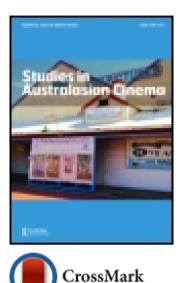
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Australian films at large: expanding the evidence about Australian cinema performance

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Australian films at large: expanding the evidence about Australian cinema performance

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International markets have in recent years become a critical component of the business model for Hollywood cinema, opening up a renewed interest in the global dimensions of film diffusion. Smaller film-producing nations such as Denmark have similarly emphasised global distribution as a key component of the industry's success. Typically, however, claims for Australian film industry success rely almost exclusively on a film's domestic box office performance. This paper considers the possibilities for an expanded approach to measuring success and failure in the Australian film industry. Adopting analytic methods from cinema studies, cultural economics and geo-spatial sciences, this paper will examine the international theatrical circulation of Australian films using a unique global database of cinema showtimes. This data set captures all formal film screenings in 47 countries over an 18-month period ending 1 June 2014 and enables detailed empirical study of the locations visited by Australian-produced films. In conjunction with relevant box office data and contextual critical commentary, we propose a revised and expanded 'film impact rating' for assessing the reported performance of Australian films.

Introduction: measuring success and failure in the Australian film industry

The Australian film *Satellite Boy* (McKenzie 2012) is the story of what happens when a mining company acquires a dilapidated outback cinema with plans to demolish it and displace the family living there. It's a neat metaphor at many levels; in which a story about an Indigenous boy who desperately wants to save his 'home' from destruction becomes entwined with an implicit story about the renovation of the domestic cinema. In these interlaced narratives, the harmfulness of impersonal global corporations is squarely pitted against the resilient values of community experience and by implication, local cinema.

Satellite Boy was released in Australia at a time when commentary about the 'end of Australian cinema' was proliferating. These apocalyptic observations have more specifically been taken up in a series of recent popular and trade press articles that focus on the perceived failings of the Australian cinema, most commonly verified by a succession of disappointing domestic box office returns for individual film titles (see, for example, Maddox 2014; Roach 2014; Jones 2014; Kent 2014). In these accounts, domestic box office is the 'metric that matters'. But in a period of

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industrial transition in which distribution models are shifting technically, temporally and spatially, especially in niche markets such as Australia, this evidentiary solipsism requires more scrutiny.

Industry commentator Gary Maddox for example, likens the box office failure of the apocalyptic *These Final Hours* (Hilditch 2013) to its core theme; the end of the world: 'If a critically lauded film such as *These Final Hours* can't resonate with local audiences, is there any hope for Australian films at the cinema?' (Maddox 2014). Maddox notes despondently that:

While a wider variety of films are being made than five years ago – and many of them are being critically praised and winning awards around the world – cinema audiences have largely overlooked the five Australian features and three documentaries released in the past 12 weeks. (Maddox 2014)

Vicky Roach echoes Maddox, observing that even as Australian film-makers take up lucrative opportunities internationally, 'local audiences appear to have turned their backs on them' (Roach 2014). A feature of most of this commentary is that the 'evidence' for poor domestic box office returns is typically set at the level of individual film titles and often in some detail (the script, the performances, the casting, etc.). Critic Luke Buckmaster, for example, explains that Australian cinema has a perception problem:

when it's not busy depressing us with films about cancer and people who collapse in gutters with needles in their arms, Australian films are cringe-inducing 'g'day mate' comedies. The sort of facepalm productions geared towards jokes featuring things as stereotypically nationalistic as shrimps on a barbie (thanks, Paul Hogan). (Buck-master 2014)

In their readiness to point the finger, industry commentators provide little reflection on the usefulness (or lack thereof) of the measures they deploy for assessing success and failure in the first place. This paper explores how we can better evaluate film industry performance beyond the simple measure of box office. Can we reflect on how a wider range of evaluation criteria can, in combination, push past the binary of success versus failure and examine relative impact for instance? What new sources of evidence might enable a reconsideration of our attempts at industrial evaluation? We argue that when it comes to explaining success and failure in the Australian film industry, it is the terms of definition that require improvement rather than the merits of the films themselves.

Show me the money!

