Film Funding in Australia: Recent History and Empirical Analysis

Jordi McKenzie and Craig Rossiter

1 Introduction

Like many countries with relatively small populations, Australia's local film industry has never been able to compete at any serious level with the output of product from major markets—in particular, of course, that of Hollywood in the United States. While it may be reasonable to expect that domestic Australian films don't export so well, the data also show that Australian consumers are generally less inclined towards the local product in favour of imported alternatives. This is borne out in historic box office results for Australian films. Although the data are heavily driven by 'hit' films, the average contribution of Australian film revenues to annual total box office revenues in the last 10 years has been a mere 4.4%. The last time this share exceeded 10% was in 1994, where the hit films of the year included *The Adventures of Priscilla, Queen of the Deser*t; *Muriel's Wedding*; and *Lightning Jack*. In the 20 years prior to 1994, there were at least five occasions where the 10% threshold was exceeded, including 1986, where blockbuster films *Crocodile Dundee* and *Malcolm* enticed local consumers to cinemas contributing to a record local share of 23.5% of total box office receipts.

While 2015 has been lauded as the 'best ever' box office for Australian films based on actual dollars (7.2% of total box office) and the best since 2001 when adjusted for inflation, whether this represents a shifting preferences in consumers' taste, improved quality of local content, or something else is not obviously apparent. What is clear is the industry has required significant amounts of public funding to remain viable. This, of course, raises another important question: what form

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should public funding take? Over recent history, Australia has experimented with a range of funding arrangements designed to promote local filmmakers and their product. Since the inauguration of the *Australian Film Commission* (AFC) in 1975, the establishment of the *Film Finance Corporation* (FFC) in 1988, and their merger forming *Screen Australia* in 2007, various subsidy schemes, tax concessions, and offset provisions have been implemented to support the local industry.

This chapter seeks to detail and analyse public film funding in Australia. It begins with a detailed historic overview of funding arrangements and the eventual role of public money in this industry. Particular attention is given to the tax incentives offered under the 10BA scheme (where tax deductions as large as 150% were offered, alongside a 50% haven on royalties), the ‘two-door approach’ funding provisions under the FFC, and the more recent ‘Producer Offset’ scheme operated under *Screen Australia*. The second primary contribution of this chapter is an empirical investigation building on the analysis of McKenzie and Walls (2013). A hedonic box office revenue model is developed assessing the impact of FFC and *Screen Australia* funding on the box office revenue performance of Australian films in Australian cinemas over the years 1997–2015. We find some statistical support for funding increasing the box office revenue of films, but the elasticities are low suggesting the investments do not typically go anywhere near recouping their cost. Of course, we acknowledge commercial success is not the only objective of a national film funding agency and focusing on revenues alone does not provide a complete picture of the role of such agencies.

2 History of Film Funding in Australia

Prior to significant government support of feature film production in the 1970s, the history of Australian film can be described as an early boom followed by a relatively long period of bust. Like most other non-Hollywood production industries, Australian producers struggled to compete against the studio oligopoly with large budget productions, international distribution, star system, significant marketing expenditures, guaranteed screens, and restrictive trade practices. In order to survive, Australian filmmakers had to be opportunistic and stubborn.

2.1 The Early Years

Australia was an early adopter and innovator in the film industry and lays claim to producing the first feature film *The Story of the Kelly Gang* (1906). Tulloch (1982) suggests that the primary source of film finance during the early period of Australian film production was private bankers and other financiers, production companies, and studios. Government mostly stayed out of the machinations of the forming industry.

In 1915, US-based Paramount Pictures set up its own film exchange in Australia and was soon followed by Fox, First National, and Metro (later to become MGM).

With the war in Europe restricting supply, Hollywood solidified its stranglehold over the local industry.

One of the key mechanisms of the Hollywood juggernaut was the notorious contract system of block and blind booking system. For Australian film production, this ensured Hollywood productions had a guaranteed audience and income stream and dramatically reduced the screen space available for productions from other industries, including the local industry. The federal government imposed a tariff on imports in 1914, but this was later reduced as a result of pleas from importers over wartime difficulties during World War I and was removed in 1918.

While Australian production was shrinking, cinemas were expanding. By 1927, there were 1250 picture theatres in Australia that drew 110 million admissions (Shirley & Adams, 1983). For over a decade, there had been many calls for government intervention to support local production. The government began to hear producers' cries, but there were disagreements amongst Australian producers as to what role it should take.

In 1926, the Royal Commission on the Moving Picture Industry in Australia was announced. Consisting of 147 sittings, and stretching from June 1927 to February 1928, the Commission considered issues of importation, distribution, exhibition, and production as a means to legislate future strategies concerning its global integration (Gaunson, 2012). Despite not finding any evidence that a 'combination' of exhibition and distribution interests existed, the Commission made a number of recommendations to support local production, namely, the introduction of a quota and a system of awards, which ultimately failed.

By 1929, no single locally made picture was released and the federal government went to an election. The Labour government of James Scullin that followed showed no political will to support local production or upset a powerful media player in the film industry. By all accounts though, it wasn't the collusion of an embedded distribution and exhibition sector that prevented the local production industry from gaining meaningful outcomes from the Commission. Rather it was a lack of organised, coherent, and consistent voice from producers.

A patchwork of production continued during the introduction of sound, but after World War II, Australia became a virtual backlot for overseas film production, namely, British and American films. Most films made after the war were produced and financed by British and American companies motivated simply by the need to use capital frozen in Australia by wartime restrictions. Sir Robert Menzies, Australia's longest serving Prime Minister, took office in 1949 and also introduced capital issues restrictions in 1951, which prohibited the formation of public companies that sought to raise capital beyond £10,000 limit (Pike & Cooper, 1998). This stopped Australian production of major features and made it difficult for local producers to raise funds from local investors.

During this period, there were a number of developments which would prepare the government for a greater role in the industry. In 1940, UK documentarian John Grierson visited Australia. He made the case for distributing documentary films outside the sphere of commercial film trade, which the federal government adopted. Founded as the *Film Division of the Australian National Film Board* in 1945, it was renamed *The Commonwealth Film Unit* in 1956 and in 1973 became Film Australia until it merged with *Screen Australia* in 2008. It grew to be one of the leading producers of television documentaries and educational videos with purpose-built studios, its own distribution, a stability of production, and professional practice.

Possibly the most important development though was the introduction of television in 1956. The rapid acceptance of television did much to establish the preconditions for a renewal of government interest in the Australian film industry, and the decision in 1960 to restrict imports on locally made television commercials gave stability to a local production industry (Dermody & Jacka, 1987).

Between 1962 and 1963, a Senate Select Committee on the *Encouragement of Australian Production for Television* was set up in response to community dissatisfaction with a lack of Australian content, particularly in drama. This led to more vocal and organised lobbying of government for assistance for feature film production. By this stage, industry professionals had begun to organise themselves into producer associations, writers' guilds, directors' guilds, and other professional associations.

