meanwhile, it would be extremely foolish to rely on this new technique catching on.

This leaves levying a charge on some other form of equipment, such as videos or indeed televisions. The main case against this is that it would be likely to raise public doubts about the whole licence fee system. When the licence fee was first introduced, the BBC was a monopoly supplier, so everyone could see why they had to make a contribution towards its costs. Even now, very few people own a colour TV without making extensive use of the BBC's services, so that the link between the charge and the service remains strong. However, this is much less true of the use of videos, which are often primarily used to view non-BBC software, including the output of home video cameras. It is also less true than it used to be of televisions since they are used in conjunction with both videos and some home computers. Many users may therefore be most unwilling to pay an extra charge on videos, and such an attitude could lead to widespread evasion of an annual fee. A charge made at the point of the sale would certainly be administratively feasible,

but apart from the acceptability arguments already mentioned, there is the more serious extra question of why people who have already purchased videos should gain at the expense of future purchasers (especially given that two out of every three households which own a TV *already* own a video). The last argument applies with even more force to televisions. In view of all this, charges on videos or other similar equipment do not seem attractive.

Having considered the main alternatives, it appears that the licence fee fulfils more of the 'ideal' requirements listed above than any alternative that has so far been found, and that it should remain as the most important source of BBC revenue for the foreseeable future. However, there should be some reconsideration of the methods used for setting and uprating the licence fee. This is for the following reasons.

First, it can be shown that uprating the licence fee in line with changes in the RPI (the policy from 1986 to 1990) is unsatisfactory, because it inevitably results in licence fee income increasing less rapidly than the BBC's costs, thus squeezing the real level of BBC income. Clearly still more unsatisfactory is the proposal for the future to uprate the licence fee at 1 per cent less than the RPI. Broad illustrations of this problem are given in Table 6.1 below, which is not meant to contain precise forecasts. Over long time periods, the RPI is likely to rise broadly in line with unit labour (or wage) costs in the economy as a whole — say 5 per cent per annum. But, in the past, unit labour costs in 'services' have risen faster than in the economy as a whole. The BBC is clearly a 'service' industry and most of the BBC's costs are labour costs and so, if its revenue were forever linked to the RPI while its unit costs grew more rapidly, it would face a position of permanent decline.

The important part of Table 6.1 is *not* the assumption about the growth of wages, nor therefore about the inflation rate over the long term. This cannot be forecast with any accuracy. What matters is the *difference* in unit wage costs (line 5).

Table 6.1 The uprating problem: illustrative long term rates of increase (% per annum)

	Whole economy	Private services	Implications for BBC
1. Output	3	3	-2
2. Employment	0	2	-3
3. Productivity (1-2)	3	1	1
4. Wages per head	8	8	8
5. Unit wage costs (4-3)	5	7	7
6. Wages bill (4+2)	8	10	5
7. Retail price inflation (and BBC revenue from licence fee)	5	—	5

This difference in unit wage costs between different sectors arises because productivity growth in the whole economy (say 3 per cent per annum) will almost certainly be faster than productivity growth in services (say 1 per cent per annum). In the example shown in Table 6.1, unit wage costs for the whole economy rise at 5 per cent per annum while those for private services rise at 7 per cent per annum. If the licence fee is uprated in line with the RPI at 5 per cent per annum (line 7 in the table), it will rise by 2 per cent per annum less rapidly than the BBC's unit costs (line 5 in the table) — which implies that the real level of the BBC's services would need to decline by that amount if the Corporation were wholly reliant on licence fee income. In other words the -2 per cent per annum shown in the top right hand corner of the table for the output of the BBC is a consequence of its real revenue rising 2 per cent per annum more slowly than its unit costs.

This squeeze on the BBC that these figures imply has some striking consequences. If the overall output of commercial broadcasting services in the private sector simply grew in line with the economy as a whole — say at 3 per cent per annum — then the relative importance of the BBC in the broadcasting market would decline by 5 per cent a year. This could rapidly leave it with insufficient influence over the market to play the 'quality setting' role which is so essential.