Whilst box office revenue is undoubtedly an important ingredient in determining the overall success of a film, its importance is too often overstated and overextended. Theatrical box office for example, is frequently posited as a proxy for audience attendance with little regard to how these figures are actually conjured (see Epstein 2005). And as films proliferate across ancillary platforms the importance of theatrical box office as a single or even reliable marker of audience impact diminishes further. Ramon Lobato (2009) has usefully pointed to the importance

of recognising the 'invisible' audiences realised through informal media distribution networks in measuring film impact:

Year after year, hundreds of commercial flops and straight-to-video releases go on to reach massive audiences through informal channels, out of sight of the conventional film industry. (p. 164)

A further approximation occurs when box office serves as a substitute for profitability. While it naturally follows that higher box office revenue generated, *ceteris paribus*, will result in higher profit (assuming negligible marginal costs after the initial production and marketing budgets are spent) this only reveals part of what must be considered in gauging financial success. Production and marketing costs for example vary greatly between film projects. Without accounting for these differences, the act of comparing films purely on the basis of box office gross alone is like comparing the proverbial apples and oranges.

There is another limitation to the way in which financial figures are calculated to indicate industry success: the widespread use of annualised results (either in terms of comparing films produced or totaling gross box office takings). Organising film industry data based on an annual calendar year (January–December) does not make a great deal of sense. Films are not released during the year only to cease business every 31 December. In fact, one of the heaviest periods for box office returns occurs in the final week of the year beginning on Boxing Day (26 December) and into the first week of a new year. Limiting data analysis to either films released in a given year or revenues accrued in a given year (or both) has the effect of biasing results simply by undervaluing films released late in the year rather than establishing a sense of overall performance across the long life of a title for instance.

Finally, the typical focus of financial measures is on *domestic* box office with little attention paid to international sales and foreign ticket revenues. The increasing reliance of domestic film industries on international revenues has been widely noted in both trade and general media outlets (see, for example, Hoad 2011; MPAA 2013). A quick look at the recent numbers reveals that 8 of the 10 top-grossing Hollywood films in 2013 made more than 60% of their theatrical revenues outside the USA (see Box Office Mojo 2014). However, using global box office as a sole measure of success where ticket price differences prevail biases favourably towards markets where cinemagoers pay more to see a film. So in places or countries were cinema tickets are typically more expensive, box office will give an exaggerated sense of success based on this price factor alone, even though less people may have seen a particular title.

Whilst acknowledging the veracity of these shortcomings, this study is currently limited to exploring how formal or reported industry metrics can be better used to understand film performance. Inconsistencies, disputes and discrepancies in existing measurement exercises must be admitted. But in the absence of viable alternative data, these limitations are not in themselves enough to completely unseat established provisions for industry evaluation (Napoli 2011). But they are an argument for doing better with the formal measurement metrics currently available. In particular, we want to press for using an extended and combined set of film industry performance data to reveal a more nuanced view of film impact across a broader range of criteria.

Beyond box office: other success factors

There have been many studies which investigate the financial performance of films using variables including star power, advertising, opening screen saturation and length of exhibition; however, these studies predominantly look at these variables in terms of their potential impact on the box office receipts across a set of movies rather than in terms of their usefulness as a measure for determining any particular film's impact *per se*. For example, Karniouchina, Carson, and Moore (2010) investigate the influence of a number of variables including Academy Awards, MPAA ratings and production budgets on revenue and profitability. Other studies include the impact on box office performance of critical reviews (Eliashberg and Shugan 1997; Basuroy, Chatterjee, and Ravid 2003; Reinstein and Snyder 2005; Gemser, Van Oostrum, and Leenders 2007), star power (Albert 1998; De Vany and Walls 1999; Chisholm and Norman 2006) and pre-release advertising (Elberse and Anard 2007).

In these studies, film performance is still measured financially. There is very little evidence available for measuring the success or impact of films in a quantitatively comparable way using alternative metrics. In an exceptional Australian study, McKenzie (2009) finds the length of time a film remains in theatres can be used as an alternative metric for success, revealing that preview screenings and advertising are a positive factor for film longevity as well as box office and critic reviews.