In 1967, Liberal Prime Minister Harold Holt set up the *Australia Council for the Arts*, and in 1968 a Film and Television Committee was added to its structure. In 1969, it recommended the establishment of a National Film and Television School, the *Australian Film Development Corporation*, and an 'Experimental Film Fund' (Bertrand, 1989). The *Experimental Film and Television Fund* (EFTF) set up in 1969 had a budget of $300,000 per year. It ran until 1977 when the fund was rolled over into the *Australian Film Commission* and was the first step in a broader plan to revive the industry (French & Poole, 2011). It was an initiative of the conservative Prime Minister John Gorton who was a vocal supporter of film and was designed to fund film culture and provide an alternative career option for filmmakers other than through TV broadcasting or the Commonwealth Film Unit (French & Poole, 2011).

2.2 Australian Film Development Corporation

In addition to the EFTF, Prime Minister John Gorton also established the *Australian Film Development Corporation* (AFDC) in 1970. The AFDC's brief was 'encouraging the making of Australian cinematograph and television films and encouraging distribution of such films within and outside Australia' (Molloy & Burgan, 1993). The AFDC bill was significant because it made 'Australian film' defined by a parliamentary act. It was a policy of encouragement rather than protection and made no attempt to change the exhibition or distribution system (Bertrand, 1989). The establishment of the AFDC was in effect the beginning of public funding of film in Australia and over subsequent years led to increasing levels of film production (Fig. 1).

In selecting projects, the Corporation was expected to give preference to the most commercially promising proposals, although exceptions on grounds of artistic excellence were permitted. Assistance was provided in the form of loans,

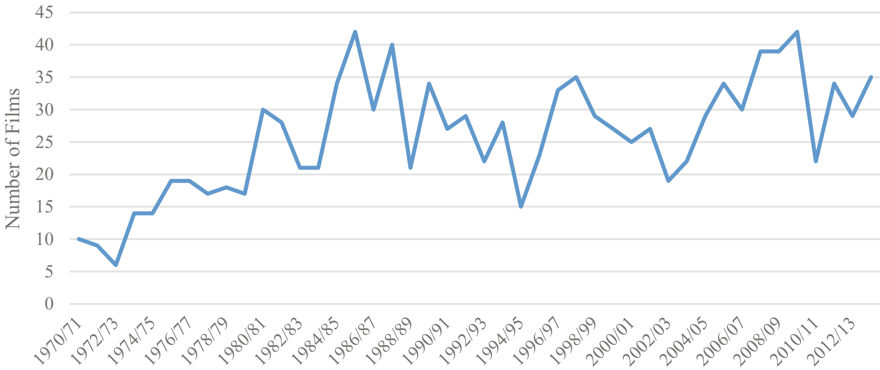

Fig. 1 Number of Australian feature films produced since 1970–1971 (Source: Screen Australia (2015f), Production Industry: Drama)

guarantees, or equity investments. AFDC investment contributed on average 30% of film expenditure according to some sources, although in later years this was between 53% and 58%.

Between September and November 1972, *The Tariff Board Inquiry* was held to determine whether the Australian film industry required industry assistance. In addition to outlining industrial barriers to profitability, the report also acknowledged that the local production industry performed other important role other than an industrial one. It stated, 'In other words, a variety of national, cultural, artistic and aesthetic aspirations, for which film is an important, if not the most important, medium were not being adequately catered for under present circumstances' (Tariff Board, 1973, pp. 5–6).

In December 1972, a new Labour Government under Gough Whitlam came to power, and the results and recommendations of the Inquiry were submitted. The report recommended divorcement and divestiture of 'concentrations of commercial power that favour the films of overseas producers' between distributors and exhibition in order to provide 'equality of opportunity in the marketing of Australian films' (Tariff Board, 1973, p. 7). Jack Valenti, Head of the *Motion Picture Distributors Association of America*, visited Australia in April 1973 on the eve of the release of the report, and most of the recommendations of the Tariff Board were not implemented. Whitlam did act on one recommendation and set up an interim board for a new organisation to replace the AFDC and to rationalise government involvement.

2.3 The Australian Film Commission

In 1975, the *Australian Film Commission* (AFC) was established under Prime Minister Gough Whitlam. His government lost office soon after but the Commission was continued by the new conservative Prime Minister Malcolm Fraser. This was despite attacks to other areas of cultural funding by the new government like the *Australian Broadcasting Corporation* (ABC). It was believed that this was because the government had recognised that diplomatic and trade benefits were derived from film.

The AFC had a broader brief than its predecessor and included the funding of script development, distribution and promotion, and research and policy advice. In general, it sought to provide an environment that nurtured film ideas, personnel, and culture. The new agency also took over administration of the *Commonwealth Film Unit*.

The years 1977–1979 saw an increase in the number of films produced in Australia (see Fig. 1) and an increase in budgets, but fewer films made returns on their investment. Formica (2012) notes the industry was characterised by low-budget production in the first half of the 1970s where private investment was more significant. After 1975, when the industry received a dramatic boost from the government, private investment 'failed to keep pace with the growth of the industry' and declined.

In 1979, an independent review entitled *Towards a More Effective Commission* suggested that the AFC should be restructured into a more business-like entity. According to the report, Australian films in the early years were a novelty and quoted a one-in-five success rate for local productions, but a glut of Australian product meant that the 'mystique' of Australian films had begun to disappear. The report also stated that 'the financing of feature films is a complex procedure which within Australia is becoming increasingly sophisticated although still, by world standards, lacking in sophisticated financing techniques' (p. 28). Evidence indicated that alternative tax schemes were being used to fund Australian films at the time that pushed the spirit if not the letter of the tax law.

The report recommended deductions on the subscription of shares in a company that produced Australian films such as those used in the mining industry. This was not supported by the AFC or Treasury, but in the run-up of the federal election in 1980, changes to the tax legislation were announced by the Liberal-Conservative Party as their primary policy to support the industry.

2.4 Section 10BA

In May 1981, after the Fraser government returned to power, *Section* 10BA was introduced. Although the *Australian Film Commission* remained, the tax act would become the primary vehicle for film industry assistance and an alternative to increased direct funding. The initial 10BA incentive provided for a 150% tax deduction on eligible expenditure on qualifying Australian films in the year the expenditure was incurred, as well as a tax haven on returns up to 50% of the initial investment. With the top marginal tax rate in that year being 60%, this effectively meant a 90c tax deduction for each qualifying dollar spent for those earning enough income. The effects were almost immediate.

Table 1 10BA tax concession rates

10BA concession	Marginal tax rate (%)	Amount at risk (as % of amount invested)	Break-even point (as % of amount invested)
150/50 From October 1980	60	10	10
133/33 From August 1983	60	20.2	20.2
120/20 From September 1985	60	28	40
120/20 From July 1987	49	41.2	61.6
100/0 From July 1988	49	51	100
100/0 From July 2006	46.5	53.5	100

Source: AFC (1986, p. 4, 2006)

In 1979–1980 the total budget amount raised for films was A$10 million, with A$3 million from private investors. In 1980–1981, A$50 million was raised with A$45 million from private investors (AFC, 1986). Production boomed in 1981 but by 1982 it had slumped again. This was largely attributed to the ‘12-month rule’ in the legislation which required the deadline for completion of film production to be the 30th of June (the end of the financial year). This created compliance issues, especially for films that had seasonal or location requirements (Formica, 2012). The result was a bunching of production, leading to competition and an inflation in costs of cast and crew. In January 1983, the government modified the tax scheme so that investors could claim in the year of expenditure, and the problem was solved.