Admittedly, it might be possible to offset this by increasing productivity in the BBC at a faster rate than applies to other broadcasters. The BBC's record on productivity growth in the past has been poor (especially during the years when revenue growth was so buoyant) and can be justifiably criticized by the government. There may well therefore still be some 'fat' in the BBC, and it is possible that the present licence arrangements might lead to a squeezing of this fat — in the same way that cash limits were supposed to operate elsewhere in the public sector. However, this is a process which obviously cannot operate for very long without eventually cutting into the bone. Indeed, most government departments found that they were into the bone after only a very few years of operating the cash limit system. After a while, public sector productivity could rise no further, and the real level of services had to fall. This is what will eventually happen to the BBC — indeed, what some observers believe is *already* happening. Two recent pieces of research³⁰ both come to the conclusion that the reduction in the funding of the BBC is leading to a loss of quality and an inability to meet the full requirements of a public service broadcaster.

It is also unlikely that there is any scope left for curtailing BBC costs by significantly reducing the relative pay offered to its staff. This would simply cause a mass exodus of people, with a sharp drop in the quality of the service. In fact in the competition for staff that will follow deregulation it is much more likely that the BBC will need to increase its relative pay — the analogy with the City is suggestive.

These considerations suggest that, if the BBC relies entirely on the licence fee for its income and the uprating of the licence remains unchanged from the present arrangements, then the BBC will be unable to maintain the present level of service provision in absolute terms, still less in relative terms. The inevitable conclusion is that the system should be changed.

³⁰ Ehrenberg and Mills (1990) and Davis (1991).

VII.1 Alternative Up-rating Methods

One possible way would be to up-rate the licence fee each year in line with unit labour costs in the service sector of the economy as a whole. In our example, this would imply that the licence fee should be up-rated by 7 per cent per annum (or 2 per cent per annum faster than the RPI). This would allow the BBC to maintain its real level of services constant over time, provided that it could achieve productivity growth roughly in line with the average for the service sector, which seems to be a reasonable target. In the longer term, with the likely expansion of the private broadcasting sector, a more accurate indicator of the BBC's costs might be to use the change in labour costs in the private broadcasting sector as the basis for licence up-rating. This would allow the BBC to maintain the real level of its services if it could keep its productivity growth in line with the average for its own industry. This formula could not work in the near future, however, because the BBC is itself too dominant in the broadcasting market.

In the immediate future, and as a minimum change, the right course of action is to change the basis of up-rating for the licence fee from the RPI to the increase in unit labour costs in the private service sector. At a later date, if the expansion of private broadcasting makes this possible, the basis should be changed to the increase in labour costs for the industry itself.

VII.2 More Radical Alternatives

However, all this would do would be to stabilize the real level of BBC services which could be financed from the licence fee. There would be no scope for real growth, either in line with the growth in the economy, or with the growth in private broadcasting activity, which could be considerably faster. Consequently, the share of the BBC in the broadcasting market would still decline rapidly, unless alternative sources of revenue could be found.

One way round this would be to uprate the licence fee in line with the increase in overall labour costs in the private service sector (10 per cent per annum in our example), rather than the increase in unit labour costs. What this would do would be to increase the real provision of broadcasting services in the economy, as measured by an increase in the number of people who work in the industry. Hence, it would be likely that the BBC could maintain its relative position in the market even without seeking alternative sources of revenue. Although this would be ideal from the BBC's point of view, there are two conflicting considerations. On the one hand, the government is not likely to welcome such a system. It would result in an annual increase in the licence fee substantially above the rate of retail price inflation (5 per cent each year in our example). In addition, it is currently committed to a policy of squeezing the BBC revenues — though it is not clear that the full implications of this squeeze have yet been realized. On the other hand, recent research suggests that the great majority of consumers would be willing to pay more for television — possibly substantially more.³¹ It has been found that:

- a. if the licence fee were to be changed to a subscription, as many as 98 per cent of current users of colour television would voluntarily pay a subscription equivalent to the current licence fee;
- b. even if the subscription fee were higher, there would only be a 20 per cent drop in voluntary subscriptions. Moreover, any such drop would probably be temporary because viewers have an idea of the 'normal' price and resist paying more than this;
- c. there was 'remarkable insensitivity to price increases up to some £200 a year'; and

³¹ Ehrenberg and Mills (1990).

