REVIEW ARTICLE ECONOMICS OF FILM AND TELEVISION IN AUSTRALIA*

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Molloy and Burgan's study of film and television production and distribution in Australia summarises the idiosyncratic features of the industry, identifies the domestic policies affecting this sector and discusses a number of the economic issues. This review of the study provides a different interpretation of some of the economic issues. A framework for analysing the industry is proposed, one which focuses on the management of three types of risk: uncertainty ***ex ante*** *about what will attract viewers; difficulties in containing cost overruns; and the problem of piracy.*

Keywords: film, television, economics, management, risk

The aim of the study by Molloy and Burgan (Numbers in brackets refer to pages in the Report) is to enhance understanding of the reasons for and type of government intervention in the Australian film and television industry. Three of the four stated objectives are to provide information about the industry for the public, the government and the industry; the fourth is "to develop a more sophisticated analytical framework within which to monitor existing programs and consider future policy questions." While the Report adds to the understanding and suggests topics for further research, a framework has yet to be set out. This review will outline the principal sections of the Report, comment on issues raised, and suggest a framework for future analysis.

Throughout the Report, note is made of the idiosyncratic features of the industry that need to be incorporated into any economic analysis. These include the financial risks associated with producing a film or television program that will make money where all expenditures are made before a finished product can be shown to investors and viewers; the response of producers and distributors by way of organisational and contractual arrangements to cope with these risks; the flow of revenues over time from different markets and regions; and the convergence of film and television so that what is being discussed is screen economics. The peculiar nature of the product as a carrier of cultural messages is stressed and considered by some (not the Report's authors) as not being susceptible to the type of economic analysis applied to industries such as agriculture, automobiles and accounting.

In Part 2, the international context is outlined with data presented on film, televi-

* Review article of **The Economics of Film and Television in Australia**, by Simon Molloy and Barry Burgan (Australian Film Commission, Sydney, 1993), pp. iv + 133, ISBN 0 642 19762 8.

sion and home video production and distribution in selected countries, together with a brief survey of their respective policies. Due to the inadequacies of official sources, statistics are presented from a trade publication, *Screen Digest*. Readers should be cautioned that commercially interested players are often providing and publishing the information that forms the basis of policy decisions. Governments need to improve the quality and extent of official reporting. In this section, the reader would be assisted by a listing of reference sources to the country policies, an area of continual change and considerable complexity which cannot easily be summarised in a few paragraphs. A similar inclusion of sources is required for the details of film and television production and distribution by country contained in the Report's appendix.

Part 3, in three and a half pages, discusses the demand for audio-visual entertainment with subsections on information and uncertainty and on advertising. The latter relates to how viewers can become informed about the content of films. The important subject of advertising financed programming receives scant attention either here or elsewhere in the Report. In a section on consumer demand, it would be useful to explain how the interactive technology that allows for dial-up ordering of pay-per-program delivery and the growing popularity of home-video rental and sell-through markets (discussed on p.17), allow consumers to express their demand in ways not available when broadcast signals were the sole source of supply.

The institutional and statistical detail of the Australian film and television industry constitutes a major segment of the Report (Part 4), providing useful current information on film and television production and distribution, the extent of vertical integration and foreign, especially American involvement in the industry. Analysis is made of entry barriers, pricing of program rights and the popularity of Australian television programs, each of which will be discussed below.