In March 1983, the new Labour government of Bob Hawke set about modifying the 10BA concessions due to concerns over costs to government and cut back the concessions to 133%/33%. They were later reduced again in 1985 and in 1988 (see Table 1). According to the *Australian Film Commission* (1986), as government decreased the level of subsidy, gaps in finance began to emerge as investors required presales to optimise the incentive through the tax haven. The level of guaranteed presale income required to attract investors had reached 65% of the budget by 1985 and was predicted to climb to 75–80% once the changes to marginal tax rates in 1987 were introduced.

Although 10BA was not the only way to fund film production during the 1980s, it was the primary means by the majority of producers (Fig. 2). In later years, non-10BA films also included low-budget projects from first-time filmmakers that had some market presales and direct investment from the AFC and state

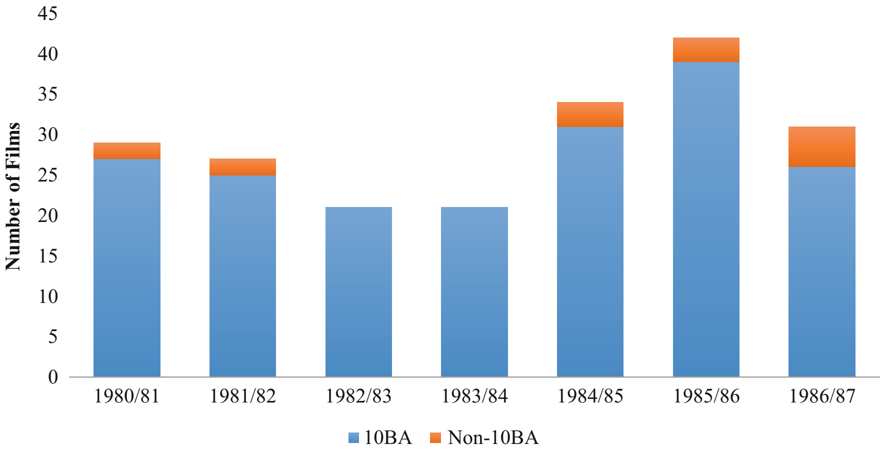

Fig. 2 Australian feature films produced (10BA and non-10BA), 1980/1981–1986/1987 [Source: AFC (1988)]

organisations. During 10BA, the AFC played a very different role to the one it had played in the 1970s. The Commission was restructured at the time 10BA was introduced, separating script and production from screen culture funding (AFC, 1988). Previously it invested up to 50% of a films budget, but under 10BA it put money in ways that would enhance the attractiveness of the financial package to a potential investor. It continued to invest in script and project development which would later be bought out by the investor if the project went into production. It gave marketing assistance and also began to offer new financial facilities such as bank guarantees, completion guarantees, 'overage loans', and underwriting facilities (Dermody & Jacka, 1988). It was able to do this principally through the *Special Production Fund*, which was provided by the government after the August 1983 budget reduced the size of the incentive from 150/50 to 133/33, to compensate for an anticipated drop in production, which did not actually occur.

By the mid-1980s, Treasury became concerned that the cost to revenue had become excessive in the absence of any cap on 10BA raisings each year (Fig. 3). Many investors were being secured on the basis of attractive tax breaks rather than any inherent interest in film and the filmmakers they had backed. Government still wanted to support the industry and its cultural objectives but wanted to do so by reducing the annual cost to revenue for production support.

The AFC undertook to find an alternative mechanism for support, and the idea of a 'film bank' came in the discussion paper, *Film Assistance: Future Options*. Rather than 'picking winners', the proposed agency would allow the market to lead its decisions on which projects to support. The 'market' consisted of broadcasters, distributors, and sales agents both in Australia and abroad. Under the proposals, 10BA would cease. The AFC would gain A$10 million for a fund to fully fund riskier films.

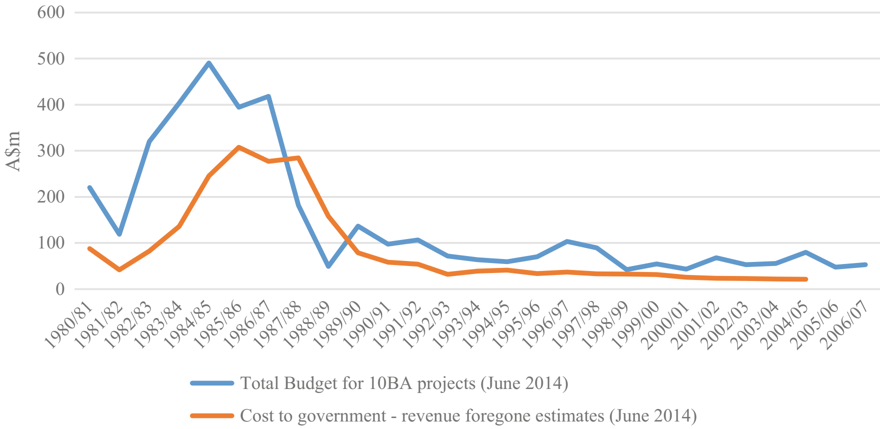

Fig. 3 10BA budgets and estimated cost to government (Source: Screen Australia, Archive: production Incentives, Levels of financing of 10BA projects and effects on government revenue, 1980/1981–2006/2007)

The idea was supported by industry and was set up in the mini-budget of May 1988, with initial funds for 4 years. Future funding was to be pinned to a review of its performance in 1991, but the then treasurer Paul Keating 'had bought the idea of the FFC from the industry in the belief that it would become self-funding' (Maddox, 1996). 10BA was not revoked, but the level of incentive was reduced to 100% write-off but with no tax haven on income. The AFC remained with its focus on project and professional development and policy.

2.5 The Australian Film Finance Corporation (FFC)

The notion of a film bank proposed by the AFC was short-lived. Established in 1988, the FFC ended up making equity investments rather than loans. FFC investments depended on meeting a minimum level of investment from private investors or the marketplace. Other factors such as the experience of the team, the commercial track record of the producer, expected returns to the FFC, and the size of the budget were secondary factors. This was somewhat different to the approach of the AFC where the decision was largely made by government employees on the basis of 'perceived quality' or 'cultural merit' and in contrast to the funding decisions under 10BA which may have had little to do with the films or the filmmaker themselves.

The early years of the FFC were troublesome with non-FFC films outperforming FFC films in the marketplace. Luckily, 1992 saw the release of *Strictly Ballroom*—a surprise hit from a first-time producer, director, and star. The extent of the success of that film validated the FFC in the eyes of the government of the day, and when *Muriel's Wedding* and *The Adventures of Priscilla, Queen of the*

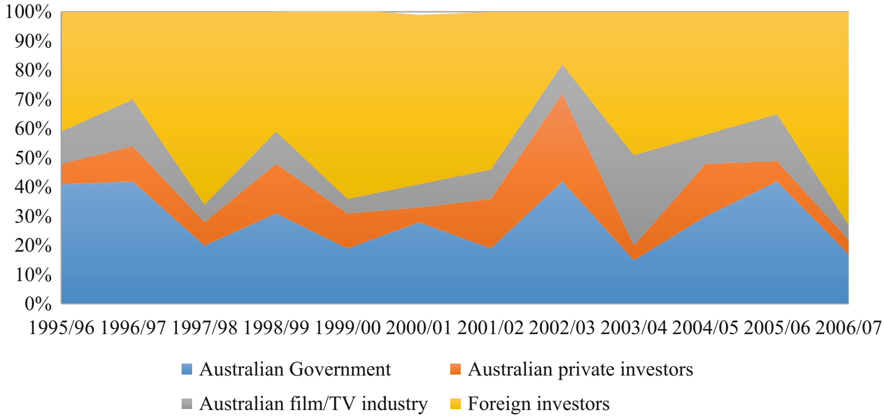

Fig. 4 Sources of finance for Australian feature films, 1995/1996–2006/2007 (Source: Screen Australia (2015g), Production Industry, Drama: Features, Sources of finance)

Desert became both critical and box office successes in 1994, the policy appeared to be working.