- d. 'there is no support from the market for the idea of cutting services in order to reduce the licence fee.'³²

This research does, however, need to be seen in context. There are some 6–8 per cent of households who evade the licence fee who were not covered. Nor did the survey include households taking satellite television. When the research was done (April 1989 – March 1990), these were a small number (less than 5 per cent of UK households had cable or satellite television), but, as these grow, there might be more resistance to paying a higher licence fee. In addition, as is spelt out in the research, there were significant differences in the willingness to pay for BBC2 as compared with BBC1. Nevertheless, even allowing for these qualifications, the direct evidence available now is that a higher licence fee would be acceptable to most consumers. Of course, real increases in the licence fee would make its regressive aspects more noticeable, but this is not an insurmountable objection. The government used to include the TV licence in Supplementary Benefit payments and a similar system could be instituted in future.

VII.3 Implications of Different Uprating Methods

If the earlier arguments about the need for the BBC to act as a guarantor of quality are persuasive, the most important factor which should determine the licence fee is the implications it carries for the BBC's market share.³³ The effects of three different uprating methods up to the year 2000 and, beyond that, to 2005 and 2010, can be seen in Table 6.2. This table shows what would happen to the BBC's share of the broadcasting market if the licence fee were to be uprated in line with the RPI (Case A), by 2 per cent per

³² Ehrenberg and Mills (1990), p.1.

³³ It is assumed throughout this section that the market share measured by viewing will move closely with shares of revenues. This has been the case in the past and there is no reason to expect it to be markedly different in the future.

annum slower than the RPI (Case B) and 2 per cent per annum faster than the RPI (Case C). The second of these (the RPI + 2) is equivalent to the suggestion made above that the RPI should be increased in line with the growth in unit labour costs in the private service sector.

The numbers given in Table 6.2 are on two different bases. First, the main numbers show the effect of applying the assumptions made earlier about productivity and about a possible long run growth of commercial broadcasting services

Table 6.2 The implications for market share of alternative methods of uprating the licence fee^{(a)(b)}

% share held by BBC			% share held by other broadcasters	
NOW (1991) ^(c) 39			61	
Case A. In line with RPI				
2000	31	(23)	69	(77)
2005	27	(16)	73	(73)
2010	23	(11)	77	(77)
Case B. In line with RPI - 2				
2000	27	(20)	73	(73)
2005	22	(13)	78	(87)
2010	17	(8)	83	(92)
Case C. In line with RPI + 2				
2000	35	(26)	65	(74)
2005	33	(20)	67	(80)
2010	31	(16)	69	(84)

Notes

(a) In all three cases the licence fee is assumed to grow by approximately 1 per cent per annum because of natural buoyancy (see Chapter 5).

(b) The figures in brackets show the effects of using the growth of revenues for other broadcasters of 9.8 per cent per annum predicted in Chapter 5 less an allowance of 2 per cent for productivity (see text). None of the figures are intended to be more precise than the discussion in the text.

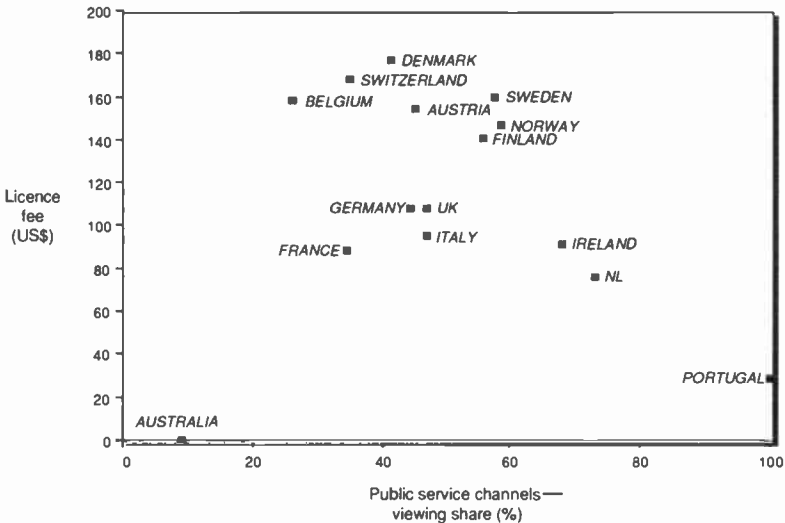
(c) Shares of revenues in 1991. Licence fee revenue is measured net of the costs of collection.