A literature review of rationales for government intervention in the industry is the subject of Part 5, with attention given to the issue stressed throughout the Report of whether assistance provided on cultural grounds is "...outside the province of economics."(11) The view that there are two separate optics, economics and culture, used to explain government intervention pervades the policy debate in all countries except the US. In the industry, financiers and artists take opposing sides; in government, different views are expressed by departments of industry and of arts; and in academia, economists are pitted against teachers of film studies and communications. One example of support for the dichotomy is provided by media critic Jay Blumler,

> Though a high consumer-oriented good, television programming is very different from most other such goods (like cars, toasters, washing machines, electricity or telephones). Whereas the latter provide the means, the former trades in the meanings of life.[1]

An alternative view is that no such dichotomy exists. Support for culture, including film and television, has its peculiarities as does support for health, defence and education, each of which is administered by specialised government departments. Health, defence and education policies receive inputs from doctors, generals and teachers because of their specialised expertise, but devising policies to determine the desired level and type of resources to be directed at these areas draws on an understanding of political economy. The same is true for culture. Through the political process, decisions will be made about the level of support for the film and television industries. Artists and other interest groups including economists will attempt to influence the political process, but once the decision is made to intervene, then those with an understanding of the politics and economics of the policy process need to provide their expertise on the most efficient and effective way to achieve the politically determined objective.

Much of the debate on "culture being outside the province of economics" is a technique to lobby for levels of government assistance that the political process may not support. Once culture claims resources from the finite public purse in competition with a wide range of recognised public needs, then it enters the realm of economics. What artists and supportive interest groups can do is to justify the need for support using arguments similar to those outlined in Part 5 of the Report dealing with market failures (externalities, merit and option goods), infant industry arguments and income redistribution policies.

The particular techniques used by successive Australian governments since the establishment of Film Australia in 1911 are set out in Part 6. The poor profitability of film production in Australia is attributed to "absence of large scale production-distribution integration"(109). The Report proposes that detailed information on the profitability of Australian films is the most important area for further study, linking profitability to the incentive effects of past policies (117)[2]. It also concludes that "The reason that production continues in Australia, at least at the current level is ... because of government subsidy"(107).

Reference is made to Harold Vogel's work on entertainment economics, but Vogel would be the first to caution about the difficulty of determining the profitability of individual films given the distortions created by the industry's accounting conventions. The final pages of Vogel's book flags some of these problems.[3] If an attempt is made to measure individual film profitability, then works such as Jason E. Squire, ed. *The Movie Business Book* (New York, Simon and Scuster, 1983) and Danford Chamness, *The Hollywood Guide to Film Budgeting and Script Breakdown for low budget features* (Los Angeles: Brooks Company, 1993) would assist the analyst.

ECONOMIC ISSUES

A sample of recurring themes in the economic discussion of the industry and found in the Report include the following: the scarcity of spectrum frequencies for the delivery of television broadcasts (10); the importance of vertical integration for profitable operation while its absence "...probably is the main reason for the poor profitability of film production in Australia." (109); the domination by Hollywood of the small Australian market (109); entry barriers to Australian films evidenced by "... the proportion of cinema attendances that foreign films account for." (25); the increasing popularity of Australian television programs in domestic markets alongside support for continuing Australian content policies (57); and the practice of US program producers to engage in price discrimination by selling into the Australian market at prices lower than domestic programs and lower than the sale of

American programs in the US (115) — other writers often refer to this as dumping. Economic analysis can be used to clarify each of these issues and in some instances provide an alternative interpretation.

Spectrum scarcity

While spectrum scarcity has in the past limited the number of broadcast television signals, this is no longer the case. The combination of VCRs, cable, telephone and satellite delivery of audio and video signals has expanded the highways to viewers. Reference to the new technologies, which is scattered throughout the Report, should be expanded and preface any current examination of the economics of film and television. Technological developments have signalled the end of spectrum scarcity and undermined effective government regulation of both entry and content. The multiplicity of delivery channels, including VCRs, has lead to a shortage of content and expanded opportunities for film and television producers in all countries, reducing the need for government subsidies. Australia has yet to introduce pay television but is on the verge of receiving not only pay but possibly several hundred satellite signals. Domestic regulation of foreign satellite signals is a problem for numerous countries.[4]

Market size and national content

The limited size of the Australian television market relative to the US is used to explain the difficulty of generating enough revenues to make programs profitable. Size is a problem if Australian producers target domestic markets only. Aiming for an international market provides access to more funding sources but is seen as undermining the "Australianess" of a film or program. However, when an Australian film receives international recognition, it is widely acclaimed at home and seen to confer benefits on Australia, similar to an Australian athlete winning an Olympic gold medal.