In 1997, the industry was beginning to change. There were increasing levels of international trade in audio-visual products and global strategies to liberalise it; new technologies were influencing the way in which films were produced and delivered to audiences (including pay TV); and there was a convergence of technologies creating increasingly dominant global communications and media companies (Gonski, 1997). The international marketplace became an important financier of Australian films (Fig. 4). Over the FFC period, a number of international sales agents grew to connect the local industry to the global marketplace, including Beyond Films and Southern Star (now major production houses).

In 1997 the *Review of Commonwealth Assistance to the Film Industry* was conducted by David Gonski and found that only 20% of Australian films were made without direct government funding. The review introduced the concept that 'many doors' were needed for producers to seek assistance. The report warned against the 'informed subjective' decision-making that was 'confined to a small number of (influential) individuals whose personal opinions or taste may be reflected in what is supported and ultimately screened to the public' (Gonski, 1997, p. 10).

The report was also concerned about the existing number of agencies resulted in overlap and duplication. It outlined the core functions of the agencies:

- FFC—to provide assistance for film and television production, including documentaries
- AFC—script development and professional development of new entrants to the industry
- AFTRS—advanced training to the industry

- National Film and Sound Archive—collection, preservation, and provision of access to the Australia's audio-visual heritage
- Film Australia—commission products under the National Interest Program

While this was important for the industry, the report did not lead to any lasting changes for the way feature film production was funded in the industry, other than the pilot Film License Investment Corporations (FLIC), which were ultimately unsuccessful at providing a 'second' financing door for producers.

Between 2004 and June 2007, the Australian *Film Finance Corporation* (FFC) implemented their own "two-door" financing policy for Australian film producers. Although not quite that envisaged by Gonski, the first door, or the *Marketplace*, provided automatic funding by the FFC for feature films that had financing from non-government (marketplace) sources that made up a minimum of 25% of their budget. This was largely a commitment by an Australian theatrical distributor to release the film, usually but not always, through the provision of a guarantee of sales revenue (referred to as a distribution guarantee or minimum guarantee). The FFC would contribute no more than 45% of the budget of these films.

The second door, the *Evaluation*, provided potentially higher levels of government funding as a percentage of budget for films that had some degree of commitment from the marketplace (financial or nonfinancial) but which also passed an evaluation by an internal assessment committee (a 'panel of experts'). There was no prescribed level of contribution needed from the marketplace for the *Evaluation* door.

The *Marketplace* films were assessed only by experts that came from distributors and/or broadcasters, while the *Evaluation* films had marketplace endorsement as well as an assessment from internal and external assessors.

In terms of performance, there was very little difference between *Marketplace* films and *Evaluation* films when measured by box office (Rossiter, 2013). The median box office for *Marketplace* films was A$690,000 as opposed to A$620,000 for *Evaluation* films. However, 75% of *Marketplace* films earned less than A$2.5 million, while 75% of *Evaluation* films earned less than A$1.6 million. The key difference was in the cultural performance of the films. More *Evaluation* films were screened at A-List film festivals than did their *Marketplace* counterparts.

In 2006, the government called for a *Review of Australian Government Film Funding Support*. Questions the review posed were directed at identifying the most appropriate model for direct government support of the industry and whether the current model under the FFC, AFC, and Film Australia delivered the best outcomes.

The FFC argued that the current structure, where the AFC funded development and it funds production of feature films, did not promote cohesion and lacked a genuine rationale (FFC, 2006). While not arguing directly for a restructuring of agencies towards a more unified approach, it did argue that keeping the agencies as separate divisions would produce problems. It also argued that the 'many-doors' approach was not working effectively in Australia and that the small market in Australia meant that value could not be maximised except through a coordinated

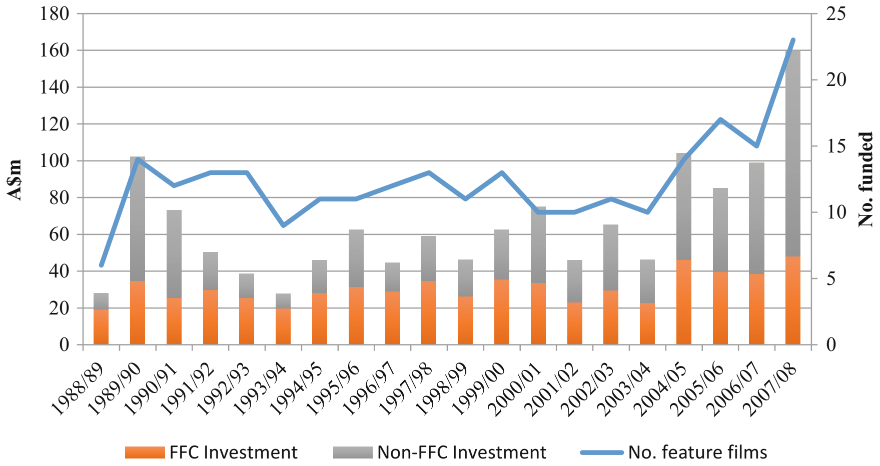

Fig. 5 FFC feature film investment, 1988/1989–2007/2008 [Source: FFC (annual report, 2007/2008)]

approach, the exception being production support—one through direct funding and the other through indirect (for larger productions).

The AFC also supported the idea that ‘there are some obvious efficiencies and synergies that could be gained by locating all the directly supported programs under one agency’ (AFC, 2006, p. 56) but that any change in industry structure needed to be consequential to the introduction of a ‘tried-and-tested’ indirect funding alternative, arm’s length from the government, and it would be preceded by wide consultation.

Over its 20-year history, the FFC supported 248 feature films with an investment of A$622 million (almost A$1 billion in 2014 dollars). The total production budgets were A$1.3 billion (Fig. 5).

2.6 Screen Australia

Screen Australia came into effect on 1 July 2008 by virtue of the *Screen Australia Act* (2008) with the following functions:

(a) Support and promote the development of a highly creative, innovative, and commercially sustainable Australian screen production industry.
(b) Support or engage in:
   – The development, production, promotion, and distribution of Australian programmes
   – The provision of access to Australian programmes and other programmes; and support and promote the development of screen culture in Australia
(c) Undertake any other function conferred on it by any other law of the Commonwealth.