in line with the growth of the whole economy (here assumed to be 3 per cent per annum). The only additional assumption incorporated in this table is that, in line with the assumptions made elsewhere in this book, the licence fee is taken to have a natural buoyancy of about 1 per cent per annum. On these assumptions the effect of linking the value of the licence fee to the RPI (Case A) is that the BBC share of the market would shrink to 31 per cent by the year 2000 and to only 23 per cent by 2010. In Case B (the RPI - 2), the BBC's market share shrinks to 27 per cent by the year 2000 and to 17 per cent by 2010. Even in Case C (the most generous), which, apart from the 1 per cent buoyancy in the licence fee, allows the BBC to stay the same *absolute* size as it is now, its market share still declines to 31 per cent by 2010. However, the main numbers in Table 6.2 almost certainly significantly understate the likely contraction in the BBC's market share. In Chapter 5 it has been forecast that from now until the year 2000 there will be particularly rapid growth in the activities of other broadcasters. It is assumed that their revenues over this period will grow by nearly 10 per cent per annum (9.8 per cent to be precise). If, as we assumed earlier, they, like the BBC, are not able to increase their productivity as fast as that in the rest of the economy, then their output will grow more slowly than their revenues (we have assumed 2 per cent per annum). Nevertheless their output grows much faster than the BBC. In addition, if these forecasts are even approximately right, their output grows much faster (at approximately 8 per cent per annum) over this period than we have assumed might apply over the long run (only 3 per cent per annum).

The effect of this second set of assumptions is shown in brackets in Table 6.2. The results are dramatic. In this second case the BBC's share would fall to 23 per cent by the year 2000 in Case A and to only 20 per cent in Case B. The figures after the year 2000 are more conjectural. However, if this rapid growth of other broadcasters were to continue, the BBC would fall to 16 per cent in the best case and to a mere 8 per cent in the worst case (Case B).

The point to be emphasized, however, is not the precise figures. The future will undoubtedly turn out somewhat different from any of the pictures given here. The point is that, whatever the exact figures, tying the licence fee to the RPI implies a continuing fall in the BBC's market share. This immediately raises two critical questions. First, how long will it be until the BBC is too small to play the 'quality setting' role that is so essential? Second, how large does the BBC need to be to influence the market?

It is not possible to give precise answers to these questions. Nevertheless, there are three pieces of evidence on which to draw. First, as Figure 6.3 shows, in 1989/90 all the countries which had licence fees as a source of public broadcasting revenue were achieving market shares of viewing of at least 25 per cent, and the great majority were in excess of 40 per cent. It is possible that the licence fee is only acceptable if a large number of the public watch public broadcasting for a



* No longer able to charge a licence fee

Figure 6.3 Public Service Broadcasters, Licence Fee Levels and Viewing Levels, 1989

significant amount of time. Or, to put the same point another way, a market share lower than, say, 25 per cent might be unstable because below this level, even though the licence fee would be smaller, the incentive to evade it would also rise rapidly. Moreover, at some point as the share falls, the claim of the public service broadcaster to be meeting the needs of the community is no longer sustainable. Any claim to universality must eventually collapse. For this reason, also, the licence fee might become indefensible.

Second, there is some indirect evidence from the industrial economics literature. Various authors have measured the point at which the four largest firms in an industry recognized their inter-dependence. An early study³⁴ found a critical level of market share at 55 per cent, but subsequent studies had estimates of the critical level varying from as high as 59 per cent to as low as 45 per cent.³⁵ Of course, the BBC as a single organization may be able to be smaller than this and still be an important player. Also the ways in which the BBC is required to influence the market are not directly comparable to the pricing and profit maximizing considerations of most industrial markets. Nevertheless, such findings suggest, even if only weakly, that the BBC could not become a great deal smaller and still be a powerful influence.

A third, later work³⁶ found that, in order to influence a market, firms need a larger market share if they used to be small and are expanding than if they used to be large and are contracting. This would help to explain why earlier research had found such a spread of results about the level at which inter-dependence was recognized.

Again it is necessary to be extremely cautious in applying these results to broadcasting, but the important implication of

³⁴ Meehan and Duchesneau (1973).

³⁵ Dalton and Penn (1976) found evidence for a break at 45 per cent, White (1976) at between 56 and 59 per cent and Sant (1978) at 47 per cent.

³⁶ Bradburd and Mead Over (1981).

the later work, which accords with common sense, is that, if the BBC became too small to act as the 'quality setter', it would then be much more difficult to re-establish this role. The relationship both between the public and the BBC and between the BBC and the commercial sector is one which depends heavily on reputation. Once destroyed it would not be easily reversible.