One of the arguments put forward for government intervention in Australian film production is the potential 'multiplier' effect that accompanies production investment such as the revenues from increased tourism (see Beeton 2005). Additionally, the impact of an Australian 'brand' or identity on non-domestic screens can advance not only tourism but other areas of trade also. More broadly it has been argued that trade itself promotes improved international relations between nations (Jackson 1997). When the item being traded is an entertainment product like film, it may then also aid in improving understanding between cultures and the benefits of this exchange are likely to be further multiplied leading to higher levels of cooperation along with further trade and tourism opportunities.

Quantifying the outcomes of theatrical distribution then is not just a matter of adding up the box office. By measuring the coverage of Australian content on cinema screens for example, we can encompass additional desired outcomes such as cultural exposure, both domestically and internationally in our reckonings of impact. As CEO of Screen Australia, Graeme Mason explains:

No offence to my friends at tourism, but the best promotion for Australia is not what they do, it's Hugh Jackman, Nicole Kidman and Cate Blanchett. If you ask people about Australia, they know about koalas, the Harbour Bridge and Hugh Jackman. That's an enormous thing for Australia both culturally and economically. (Mason in Roach 2014)

The head of the South Australian Film Corporation (SAFC), Richard Harris concurs that a film's coverage should be considered in determining its success. For Harris, by focusing on film releasing 'we can look very differently at the success or otherwise' of Australian films and 'really assess the extent to which our films are performing on their own terms' (Harris cited in Groves 2014).

However, much more than the simple addition of film releasing data is required to redress how film impact is currently calculated. To really undertake the type of exercise Harris proposes, the establishment of an evaluation mechanism capable of re-conceptualising a film's success or failure in terms that are relative to opportunity and industrial context, several additional steps and data sources are required.

Algorithms and film industry evaluation

As part of its own reconsideration of industry performance indicators, in 2011, Screen Australia released *Beyond the Box Office*, a report intended to improve understanding of the shift in Australian media consumption from large to small screens (Screen Australia 2011). Looking in detail at feature film releases across a range of platforms, the report implemented a new standardised audience metric to model the relationship between theatrical attendance and the viewing of films on other platforms. Unfortunately, the accomplishment of Screen Australia's innovative approach is reduced because the underlying data and the specific calculations used to estimate the relationship between large and small screen viewership are not themselves available for external assessment.

Confidential exercises such as Screen Australia's *Beyond the Box Office* calculator have given rise to the widespread perception of algorithms as a 'black box' (Gillespie 2014). Yet despite these misgivings, as Napoli (2014) has noted, algorithms are playing an increasingly prominent role in the media sector. Napoli identifies two aspects of the media and entertainment industries in which algorithms are regularly applied – in media consumption (e.g. search and recommendation systems) and media production (particularly in terms of demand predictors and content creators). To this we can add a further dimension – the development of algorithms as a tool to measure film impact as a weighted calculation made up of heterogenous factors.

With any discussion of 'impact' comes a barely submerged minefield of insinuations that require careful navigation. It is certainly not our intention to reproduce the worst aspects of 'audit culture' or to suggest that other definitions of impact or success cannot be pursued. It is not our intention to argue for, or seek to contribute to, the production of even more regulatory routines in the film industry. Nor, in developing an impact rating algorithm, are we abandoning a critique of quantitative calculations or somehow behaving as apologists for a neoliberal agenda. Quite the opposite.

Rather than adopting a self-limiting conceptualisation of what defines impact in the film industry we have instead designed an analytical tool that encourages industry and members of the public alike to contribute to the definition of what is meant by impact. If an impact evaluation algorithm is to have any credence then ultimately the basis on which it allocates 'impact' needs to be rigorously contested from the perspectives of multiple stakeholders.

We have previously designed cultural ranking algorithms to reveal the ways in which systems of calculation play a role in the social construction of knowledge. For example, earlier research we conducted into the 'cinemability' of cities (see http:// cinemacities.com) allows users to modify the settings of the algorithm by adjusting interactive sliders in order to reflect their own value preferences. This shows users how the calibration of specific values inform algorithms and how making changes to the weighting of these values can affect the production of knowledge. It also provides a 'feedback loop' so that we can adjust our own weightings in order to better reflect public priorities. For example, with the Cinema Cities ranking exercise it became

very apparent that ticket pricing was a far more critical factor for the majority of site visitors than we had imagined. Similarly, our film impact rating (FIR) algorithm has been designed to emphasise the contingency of a multitude of impact assessments.

