

Impact of Film and TV Incentives in Australia

A Report for the Australian
Screen Association by
Olsberg • SPI

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1. EXECUTIVE SUMMARY

1.1. Context for the Study

Feature Film and TV drama production has become an increasingly vibrant and important sector in Australia.¹ The Federal Government has long recognised this and in 2007 put in place a suite of innovative mechanisms aimed at capturing greater value from its investments and improving the long-term health of the sector. These are the Producer, Location and PDV Offsets (collectively, the “Offsets” or “Incentive”).

Marking the 10th anniversary of their creation, the Australian Screen Association commissioned this research report from the international consultancy Olsberg•SPI to identify and quantify the various impacts of these Offsets.

The report addresses:

- How the Screen Production sector in Australia has developed, and the interaction between the Offsets, other Federal funding, and funding from Australia’s States and Territories;
- The impact of the Location Offset for Film and TV production (currently 16.5%);²
- The impact of the Post, Digital, and Visual Effects (PDV) Offset (currently 30%);
- The impact of the Producer Offset for domestic TV Drama production (currently 20%);
- The impact of the Producer Offset for domestic Film production (currently 40%);
- Return on Investment for the Australian public and Treasury as a result of investment through the Offsets; and,
- The future reform of the Offsets.

1.2. Impact of the Offsets on the National Economy

Chapters 3 to 6 analyse and present in detail the impacts that are generated by each of the Offsets. We look at taxation receipts further below, but the main metrics used to measure the economic effects are:

- Gross Value Added;³
- Total Full Time Equivalent Jobs; and,
- Direct income to Australians engaged in Offset-supported productions.

We present in the tables below the aggregate impacts of the combined Offsets for, first, Direct and then Total (adding in the indirect and induced effects) Impacts. Following these tables, we identify how each Offset system contributed to these aggregate figures in the most recent year (2016-17) to enable a comparison to be made.

Bringing together the direct impacts across all Offsets, we find that GVA directly related to productions supported by the Offset almost doubled from A\$199.8 million in 2007-08 to A\$386.0 million in 2016-17. This led to 60% growth in jobs from 15,617 FTEs in the first year of

¹ The cultural value of these sectors were analysed for Screen Australia in 2016 in *Screen Currency*

² The rate offered by the Location Offset is 16.5%, but because in recent years this has proven uncompetitive, there have been a number of selective additional amounts (“Top Ups”) made available by the Federal Government to some projects thereby enhancing the value of the Offset to closer to 30%. We have included these additional sums in our calculations throughout the study.

³ The economic activity contributed by Offset-supported production to the Australian economy as a whole.

the Offsets to 24,989 in the most recent year; direct income to Australians engaged in Offset-supported productions, meanwhile, increased by 82% from A\$1.05 billion to A\$1.91 billion.

Table 1 - Direct GVA, FTE and Income Impacts of Offset-Supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	199.8	15,617	1,047.6
2008-09	213.2	16,651	1,129.2
2009-10	230.5	20,803	1,369.1
2010-11	160.6	19,605	981.3
2011-12	188.2	19,683	1,231.2
2012-13	236.5	19,888	1,517.6
2013-14	274.9	20,556	1,568.6
2014-15	256.2	21,637	1,651.1
2015-16	260.5	22,629	1,726.8
2016-17	386.0	24,989	1,906.9

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Furthermore, when the direct and induced impacts generated by Offset-supported production spend are included, we find a total GVA contribution in 2016-17 of A\$1.18 billion, up 133% from A\$506.2 million in 2007-08. This supported 94,265 FTEs in the most recent year, an increase of 77%, who earned A\$6.4 billion of total income (up 92%).

Table 2 - Total GVA, FTE and Income Impacts of Offset-Supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	506.2	53,188	3,346.8
2008-09	593.2	58,779	3,642.4
2009-10	647.0	66,426	4,175.9
2010-11	464.4	66,310	3,116.7
2011-12	560.0	70,372	4,065.1
2012-13	723.5	75,024	5,201.8
2013-14	815.0	77,543	4,944.5
2014-15	802.7	81,623	5,835.6
2015-16	795.3	85,364	5,821.7
2016-17	1,178.4	94,265	6,428.7

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

The following table identifies the relative contributions, to the amounts listed above, made by each Offset in the final year of the data. Although the relationship between the Offsets from this table presents only a limited picture, as it varies from year to year, it helps to understand the relative position of each Offset.

These figures show that each of the Offset categories contributes well to the overall impact provided by the sector in Australia, with a large number of direct employees, wages, and economic activity. In 2016-17, the Location Offset provided particularly strong figures, reflecting a number of major US Studio productions which shot in Australia in this fiscal year.

Table 3 - Breakdown of Direct Impacts by Offset, 2016-17

	Direct GVA (Millions of A\$)	Direct FTEs	Direct Income (Millions of A\$)
Location*	139.9	9,059	691.3
PDV	33.7	2,178	166.2
Producer (TV)	113.9	7,376	562.9
Producer (Film)	98.5	6,375	486.4
Total	386.0	24,989	1,906.9

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Location Offset includes discretionary top-up grants to Location Offset-supported productions

NB: numbers may not sum due to rounding

These impacts are also reflected in the Total Impacts generated by the Offsets, where the impact of each of the Offset categories is to provide strong economic activity through its multiplier effects.