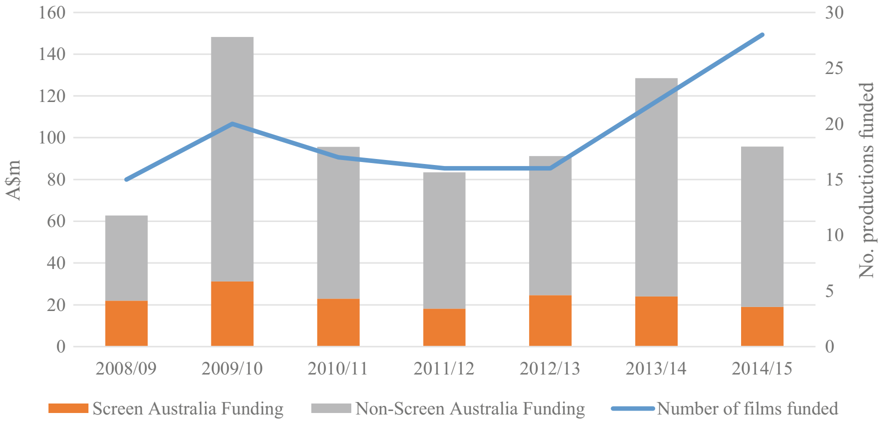

Fig. 6 Screen Australia feature film investments, 2008/2009–2014/2015 (Source: Screen Australia Annual Reports 2008/2009–2014/2015)

Screen Australia investment funding is available to feature films of any budget range, including low-budget non-offset projects, that is, films with qualifying applicable production expenditure (QAPE) below the threshold of A$1 million, as well as to offset-eligible projects. *Screen Australia* originally operated with a capped investment of A$2.5 million in a single feature film. As a result of significant reductions in appropriations announced in the federal budget in May 2014, this cap was reduced to A$2 million (Screen Australia, 2014).

By end of June 2015, *Screen Australia* had supported 134 feature films. The nominal investment of A$161.8 million generated total budgets of A$705.3 million (Fig. 6).

2.7 The Producer Offset

The history of 10BA as a means of support during the 1990s and early 2000s was largely one of disappointment (Fig. 7). It had become too complex for investors, and risk/return level was deemed too high. There were some exceptions, but many of the films funded through 10BA during its last two decades were low budget and used as an option to fill a gap, rather than fully fund a film.

During the 2006 *Review of Australian Government Film Funding Support*, there was general agreement from the industry that greater incentivisation of production through indirect support of the industry was needed through some form of offset, and for feature films, that offset should be set at 40%. A large part of the reason for the introduction of an offset was that in 2001 the *Refundable Film Tax Offset* was introduced to encourage large foreign productions to shoot in Australia (later the Location Offset). This was set at 12.5% of budgets with expenditure over A$15 million but now sits at 16.5%.

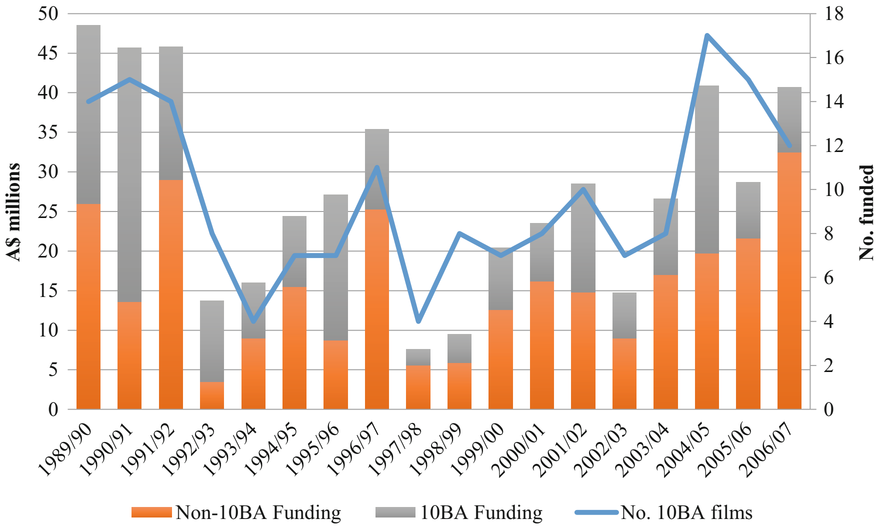

Fig. 7 10BA-funded feature films, 1989/1990–2006/2007 (Source: Screen Australia (2015a), Archive, Production Incentives: 10BA, Number of projects and estimated total value of production budgets raised through 10BA, according to type of project, 1980/1981–2006/2007)

Introduced in July 2007 and further refined in July 2011, the Producer Offset is administered by *Screen Australia* and offers a 40% tax rebate for feature films. Originally, the threshold for eligibility was A$1 million dollars in eligible production expenditure (which did not include financing or marketing expenditure) but after a review in 2010 was reduced to A$500,000 to encourage more low-budget films.

In addition to the format requirement, there are two primary criteria that need to be met—the *Significant Australian Content* (SAC) test and the *Qualifying Australian Production Expenditure* (QAPE) threshold. Further requirements include meeting relevant commencement and completion dates and eligibility of applicants. The Offset is only available to companies, and the company must be an Australian resident or have a permanent establishment in Australia and be able to lodge an income tax return in Australia.

The SAC test will be met where the film has a sufficient level of Australian content, which can be determined by subject matter, the place the film was made, the nationalities or places of residence of the persons involved in making the film (including directors, producers, scriptwriters, cinematographers, actors, and editors), where the funding came from for the film, or any other matters considered to be relevant by Screen Australia. The efficacy and the secrecy of the SAC test have been called into question at times. When first introduced, George Miller's high-budget *Justice League: Mortal* was refused its Australian certificate. Alex Proyas' *Knowing* was also rejected at first but then later passed the SAC test enabling the producers to claim the Offset.

One of the more contentious issues is that the film must be produced for public release or distribution in some form. Feature films, being the only form of production receiving a 40% tax rebate (others receiving only 20%), must show evidence of intent to have a cinema release in Australia, screened as the main attraction in a commercial cinema. A distribution agreement with an established distributor, not necessarily with a corresponding minimum guarantee, is considered proof enough (Screen Australia, 2010). This puts limits on a producer's ability to self-distribute or utilise alternative distribution mechanisms and reinforces if not increases the market power of distributors to greenlight Australian feature films.

In February 2007 Senator George Brandis, the then Minister for the Arts, issued a press release in which he said that 'the Government expects the Producer Offset will provide a real opportunity for independent producers to retain substantial equity in their productions and build stable and sustainable production companies, and should therefore increase private investor interest in the industry' (SPAA, 2010). *Screen Australia*, however, reports that private investment has actually decreased since the *Producer Offset* as a proportion of budgets in comparison to the trend during the FFC period. In the 2010 *Review of the Independent Screen Production Sector*, *Screen Australia* reported that the industry perceived there to be a lack of private investment partly due to the removal of 10BA and that some sections of the industry called for its reprisal (Screen Australia, 2010).

3 An Empirical Evaluation of Public Film Funding in Australia

As the second major contribution of this chapter, this section outlines a simple statistical model that builds on the study of McKenzie and Walls (2013) published in the *Journal of Cultural Economics*. The objective is to analyse a sample of Australian feature films that received funding support from the *Film Finance Corporation* (FFC) over the years 1997–2007 and *Screen Australia* over the years 1998–2015 and assess the impact of this funding on box office revenue outcomes.