Using heterogenous data to measure Australian movies: the FIR

To move beyond the dominance of any single measure of film success, we set out to explore 'impact' through three themed categories: coverage, commentary and commercial performance (the three C's of film impact and success). Coverage includes data concerning the location, volume and saturation of film screenings (including film festival screenings); commentary covers critic and user ratings as well as award nominations and wins; and commercial data incorporate the traditional box office return measure and box office relative to production budget size. The variables along with suggested weights we used in constructing an FIR are provided in Table 1.

Notably we have retained box office data (domestic and international) but only as a partial measure of success. The primary source of data for many of the *Kinomatics* projects and visualisations come from our global movie screenings database. Data are supplied weekly by a third-party provider and consist of records for all screenings of all films for all cinema venues in 47 countries around the world (for a full list of countries, see Appendix 1). We are collecting data on formal theatrical distribution only (not for example community screenings or viewings in other media). The application of this type of detailed screening data is unique in film research to this point and our *Kinomatics* showtime database is the only record of this data in the world. The data set includes data on:

- Venues: name, addresses, geographic coordinates, number of screens, sound technology, etc.
- · Movies: title, main actors, genre, running time, director, writer, producer, etc.
- · Showtimes: film, venue, date, time, whether it was part of a film festival

The time period for this study coincides with the start point of our *Kinomatics* database, from 1 December 2012 until 1 June 2014. During this 18-month period, we collected data on over 180 million film screenings around the world, a total of 68,000 movies playing in over 30,000 venues in 47 countries. The movies shown and recorded in the data set are not restricted to new releases, although the vast majority of screenings are for first release titles. All up during this period, 134 contemporary Australian films (including co-productions) were screened.

To create the FIR, we relied on a number of iterations in order to refine the method. Most of these refinements centred on the inclusion (or exclusion) of particular films from the study, based on temporal and data access restrictions. The extent of the *Kinomatics* database dictated the data collection period and as a result the films that could be included in the study. The main theatrical release of the film needed to rest within the data collection period from 1 December 2012 to 1 June 2014. Those films that either started before this date or continued to screen after this period were not included in the study as the data would be incomplete for many variables such as box office and number of screenings. There were however a few films that were included even though they screened beyond this date or have

Variable	Description and data source	Weight assigned
Film coverage (39% total	weighting)	
Number of countries visited	Total number of countries the film visited, absolute Source: West World Media; Kinomatics Screen Dataset	
Number of domestic screenings	Total number of domestic screenings of the film, absolute	8%
Number of international screenings	Source: West World Media; Kinomatics Screen Dataset Total number of international screenings of the film, absolute Source: West World Media: Kinomatics Screen Dataset	8%
Number of venues the film screened in	Total number of distinct cinema venues screening the film, absolute	7%
Venue saturation	Source: West World Media; Kinomatics Screen Dataset Proportion of total venues film screened in during its run across all countries the film screened in, percentage Source: West World Media; Kinomatics Screen Dataset	7%
Commercial performance		
Domestic box office receipts	Total Australian box office receipts, A\$ Source: Rentrak, Box Office Mojo, IMDb. Missing box office estimated based on screen averages across data set	7%
International box office receipts	Total non-domestic box office receipts, A\$ Source: Rentrak, Box Office Mojo, IMDb. Missing box	7%
Production budget as a percentage of worldwide box office	office estimated based on screen averages across data set Production budget expressed as a percentage of worldwide box office, percentage Source for production budget figures: IMDb and various media sources. Missing production budget figures based on mid-point of estimated production budget bands	10%
Film commentary (37% to	tal weighting)	
Average user rating on IMDb	Average user rating on IMDb out of 10, absolute <i>Source: IMDb</i>	7.5%
Number of IMDb users polled	Number of IMDb users polled, absolute <i>Source: IMDb</i>	4%
Average critics rating on Rotten Tomatoes	Average critics rating on Rotten Tomatoes out of 10, absolute Source: Rotten Tomatoes	7.5%
Number of critics polled on Rotten Tomatoes	Number of critics polled on Rotten Tomatoes, absolute Source: Rotten Tomatoes	4%
Number of award nominations received	Number of award nominations received, absolute <i>Source: IMDb</i>	6%
Number of awards won	Number of awards won, absolute Source: IMDb	8%

Table 1. Variables assigned across coverage, commercial and commentary attributes to measure 'film impact rating'.