In the past, in order to be profitable, films have often had to appeal to an international market. Domestic producers have recognised this by entering coproduction deals with those in other countries. However the opportunity for making profitable "Australian" films that appeal to a narrow market exists where pay-per-view systems permit revenues to be tapped from niche markets, in the same way that specialised books on poetry, paintings and pop music get published and sold commercially.

Nationality of production raises the messy question of how it is determined. Various policy directives are used in Australia to measure nationality and desirability for financing and viewing based on the inputs used and expenditure made, but contradictions abound and administrative discretion has to be exercised in reaching a decision.

Piano won numerous awards as the best Australian film in 1993 with a New Zealand born writer and director, a New Zealand setting, two American principal actors and funding from France. It has been praised in Australia for its Academy Award nominations. *Black Robe* is an Australian-Canadian co-production with

"Australianess" based mainly on the nationality of the director and some funding from the Australian Film Corporation. Little about the story of French Jesuits and native indians in Canada could be considered Australian. Neither of these films would be counted as Australian content under Australian Broadcasting Authority (ABA) rules, but both are considered Australian for other reasons.[5]

Administrative discretion is needed, especially in a multicultural society, to determine what constitutes the Australian language in terms of either accent or phraseology as set out in Section 2b of the Television Program Standards (TPS 14). How will the provisions of Section 24 (Australian Factor: Test for Drama Programs) be interpreted for individual projects? As with the content of cars and computers, where parts are made in different countries, the national content of films is becoming increasingly difficult to determine. Content rules will either sink under the weight of their absurdities or provide luxury cruises for a growing complement of government and corporate officials.

Treatment of content policies for television programs (94) in less than one page of the Report does not alert the reader to the significance of this policy instrument, especially in light of its importance in trade negotiations. While the GATT, with its special treatment of audiovisual services, was concluded after the Report was published, audiovisual trade problems exist in the operation of the Closer Economic Relations Agreement between Australia and New Zealand and warrant discussion as a policy issue.[6]

Hollywood domination, price discrimination and entry

The success of American films in foreign markets and the limited showing of Australian films in the US market is not due to some conspiracy or entry barrier. US distributors would supply foreign films if American audiences demanded them as did US automobile dealers when American consumers preferred Japanese cars. Americans eagerly drink scotch whisky, wear Italian designed clothes and purchase Asian-made computers. The success of American movies may have more to do with the ability of Hollywood to make films that appeal to a multi-ethnic community of over 225 million people within the United States, one which is a test market for ethnic markets elsewhere in the world.

The argument that American film makers engage in price discrimination because film rights are sold more cheaply in Australia than in the US is difficult to sustain and is one economics can clarify. Pricing film rights involves establishing the price for a public good where the marginal cost of production is zero because all production costs are sunk costs and once produced the film can be used an unlimited number of times with no further production costs (only some distribution costs) required. Pricing of television programs varies according to factors such as size of the market and number of buyers competing for the product. A program sold to a commercial broadcaster for the Darwin market will sell for less than one sold in Sydney, not because of the price discrimination or dumping but because of the lower advertising potential of the Darwin market. Smaller market size will be one reason for the lower price of a program sold in Australia than in the US.[7] Also if two markets are identical in every respect except for the number of buyers, then the market with the more buyers will likely register the higher price due to competition between buyers. Thus pricing of television programs has to be considered in the light of the peculiarities of the product and the market.