3.1 Hedonic Model of Demand

Many academic studies have now amassed that investigate the correlates of successful films (McKenzie, 2012). Scholars have typically considered these in the form of a 'hedonic' regression model in which various film attributes are quantified and considered as explanatory variables of box office revenues. This section presents one such model similar to that described by McKenzie and Walls (2013). The specific hedonic model presented below is standard in many ways but introduces two additional explanatory variables relating to whether a particular film received public funding from the (former) *Film Finance Corporation* (FFC) or *Screen Australia* and, if so, at what level.

Letting j index individual films, the OLS regression model has the following form:

$$\begin{gathered}\ln\ \text{Revenue}_j = \beta_0 + \beta_1 \ln\ \text{Budget}_j + \beta_2 \ln\ \text{OpScreens}_j + \\ \beta_3 \ln\ \text{FFC}_j + \beta_4 \ln\ \text{ScrnAus}_j + \beta_5 \text{Review}_j + \\ \beta_6 \text{Star}_j + \beta_7 \text{Sequel}_j + \Gamma[\text{Genre}, \text{Rating}]' + \varepsilon_j\end{gathered}$$

where 'Revenue' may refer to opening week or total box office revenue; 'Budget' is the film's production cost; 'OpScreens' is the number of screens upon which the film was released in opening week; 'FFC' and 'ScrnAus' are the amount of funding (if allocated) under the FFC or *Screen Australia* system, respectively; 'Review' is the average critical review; 'Star' is a dummy for whether any of the lead actors are an A or A+ talent; 'Sequel' is whether the film was a sequel; and 'Genre' and 'Rating' are sets of dummy variables for the respective genre and classification rating assigned to each title.

The revenue and screen count data were compiled by the Motion Picture Distributors Association of Australia (MPDAA). Budget data was collected from various sources (Rentrak, IMDb, Box Office Mojo, etc.). FFC and *Screen Australia* funding data was compiled from annual reports. Review data was compiled from ABC and SBS film reviews from popular Australia television programmes (except for 2015 for which SBS or *The Sydney Morning Herald* reviews were used). Star data was constructed using James Ulmer's Hollywood Hot List for 1997–2007 and Quigley's Lists for 2008–2015. Finally, Genre and Ratings were constructed from MPDAA information. More details about the data can be found in McKenzie and Walls (2013).

Descriptive statistics are provided in Table 2 for the subsamples of films that did and did not receive funding, as well as being broken down by FFC or *Screen Australia* funding classification. All dollar amounts are reported in Australian dollars December 2015 prices. On average, across the years of the sample 1997–2015, Australia released an average of 29 films per year equating to approximately 13% of all theatrical releases. However, as noted in the introduction, the claim on box office is considerably less with an average of about 4.5% across the sample period. This is also reflected in the average (median) revenues received by individual films. Over the 477 film samples, the average (median) opening weekend and total revenues were approximately A$511,100 (A$100,500) and A$1.81m (A$300,500), respectively. Of course, with average (median) budgets of A$11.6m (A$5.3m) and average (median) release screens of 54 (17), this may not be entirely unsurprising considering the typical budgets and release scale (and associated marketing) of Hollywood films.

3.2 The FFC and Screen Australia Data

As discussed in the previous sections, the government-owned *Film Finance Corporation* (FFC) provided public funding for television and feature films between the

Table 2 Summary statistics of Australian films

Variable	Non-financed films N	Mean	Median	Std. dev	Financed films N	Mean	Median	Std. dev
Opening week revenue ($Am)	271	0.43	0.04	1.23	205	0.56	0.19	0.94
Total revenue ($Am)	272	1.62	0.15	5.04	205	2.06	0.56	3.62
Opening week screens	272	46	9	85	205	67	27	81
Production budget ($Am)	141	11.70	2.96	26.20	125	6.43	5.16	4.85
Review (0–5 stars)	193	3.41	3.50	0.62	186	3.40	3.50	0.72
Star (= 1 if A/A+)	272	0.03			205	0.02		
Sequel (= 1 if prequel/sequel)	272	0.02			205	0.01		
	FFC financed				Screen Australia financed			
Opening week revenue ($Am)	126	0.51	0.23	0.79	79	0.63	0.10	1.14
Total revenue ($Am)	126	2.08	0.76	3.52	79	2.03	0.41	3.81
Opening week screens	126	58	27	61	79	80	27	103
Production budget ($Am)	78	6.18	5.14	3.87	47	6.84	5.19	6.16
Review (0–5 stars)	116	3.43	3.50	0.77	70	3.36	3.50	0.64
Star (= 1 if A/A+)	126	0.01			79	0.04		
Sequel (= 1 if prequel/sequel)	126	0.00			79	0.03		

years 1988 and 2007 in Australia. Thereafter, this role was assumed by *Screen Australia* and continues through to the present day. Using FFC and *Screen Australia* annual reports from the years 1995–1996 to 2014–2015, we have data on the 205 funded films out of 477 films theatrically released over this period. Of the 126 films that received FFC funding, the average amount awarded was A$3.35m (2015 dollars) (note that in this analysis no distinction is made between 'Marketplace' and 'Evaluation' films). Of the 79 films that got financed by Screen Australia, the average amount of funding awarded was A$1.53m.

Under the FFC, the amounts funded ranged from A$400,000 (*Gettin' Square*) to A$8.1 million (*Oscar and Lucinda*). Under Screen Australia, the amounts ranged from A$100,000 (*Electric Boogaloo: The Wild Untold Story of Cannon Films*) to A$3.9m (*Tomorrow, When the War Began*). Figure 8 shows the relationship between the amount of FFC and Screen Australian funding and total box office revenues, respectively. As the linear predictions illustrate, there is some evidence of positive correlation between total revenue and FFC funding (0.27) and between total revenue and *Screen Australia* funding (0.59).

In terms of a simple naïve measure of rate of return (defined as total revenue divided by funding), the average for FFC films was 0.75 with a median of just 0.27,

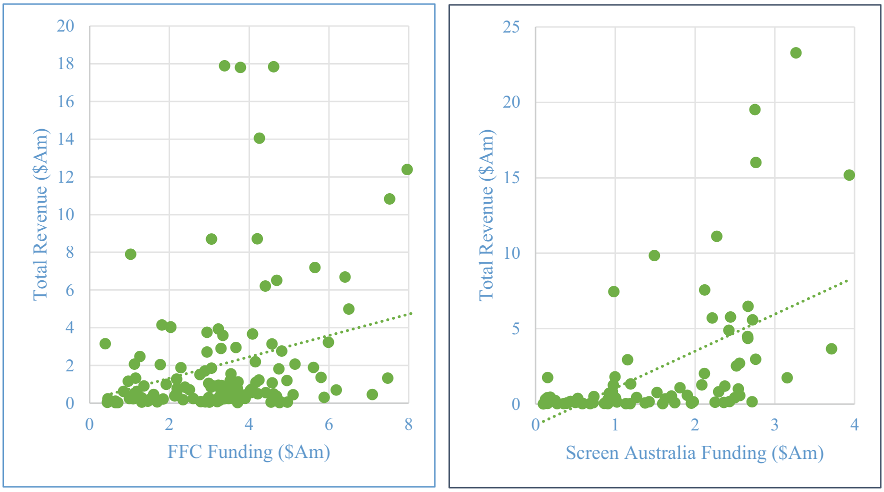

Fig. 8 Box office revenue vs. funding

implying the typical FFC film not even recouping its funding outlay. The *Screen Australia* naïve average (median) rate of return is slightly better at 1.34 (0.49). Clearly, however, the amounts of revenues finding their way back to the FFC or *Screen Australia* after exhibition and distribution expenses would have been considerably less implying an even lower actual rate of return than the naïve measure presented.