Table 2. Titles of the 36 films used in the study.

100 Bloody Acres	Save Your Legs		
3 Peas in a Pod	Saving Mr Banks		
Adore	Shadow of Doubt		
Backyard Ashes	The Caretaker		
Being Venice	The Darkside		
Blinder	The Earth Wins		
Blokes	The Great Gatsby		
Circle of Lies	The Jungle		
Cosmic Psychos: Blokes You Can Trust	The Playbook		
Die Reisezumsichersten Ort der Erde	The Railway Man		
Foreshadow	The Rocket		
Goddess	The Sunnyboy		
I Am a Girl	The Sunset Six		
In Bob We Trust	The Turning		
Mystery Road	Tracks		
Patrick	Uncharted Waters		
Return to Nim's Island	Walking With Dinosaurs 3D		
Satellite Boy	Wolf Creek 2		

scheduled releases in other countries after 1 June 2014. The reason for including such films was because the majority of their theatrical release rested within the time period and they were particularly interesting films to include. These films are shown in Table 2 in italics. It is important to note that due to the way the rating algorithm works these inclusions have affected the results. These film titles will only improve from their current FIR as they go through their exhibition schedule since most variables such as number of countries screened, box office, etc., will increase and drive up their overall FIR results.

The Internet Movie Database (IMDb – http://www.imdb.com/) was used as a basis for identifying which films were produced by or co-produced with Australia. This was further supplemented and checked with data from Screen Australia. IMDb contains information on many TV shows, DVD only releases and short films that do not make it to theatrical release. Only films that existed within the *Kinomatics* database taken from the IMDb list were considered for selection in the study. Further refinement for film selection was placed on those films that screened only a very small number of times which represented either a small run on the festival circuit or films that showed theatrically solely for marketing DVD or TV releases. In addition, if data could not be sourced for a significant number of the 14 variables previously described in Table 1, then these titles were disregarded.

The application of an 18-month restriction and the selection criteria described above resulted in the list of 36 films identified in Table 2, out of a total of 134 Australian titles that we first started with. Had we applied a typical annual calendar year analysis to the data, many of these titles would not be studied for their full theatrical release. Also, by starting our study in December rather than January we have managed to capture the highly important movie release period of Boxing Day and New Year's Day in Australia. This 18-month time period applies to all variables that have a time component – screenings and breadth of release. The remaining

Overall rank	Title	Coverage/ 100	Commentary/ 100	Commercial Performance/100	FIR/ 100
1	Saving Mr. Banks	100.00	91.29	94.82	95.53
2	The Great Gatsby	100.00	83.44	100.00	93.87
3	The Railway Man	80.14	49.07	65.71	65.18
4	Walking With	91.05	15.62	87.25	62.23
_	Dinosaurs 3D				
5	The Rocket	20.16	77.99	42.08	46.82
6	Tracks	42.66	36.78	49.01	42.01
7	Adore	38.97	26.78	41.20	35.00
8	Wolf Creek 2	24.61	29.18	54.48	33.47
9	Mystery Road	7.05	49.60	39.25	30.52
10	Satellite Boy	8.55	40.42	42.17	28.41
11	The Turning	3.62	43.02	43.34	27.73
12	Return to Nim's Island	24.99	15.55	43.19	25.86
13	In Bob We Trust	3.88	38.99	38.98	25.29
14	Goddess	18.48	14.65	42.00	22.71
15	3 Peas in a Pod	18.19	14.00	40.63	22.03
16	Backyard Ashes	7.74	19.91	42.72	20.64
17	Save Your Legs	8.94	14.96	40.88	18.83
18	The Darkside	2.09	21.41	39.98	18.33
19	Cosmic Psychos: Blokes	1.14	20.38	41.22	17.88
	You Can Trust				
20	100 Bloody Acres	3.34	28.54	20.37	16.75
21	Uncharted Waters	4.06	15.93	36.94	16.34
22	Die Reisezumsichersten	1.18	14.96	40.90	15.81
	Ort der Erde				
23	The Earth Wins	2.16	20.37	30.35	15.66
24	The Playbook	1.33	16.90	29.33	13.81
25	Blokes	0.06	14.00	35.04	13.61
26	I Am a Girl	1.08	16.13	28.03	13.12
27	The Jungle	3.87	0.07	41.06	11.39
28	Blinder	15.42	2.48	15.89	10.75
29	The Caretaker	2.63	4.93	31.72	10.46
30	The Sunset Six	1.70	11.59	21.75	10.17
31	Patrick	3.01	15.96	11.88	9.93
32	The Sunnyboy	0.80	15.14	14.36	9.36
33	Shadow of Doubt	0.18	0.00	32.28	7.82
34	Being Venice	2.49	4.35	0.01	2.58
35	Circle of Lies	1.13	0.99	0.09	0.83
36	Foreshadow	0.56	0.01	0.02	0.22