Barriers to the distribution in Australia of Australian films are claimed to result from the vertical integration that exists between the major film distributors and exhibitors which have investment or contractual ties to American distributors and thereby favour American films. However alternatives exist as there are smaller independent distributors and exhibitors available to distribute Australian films (47, 55). If producers make films that appeal to a narrow rather than a mass audience, the likelihood is that they will be distributed by the smaller specialised firms. This is not an entry barrier especially where there is nothing to prevent new distributors and exhibitors from entering the market. Again, however, the entry barrier argument is dated. Technological developments now assist the production and distribution of films and programs aimed at specialised niche audiences. Pay television has already done this in many countries. Pay-per-view will extend this possibility and satellite delivery of several hundred channels will open up massive highways to audiences. If producers cannot sell in this environment, it will not be due to entry limited by channels of distribution.

Program popularity

The increasing preference of Australian viewers for Australian programs is noted by the share of the Australian programs in the top ten programs broadcast each year. (57) If viewers are voluntarily watching Australian programs to an increasing extent, why the need for content regulations and ones which are to increase over time; why complaints about content rules from commercial broadcasters; and why the lobbying to exempt cultural quotas from the GATT agreement? A view from the supply side of the market reveals that this preference for regularly broadcast Australian programs includes, amongst others, news, current affairs and sports programs but not movies. Most Australians express their viewer preference through five options, outside of VCRs, three commercial channels which are subject to Australian content regulations and two government financed channels which, amongst their statutory requirements, are expected to showcase Australian programs but are also sensitive to ratings especially when the government reviews the broadcasters' budget allocations. Thus preference by viewers for Australian programs occurs in a constrained supply situation and one in which commercial broadcasters lobby for the removal of content regulations suggesting that their program choices, especially for drama, would be different without the policy constraints. Rising popularity of Australian programs must be seen within this context.

TOWARDS A FRAMEWORK

Our suggestion is that the management of risk in the industry provides a useful focus for an economic framework for future policy analysis. The profitability of films and programs is associated with three types of risk: lack of knowledge *ex ante* about what will attract viewers; difficulties in containing the costs of production and not incurring budget overruns; and the problem of piracy or the difficulty of protecting intellectual property rights in the final product. The three are interrelated in that the latter two affect how much money the film will make.

Production is a funnel shaped process. A wide array of inputs are gathered by the producer and combined into a product, the tape or film negative which captures and freezes the images. The post-production process gives the director an opportunity to edit the tape from the available footage and to combine it with archival material, animated sequences and sound. Once completed, the process resembles an inverted funnel as distribution spreads the output. This consists of selling showing rights for the product in a range of markets, theatrical, home-video, and television in different countries and languages. Revenues are also earned from cross-marketing the product by way of books, toys, T-shirts, music (records, CDs, tapes), video-games and theme parks.

In order to manage the risks of production and distribution, the industry has, over time, developed a number of contractual arrangements, business practices and organisational structures. These include pre-selling viewing rights in order to finance films; financial deals with directors and actors whose rewards are tied to the success of the project; investment in a portfolio of films as opposed to individual films; vertical integration of production, distribution and exhibition; pretesting films with select audiences; promotional campaigns; creation of studio brand names and film genres; development of sequels and stars with audience appeal; coproduction deals; distribution in foreign and domestic markets; cross-marketing of films and programs (see above); and funding industry associations to detect and prosecute piracy.

An understanding of the nature of the risks associated with production and distribution and the response of players to these risks provides a context in which to understand screen economics and how countries such as Australia can expect to develop policies for the industry. Factored into this will be an appreciation of how technology is and will affect the process. For example, sale of videogame software of about US$7bn in 1993 in the US exceeds theatrical box office sales and almost equals sales of recorded music in that market. At present, games are played on specially made stand alone hardware — Nintendo and Sega have sold more than 65 million game computers in the US, three times the installed base of personal computers.[8] However it is likely that these games will be available on-line via cable and will compete for finite viewertime, not just for younger age groups but for adults as games become more sophisticated.