3.3 Empirical Results

Results of variants of the hedonic regression model above are presented in Table 3. Primarily, the objective is to assess whether FFC or *Screen Australia* funding has any measureable effect on box office revenues after controlling for various film-specific observable covariates. It should be noted from the outset that such an approach presents significant statistical challenges as isolating contributing factors of a film's success cannot be done in a controlled environment. For example, the interplay between budget, opening screens, and star presence makes identifying individual factors of success extremely difficult. Therefore, the regression results presented here should be cautiously interpreted and are more a story of correlations than causation. However, there are still certainly insights that can be gained from this exercise.

Models 1 and 5 of Table 3 present the results where the only explanatory variables are whether or not the film received FFC or *Screen Australia* funding and, if so, the level (films without funding are recorded as zero to avoid problems with a log transformation of the zero value), reviews (insofar as they may influence box office), star presence, sequel, and controls for genre and rating. In both

Table 3 Hedonic regression model results

	ln opening week revenue				ln total revenue			
	1	2	3	4	5	6	7	8
ln Budget			0.633***	0.053			0.599***	0.053
			(0.104)	(0.056)			(0.104)	(0.070)
ln OpScrns				0.990***				0.931***
				(0.056)				(0.070)
ln FFC	0.080***	0.067***	0.037**	0.024***	0.086***	0.073***	0.044**	0.032***
	(0.013)	(0.017)	(0.015)	(0.008)	(0.014)	(0.018)	(0.016)	(0.011)
ln ScrnAus	0.066***	0.077***	0.047***	0.006	0.071***	0.073***	0.044***	0.005
	(0.017)	(0.021)	(0.018)	(0.011)	(0.017)	(0.022)	(0.020)	(0.015)
Review	0.682***	0.750***	0.593***	0.602***	1.030***	1.150***	1.000***	1.010***
	(0.139)	(0.184)	(0.163)	(0.081)	(0.146)	(0.196)	(0.177)	(0.113)
Star	3.550***	3.510***	1.740***	0.957***	3.710***	3.690***	2.020***	1.280***
	(0.522)	(0.484)	(0.433)	(0.248)	(0.583)	(0.530)	(0.517)	(0.385)
Sequel	2.670***	2.340***	1.810***	0.892***	2.670***	2.390***	1.890***	1.030***
	(0.622)	(0.533)	(0.428)	(0.359)	(0.668)	(0.647)	(0.533)	(0.499)
Const.	7.650***	8.180***	−0.506	5.360***	7.550***	7.940***	−0.277	5.240***
	(0.560)	(0.712)	(1.580)	(0.772)	(0.603)	(0.763)	(1.590)	(0.979)
Genre dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rating dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	370	209	209	209	370	209	209	209
R-sq	0.335	0.36	0.511	0.858	0.362	0.406	0.519	0.775

Note: Standard errors in parenthesis

*, **, and *** represent two-tailed significance at 10%, 5%, and 1%, respectively

instances, positive statistical significance of funding is observed, albeit with low elasticities (i.e. coefficients in the log-log specification). Given the spotty coverage of budget, the number of observations is reduced when this variable is introduced.

Models 2–4 and 6–8 provide results for the reduced sample of 209 films. Models 2 and 6 are identical to Models 1 and 5 but are estimated on the reduced sample. All variables maintain their sign and significance. Inclusion of budget in Models 3 and 7 shows a significant positive relation and still a significant role for funding from both sources. In these models, there is some evidence that the funding level impacts box office by creating a more commercially appealing project or alternatively making more efficient use of the available budget.

Further inclusion of opening screens in Models 4 and 8, however, removes significance of budget and also the *Screen Australia* funding variable. This result is not atypical of models of this type given the high correlations between screens (theatres) and revenues. Of course, as pointed out above, establishing causality is difficult given the interrelationships between variables. The fact FFC funding remains significant, however, is interesting and potentially suggests the FFC funding model was more successful in identifying and investing in relatively more commercially successful films. Although, as also discussed above, the low rates of return observed certainly do not imply positive returns on investment from the theatrical release of these films.

Of course this analysis has been premised on determining whether FFC and/or *Screen Australia* funding leads to better commercial outcomes for films at the box office. The objectives of public funding, however, are likely more nuanced. Ostensibly, the objectives of a national funding agency are to support the arts and culture of the society and support local filmmaking talent. So while funds may not always be recouped at the box office, the support afforded to the film industry through funding provides an important tool of support to filmmakers and talent while providing the society a means by which to reflect on itself—one of the fundamental objectives of cultural subsidisation. Indeed, *Screen Australia* recently outlined cultural impacts (understanding ourselves), audiences (inform, entertain, educate, and inspire), craft skills (working on projects of varying scales), and international resonance (projecting Australia to the world), in addition to economic dividends (returns for businesses and the economy) as the main reason for supporting the local film industry.

4 Conclusion and Discussion

This chapter has examined the recent history of public film funding in Australia. Through various governments and arrangements, there has been considerable experimentation with different forms of funding and assistance. The primary ways in which government has opted to support the Australia film industry have been through subsidy (direct funding) or incentive (indirect funding). During the 1990s, the primary means of support was through subsidy. With the turn of the century, government has opted for an increasing mix of both subsidy and incentive.

For the time being, the Producer Offset looks here to stay, but with convergence of media platforms and changing audience viewing behaviours, there is some debate about the relevance of a distinction between an offset for a feature film which is set at 40% of eligible funds and 20% offset for other programmes such as TV drama and documentary. The federal government's *Convergence Review* conducted in 2011 raised the idea of a 40% offset for all types of production (DBCDE, 2012).

This distinction is important because Australia, like many other countries, has experienced an increasing convergence of media channels. While cinema has not been the only means by which audiences can view feature films for some time, there are now more screens than ever before delivering more content in more ways to more fragmented audiences. Cinema competes with television, DVD or Blu-Ray, and video online. Assessing the performance of a feature film must take into account these various access points across the entire lifecycle of the film. Theatrical revenues tell a vital but incomplete story about the performance of feature films. Assessment of the performance of Australian feature films must move beyond the box office, despite it being a significant lead indicator, it is not the only one.

A further issue not directly discussed in this chapter is the role of foreign co-productions. The most significant advantage of co-productions is the access to extra finance that the structure offers. By qualifying as a co-production, a project is automatically classified as a national production in each of the participating countries. This opens up access to government funding in each territory, both direct (government investment, grants, and loans) and indirect (incentives such as tax credits and rebates), which is often restricted to national films and programmes. Access to additional finance can enable producers to work with larger budgets than might be possible on a domestic project and/or can ease the burden on each producer to raise large amounts of finance, by splitting the costs of production.