Taken together these three points suggest, even if only tentatively, that there would be real dangers for the quality of UK broadcasting if the BBC were to be pushed down to, say, 25–30 per cent of the market. Moreover, on some readings of the evidence above, it would be wise to sustain the market share at a higher level.

VIII SUMMARY AND CONCLUSIONS

The argument of this chapter based both on theoretical and empirical evidence can be summarized as follows. It has been shown that commercial broadcasting on its own, irrespective of whether it is financed from advertising or from subscriptions, would *not* produce the form of broadcasting which people individually or citizens collectively require. It has further been shown that there is no set of rules or regulations or laws which could entirely correct the deficiencies of a commercial system. This is for the simple but powerful reason that rules are necessarily negative. They have the capacity only to stop the undesirable. They cannot promote the desirable.

The only way to counteract fully the deficiencies of a purely commercial system is through the existence of a broadcaster which has as its driving force the ethos of public service broadcasting. Moreover, any such broadcasting institution has to be vertically integrated. This follows first from the need for public service broadcasting to be concerned with the full range of broadcasting (training, production, scheduling and broadcasting) and, second, from the fact that public service values and the commitment to quality can only be maintained,

developed and passed on within an institutional framework that persists.

Such a public service broadcaster would fulfil two crucial and inter-related roles. First, because its *purposes* were different, it would *widen* the choice that consumers individually and collectively would face. Second, provided it were large enough, it would have a positive influence on the quality of the whole system. In brief, such a public service broadcaster is not an optional add-on, but central to the health of all broadcasting.

It is not possible to say *precisely* how large a public service broadcaster has to be to play this role. Nevertheless, the evidence from other industries and other countries suggests that it would be dangerous to push the public service broadcaster down to, very approximately, 25–30 per cent of the market. Moreover, any decision about the future level of funding must take account of the new environment of the 1990s. In the past the commercial sector was constrained from following purely commercial considerations by public service obligations. These constraints will apply less in the future both because of deregulation and because technical change is making any regulation less effective. At the same time, because of the greater competition for scarce skills, less of the staff of the commercial sector are likely to have a prior spell of training with the BBC. There will therefore be a lower supply of people committed to high quality, good broadcasting practices and public service ideals. Both of these factors mean that in order to have even the same influence as in the past, the BBC would need to have a larger market share not a smaller one.

It is in the light of this need to guarantee quality that the scale of future financial arrangements should be decided — not the other way round.

As far as the source of finance is concerned, there is nothing better than the continuation of the licence fee. However, it should *not* be related to the RPI as at present. Broadcasting costs will grow faster than retail price inflation and, even over

a relatively short period, will squeeze the BBC too much for it to be able to play the 'quality setting' role that is required.

Instead of the present system, in the immediate future, and as a minimum change, the basis for uprating the licence fee should be changed from the RPI to the increase in unit labour costs in the private service sector. At a later date, if private broadcasting becomes large enough to provide a useful comparison, the basis should be changed to the increase in unit labour costs for the industry itself. However, even this will imply a fall in the *relative* share of the BBC. The only way to avoid this would be to seek to tie the licence fee to the increase in *overall* labour costs in broadcasting (even though this may appear too generous to an organization which has not in the past been particularly good at achieving high rates of productivity growth).

Faced with a squeeze on its relative position the BBC should *not* seek to expand commercial income because the scope for doing so without prejudicing the public service role is extremely limited. The BBC can either maximize profits, or it can seek to maximize the effectiveness of its public service broadcasting. It cannot maximize both simultaneously. The only really significant change should be that, in the longer run, a higher licence fee should be charged for HDTV.

One final point remains to be made. The BBC exists, does its job to international acclaim, and is, in general, highly appreciated at home. It would seem crazy, even just on insurance grounds, to start running it down *before* the effects of the new technologies and the deregulation have come into effect. If the BBC did not exist, it ought to be created with the utmost urgency. But endless experience demonstrates that the process of creation and destruction are *not* symmetrical. It would take a very brave or dogmatic policy-maker to be entirely sure that the arguments presented here will turn out to be wrong, and that the BBC will not be needed in the new environment. But once the BBC is destroyed, or fatally weakened, there may be no going back. It would be very difficult to re-create 70 years of public broadcasting culture once it had disappeared.

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