The economic toolkit for this type of analysis is the literature on transactions costs dealing with the informational problems that surround contracting in the industry as well as issues of bounded rationality and team production.[9]

The success of Hollywood, and its lessons for countries such as Australia and Canada are that its managers understood the nature of the risks and the associated informational problems facing the industry and adapted to them. Up to the 1950s, the studio system was one in which there was in-house production and vertical integration from production through distribution to exhibition.[10] Today, major American studios, three foreign-owned by Sony, Matsushita and News Corporation, still exist but emphasize financing and distribution, with production often initiated and organised by agents or independent producers who may rent the studio facilities.

The current wave of mergers and alliances involving studios, broadcasters, cable companies, telephone companies and hardware producers is the latest reorganisation aimed at coping with the risks associated with new technology. By applying economic analysis to the idiosyncratic features of the industry, a framework for policy analysis can be developed. The Report provides a useful description of selected aspects of the Australian scene, flags a number of the issues, but gives insufficient attention to changing technology, and perpetuates some misleading economic analysis of the industry.

NOTES AND REFERENCES

1 J.G. Blumler, 'Introduction' in J.G. Blumler (ed.), *Television and the Public Interest: Vulnerable Values in Western European Broadcasting*, Sage, London, 1992, p.3. Education and religion also deal with the meaning of life and are the object of government support, one through public funding, and the other through favourable tax treatment as a charity. Their differences are recognised, but like culture they are not beyond the province of economics and the issues raised in the Report.

2 A Media Release by the Australian Film Commission, November 18th, 1993, accompanying publication of the Report, noted that it suggested three areas for further research: "more sophisticated analysis of public attitudes to the local film and TV industry; the profitability of Australian audiovisual production; and interactions between different forms of government assistance, such as regulation of industry (ownership and competition policy), program regulation, subsidies and the funding of national broadcasters."

3 Harold Vogel, *Entertainment Industry Economics: A guide for financial analysis*, Cambridge University Press, Melbourne, 1990, pp.285-291.

4 In Canada, the regulator argues that, under existing legislative authority, it can regulate direct-to-home satellite signals when the program provider acquires program rights for Canada, solicits subscribers in Canada, solicits advertising in Canada, or activates and deactivates decoders of Canadian subscribers — see Canadian Radio-television and Telecommunications Commission, *Structural Hearings*, Ottawa, Public Notice CRTC 1993-74, June 3, 1993, p.8.

5 Another anomaly is the acclaim given in Australia to the Academy Award nominations for *Schindler's List*. It is authored by an Australian teaching in California but would not be counted as Australian content by the ABA.

6 A Protocol on Trade in Services came into force on January 1st 1989. Australia maintains a range of restrictions on free trade in audiovisual services in contrast to New Zealand's openness — see Ross Jones, *The Impact of the Closer Economic Relations Agreement on the Cultural Industries in Australia and New Zealand*, University of Sydney, School of Finance and Economics, Working Paper No. 27, March 1993.

7 Advertisers are interested in the cost-per-thousand of audience reached which standardises the market on the basis of size. If available this is a more relevant price comparison to make. Price information on programs by market is infrequently made public.

8 Salomon Brothers, *Interactive Multimedia: When Worlds Converge*, New York, June 1993, pp.5, 7.

9 Informational problems are associated with individuals behaving in an opportunistic manner giving rise to issues of moral hazard, adverse selection and principal-agent relationships. The issues and terminology are discussed in Oliver Williamson, *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, Free Press, New York, 1985. A special survey of television in the *Economist*, February 12-18, 1994, after p.52 provides excellent technological and institutional information needed to develop a framework for economic analysis.

10 The Paramount antitrust case in the 1940s forced divestiture of exhibition from distribution for certain firms. The demise of studio production came later. A re-evaluation of the Paramount case using transaction cost analysis has been undertaken by Arthur De Vany and Ross D. Eckhart, 'Motion Picture Antitrust: The Paramount Case Revisited', *Research in Law and Economics*, 14, 1991, pp.51-112.