Australia's International Co-production Program began in 1986 and has been expanding ever since. To date, treaties and partnership agreements have been signed with 12 countries. The longest-running agreements are with France (the first to be signed), the United Kingdom, and Canada. China was added in 2006. These countries have been involved in 57 projects as of December 2014. There have been five projects involving more than one co-production partner. The total value of the budgets of these projects is A$642 million (not adjusted for inflation).

As Hollywood moves towards a reliance on tent-pole and franchise films, countries like Australia become attractive for co-productions. The issue for local filmmakers is how much funding gets diverted towards such projects at the expense of their own projects. This is relevant as public funding becomes increasingly scarce and competitive. Over the last three years, federal appropriations for *Screen Australia* have been cut significantly as the Australian government attempts to reign in a growing budget deficit. Total reductions to the agency since the 2014–2015 budget amount to A$51.5 million (Karlovsky, 2015), while an estimated A$47.3 million in support is being diverted toward large-budget foreign films such as the next instalment of *Thor* and *Alien: Covenant* (Frater, 2015). These highlight the issues of equity and opportunity provided by the subsidy system of who wins and who loses.

References

Australian Film Commission. (1986). *Film assistance: Future options—A discussion paper by the Australian Film Commission*. Sydney: Allen and Unwin.

Australian Film Commission. (1988, July). *Australian film data, selected film, video and television statistics from the Australian Film Database*. Sydney.

Australian Film Commission. (2006). *Submission to the department of communications, information technology and the arts, review of Australian government film funding support*. Sydney. http://arts.gov.au/sites/default/files/pdfs/70-australian-film-commission.pdf

Australian Film Commission. *Annual reports 1974/75 to 2007/08*. Sydney.

Film Finance Corporation. (2006). *Submission to the department of communications, information technology and the arts, review of Australian government film funding support*. Sydney. http://arts.gov.au/sites/default/files/pdfs/41-film-finance-corporation.pdf

Film Finance Corporation. Annual reports 1995/96 to 2007/08.

Australia. Parliament. Senate. Select Committee on the Encouragement of Australian Productions for Television. & Vincent, Victor Seddon. (1963), *Report from the select committee on the encouragement of Australian productions for television*. Published for the Govt. of the Commonwealth of Australia by A. J. Arthur Canberra.

Bertrand, I. (1989). *Cinema in Australia: A documentary history*. Sydney: University Press.

Department of Broadband, Communications and the Digital Economy. (2012, March). *Convergence review: Final report*. Canberra: Government of Australia. http://www.abc.net.au/mediawatch/transcripts/1339_convergence.pdf

Dermody, S., & Jacka, E. (1987). *The screening of Australia: Anatomy of a film industry*. Sydney: Currency Press.

Dermody, S., & Jacka, E. (1988). *The imaginary industry: Australian film in the late 80's*. Sydney: Australian Film Television Radio School.

Formica, S. (2012). *Peter Weir: A creative journey from Australia to Hollywood*. Bristol: Intellect.

Frater, P. (2015, December 16). Screen Australia budget cut as gov't confirms $34 Million for 'Alien','Thor'. *Variety*. http://news.yahoo.com/screen-australia-budget-cut-gov-t-confirms-34-061908771.html

French, L., & Poole, M. (2011). Passionate amateurs: The experimental film and television fund and modernist film practice in Australia. *Studies in Australian Cinema, 5*(2), 171–184.

Gaunson, S. (2012). Australian (inter)national cinema: The royal Commission on the moving picture industry in Australia, 1926–1928, Australasian Films Ltd. and the American monopoly. *Studies in Australasian Cinema, 6*(*3*), 290–301.

Gonski, D. (1997). *Review of Commonwealth assistance to the film industry*.

Karlovksy, B. (2015). Federal government cut screen Australia funding a further $10.3 million. *IF Magazine*. http://if.com.au/2015/12/15/article/Federal-Government-cuts-Screen-Australia-funding-a-further-10-3-million/HCQRARWUAO.html

Maddox, G. (1996). A history of the Australian Film Finance Corporation. *Media International Australia, 80*, 75–83.

McKenzie, J. (2012). The economics of movies: A literature survey. *Journal of Economic Surveys, 26*(1), 42–70.

McKenzie, J., & Walls, W. D. (2013). Australian films at the Australian box office: Performance, distribution and subsidies. *Journal of Cultural Economics, 37*(2), 247–269.

Molloy, S., & Burgan, B. (1993). *The economics and film and television in Australia*. Sydney: Australian Film Commission.

Pike, A., & Cooper, R. (1998). *Australian film 1900–1977: A guide to feature film production*. Melbourne: Oxford University Press.

Rossiter, C. (2013). *Two doors: Comparing the performance of expert systems used in the greenlighting of Australian motion pictures*, unpublished manuscript.

Screen Australia. *Archive: Production incentives, levels of financing of 10BA projects and effects on government revenue, 1980/81–2006/07*. http://www.screenaustralia.gov.au/research/statistics/archtax10bastats.aspx

Screen Australia. *Annual Reports 2008/09 to 2014/15*.
Screen Australia. (2010, July). *Submission to government review of the Australian independent film and television production industry*. Sydney. https://www.screenaustralia.gov.au/getmedia/d87154c0-bd1b-47b4-8785-57d011523b1f/2010Review_full_Final.pdf
Screen Australia. (2014). *Taking stock*. https://www.screenaustralia.gov.au/about_us/Corporate-TakingStock-CEO.aspx
Screen Australia. (2015a). *Archive, production incentives: 10BA, number of projects and estimated total value of production budgets raised through 10BA, according to type of project, 1980/81–2006/07*. http://www.screenaustralia.gov.au/research/statistics/archtax10batype.aspx#Rat92982
Screen Australia. (2015b). *Audio visual markets, cinema, share of the Australian box office for Australian feature films, 1977−2014*. https://www.screenaustralia.gov.au/research/statistics/cinemaboxofficeshare.aspx
Screen Australia. (2015c). *Audio-visual markets, cinema, number of Australian and overseas films released in Australian cinemas, 1984–2014*. https://www.screenaustralia.gov.au/research/statistics/cinemascreeningsxcountry.aspx
Screen Australia. (2015d). *Production industry, drama, Number of feature films produced, total production budgets and spend (current dollars*) in Australia, 1990/91–2013/14*. https://www.screenaustralia.gov.au/research/statistics/dramafeaturesactivitysummary.aspx
Screen Australia. (2015e). *Co-Production, statistics*. http://www.screenaustralia.gov.au/coproductions/statistics_home.aspx
Screen Australia. (2015f). *Production industry: Drama, 2015*. https://www.screenaustralia.gov.au/research/statistics/drama.aspx
Screen Australia. (2015g). *Production industry, drama: Features, sources of finance*. http://www.screenaustralia.gov.au/research/statistics/dramafeaturesfinance.aspx
Screen Producers Association of Australia. (2010). *Submission to government review of the Australian independent film and television production industry*.
Shirley, G., & Adams, B. (1983). *Australian cinema: The first eighty years*. Sydney: Angus & Robertson Publishers/Currency Press.
Tarrif Board. (1973). *Tariff board report motion picture films and television programs*. Canberra: Australian Government Publishing Service.
Tulloch, J. (1982). *Australian cinema: Industry, narrative and meaning*. Sydney: Allen and Unwin.

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