Table 3. Film impact rating (FIR) by film title.

variables are either totals based on gross figures or do not have a temporal component.

Once all data were collected for the 14 variables for all films identified, we then constructed the FIR algorithm. This required normalising the data, applying weights and calculating the final rating figures. Each of the variables were normalised to ensure a relatively even distribution in order to facilitate the generation of a film rating index. The values associated with each of the 14 variables used to construct the index were scaled to fall between the values of 0 and 1. This ensured that all variables were evenly weighted and statistically comparable. One effect of normalisation is the smoothing of outliers. For films such as *The Great Gatsby*, a film that far outstrips all other films in our study in terms of box office and number of screenings, this means that their outlier behaviour is not as dramatic as it would be if we used only original figures as opposed to normalised values. For example, *The Great Gatsby* has almost twice the number of screenings as *Saving Mr Banks*, but when normalised both of these films are given the same maximum value of 1. This can strongly influence the final results but is a statistical necessity in order to compare films across extremely varying figures for all factors.

Finally we assigned weightings to each of the variables based on our own knowledge, backgrounds and ideas of importance. Given that this process is a subjective one we are concerned to ensure that the weightings are transparent (see Table 1) and open to debate. We explicitly invite feedback on the applied weightings through an interactive tool at http://www.reelmeasures.com/ and intend to assess the success of our own approximations in light of industry and public feedback.

Formally stated the FIR can be expressed in the following equation:

$$\sum_{ind=1,\dots,n}^{j=1,\dots,n} (ind_i, w_i) \tag{1}$$

where $f_1, ..., n$ equals the set of Australian films 1, ..., *n*, where the *n*th film = 36, and *ind_i* is the indicator variable from the set of coverage, commercial and commentary attributes *ind*₁, ..., *n* where the *n*th variable =14, and *w_i* denotes the weighting assigned to *ind_i*.

The application of the FIR equation (using the weights described in Table 1) to our data set of films (described in Table 2) produces an overall FIR out of 100 for each film, with the full results shown in Table 3.

Discussion of results

Through the FIR we can assess how Australian films fare locally and internationally with more finesse that just box office or release data alone provides. The FIR takes into consideration the number of countries visited, local and international screenings, venue saturation and both domestic and international box office in order to present a more holistic approach to measuring the impact of films in terms of their theatrical presence.

The international coverage of Australian films vary dramatically for each title with some films screening all over the world, whilst others never leave local shores. Looking at the worldwide distribution of screenings for the 36 films reveals the importance of international distribution to the Australian film industry; the largest markets for Australian cinema in terms of theatrical presence being (in order of volume of screenings) the USA, Australia, Mexico, England, Japan, Canada and Germany (see Figure 1). At an aggregate level, international screenings (in the 47 countries we have data for) represent over 91% of the total number of screenings for the 36 films combined. Again this composite figure is skewed by outlier titles such as *The Great Gatsby* with ready-made global distribution deals.

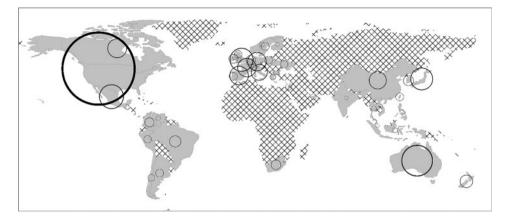


Figure 1. The screening of Australian films. Note: The larger the circle the more screenings.

There are two interesting ways we can consider applying the FIR. First, in terms of evaluating the performance of specific film titles against a range of criteria it is possible to break down the results and look at how specific films behave relative to budget size. *Satellite Boy* for example achieved a high rating figure when compared to those in a similar production budget bracket of between A\$1m and A\$5m. In fact, it stood out in relation to other comparable films across a number of variables all of which contributed to the films high rating. It has a very high rating for production cost relative to box office and does generally well in terms of box office domestically. For a small budget film it travels far and plays in many venues. It has a relatively high critics rating average as well as excelling in award nominations and wins. In comparison, many films in this production budget bracket did not release widely, received very little critical acclaim and did very poorly at the box office relative to production costs.

A second use of the FIR is to make some overall assessments of the Australian cinema during this period. Based on the FIR results reported in Table 3 it is of interest to compare rank orderings of the films. It is particularly evident from the top 10 FIR results that the biggest impact films are typically big budget co-productions. Indeed, the top 5 films are co-productions, and 6 out of the top 10 are co-productions. What is worth noting is that typically the top 5 excel in more than one category – particularly in the case of coverage and commercial performance. It is interesting in this context that the modestly budgeted *The Rocket* makes it into the top 5, in large part driven by its high rating for commentary. The bottom 3 co-productions in the FIR are documentaries. These 3 documentaries have similar results for all three categories, and due to budget size and the dimensions of their theatrical release it could not be expected that they fare better.

Using FIR we find that film impact tends to be positively clustered in terms of production budget. Typically a film involving a higher initial investment is generally associated with a bigger subsequent impact. This is of course an expected result; however, our tool enables a simple way to identify films that deviate from their expected impact to either punch above or below their weight.

We can for example interpret the results as indicating that the top film, *Saving Mr. Banks*, is highly successful relative to its production budget with high values in all categories and overtaking *The Great Gatsby* in terms of commentary indicators. Very low budget films such as *3 Peas in a Pod*, *Backyard Ashes* and *Cosmic Psychos: Blokes You Can Trust* and low- to mid-budget films such as *The Rocket*, *Mystery Road*, *Satellite Boy*, *In Bob We Trust*, *Wolf Creek 2* and *Tracks* could all be considered to be punching above their weight relative to the average performance of films in these budget brackets. Using the evaluation categories (coverage, commentary and commercial) as a guide it is possible to review how underperforming titles can improve. With data covering more films and an extended time period, FIR could also make a positive contribution to policy development in the Australian film industry.

Conclusion

This paper offers a first step in the reconsideration of how we might understand the effectiveness of Australian films in a global industry. If we are to fully realise and assess the local and international impact of Australian cinema then we need to expand our methodologies for measuring its outcomes. Film studies research into the domestic production industry can benefit from adopting a more global outlook in its analyses of Australian cinema rather than treating it solely as an outcome of local dynamics.

Particularly, we have proposed that more attention be given to incorporating data about the global theatrical distribution of Australian films into the way we measure film industry performance. We have also proposed a broadening of focus, from measuring success in purely monetary terms, to a consideration that includes more weighted notions of cultural value. These suggestions are based on the observation that films play a critical role in generating ancillary benefits and that these are often overlooked in conventional methods for determining success and failure. There is further work that can be done to improve the FIR particularly in relation to ancillary release formats and non-theatrical outlets such as film festivals. Should reliable data for online consumption (formal and informal) become available for example this would add enormous value to the tool.

In order to promote this expanded approach to measuring impact we have made the FIR available to industry pundits, policymakers and the public alike at http:// www.reelmeasures.com. We are also using the project website to invite feedback on how alternative, but incompletely documented meaures, such as the volume of commercial downloads or the prestige value of non-theatrical distribution such as festival screenings can better inform our understanding of impact. In this sense, we do not sit outside our own ambitions for the the FIR; to mobilise greater critical reflection on the conceptualisation of industry performance as something more than the ranking of individual film titles against two criteria: success and failure.

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Chile	Mexico	Taiwan
China	Netherlands	Thailand
Colombia	New Zealand	Ukraine
England	Northern Ireland	United Arab Emirates
Finland	Norway	USA
France	Peru	Venezuela
Germany	Philippines	Vietnam
Greece	Poland	Wales
Hong Kong	Portugal	

Appendix 1. List of countries included in the data set