Table 4 - Breakdown of Total Impacts by Offset, 2016-17

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
Location*	427.2	34,175	2,330.7
PDV	102.7	8,218	560.4
Producer (TV)	347.8	27,826	1,897.7
Producer (Film)	300.6	24,047	1,640.0
Total	1,178.4	94,265	6,428.7

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Location Offset includes discretionary top-up grants to Location Offset-supported productions

NB: numbers may not sum due to rounding

An additional measure of impact calculated in this research is the Return on Investment ("RoI") earned by the amounts invested by the Offsets into the qualifying productions that made use of the system. We used two measures for this element of the assessment:

- Gross Value Added; and,
- Federal Taxation Receipts.

As the following table shows, Total GVA generated by the investments in the most recent year was A\$3.98 in additional GVA for every A\$1 of Offset disbursed. The average for the 10 year history of Offsets was A\$3.86.

Table 5 – Total GVA Return on Investment from Offsets

	Offset Disbursed* (A\$, millions)	GVA Generated (A\$, millions)	GVA Rol
2007-08	115.0	506.24	4.40
2008-09	181.1	593.24	3.28
2009-10	156.8	646.98	4.13
2010-11	99.0	464.35	4.69
2011-12	172.4	560.05	3.25
2012-13	241.9	723.53	2.99
2013-14	220.4	815.04	3.70
2014-15	204.0	802.70	3.93
2015-16	188.4	795.27	4.22
2016-17	296.2	1,178.40	3.98

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

A similar assessment was made but in relation to Federal tax receipts generated by the productions which received Offset investment. As with the GVA calculation, this showed a consistent and steady return averaging A\$1.05 in total taxation for each A\$1 of Offset, with the most recent three years' averaging A\$1.13. The figures for all 10 years of the Incentive are as follows:

Table 6 - Taxation Return on Investment from Offsets

	Offset Disbursed* (A\$, millions)	Taxation Generated (A\$, millions)	Taxation Rol
2007-08	115.0	149.34	1.30
2008-09	181.1	159.58	0.88
2009-10	156.8	165.63	1.06
2010-11	99.0	117.95	1.19
2011-12	172.4	146.17	0.85
2012-13	241.9	196.08	0.81
2013-14	220.4	222.51	1.01
2014-15	204.0	221.55	1.09
2015-16	188.4	224.27	1.19
2016-17	296.2	332.31	1.12

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

1.3. Positive Benefits for the Australian Screen Sector

The Offsets have had significant impacts in the PDV and domestic (Producer) Film and TV segments of the markets, with further significant contributions made in the production market at which the Location Offset is aimed ("Footloose" productions).⁴

Since the value of the PDV Offset was increased to 30% in 2011, the impact on the Australian digital production sector has been transformative. This has included major investments in facilities and staff, the re-shoring of productions which had formerly left the country, and the evolution of the Australian PDV sector into a major attractor of international production

⁴ NB: data for 2016-17, above, represent a peak year for Location Offset production, driven by top-up funding; for further details, see chapter 3, below; Footloose productions are defined as international productions with a choice of jurisdictions in which to base themselves

spending. The value of this has been recently underlined by Technicolor's recent announcement of a A\$26 million VFX facility in Adelaide.⁵

The Offsets have been similarly impactful in the TV production space, where they have helped to encourage the development of world-leading Australian companies, and assisted domestic firms to hold IP, and develop new markets and avenues for business. In the Film sector, the Offset has, furthermore, successfully supported the ongoing production of Australian-led Films in a difficult market for risk finance.

Without the Federal (and in some cases State) top-ups the Footloose production sector for Film and TV – the targets of the Location Offset – would have fared substantially less well. Though Australia continues to attract major productions, such as *Thor: Ragnarok*, the relatively low level of the basic Location Offset by international standards means that discretionary top-up funding is normally essential to secure this inward investment; this, rather than the underlying Incentive, has driven the strong figures for 2016-17.

To date, some of this Federal top-up funding has been financed by a discrete amount generated by the sale of a Film-related real estate asset, and this limited amount was distributed in a relatively speedy manner.⁶ This source has now been exhausted, and although requests for top up still occur, there is delay and doubt about whether they will be forthcoming.

Such factors seriously inhibit the current attractiveness of Australia, as the Location Offset at 16.5%, and without the top-up, is considered by major international producers to be uncompetitive. Our qualitative research indicates that this delay and uncertainty has led to the loss of up to A\$350 million of Footloose production since 2016-17. Productions Australia should have easily attracted, given its skills and locations, have been lost to other territories such as New Zealand, the UK, and Georgia (US).

Although Film and TV productions often have a long pre-production period, the decision as to where to locate the project happens rather quickly. Once a "green light" has been given to a project, there is a theatrical release date (for Films) and a broadcast/streaming airdate (for TV) that the project must meet, so location decisions are often made within a week or two. The uncertainty of the Top Up regime, rather than a guaranteed competitive rate, puts Australia at a disadvantage for attracting these valuable Footloose productions.

While Australia's geographical isolation can be a challenge for incoming productions, from an economic impact perspective, this tends to generate significant benefits once productions are in the country. As sets cannot be easily moved out, nor individuals quickly brought in, the Australian market – whether Film crew or companies supplying the sector – captures a large percentage of production spend. This is reflected in strong indirect and induced economic impacts.

1.4. Proposed Reform of the Offsets

A reform of the Offsets is proposed by a Committee of the House of Representatives. This reform would equalise the Location Offset with the PDV Offset at 30% – making Australia internationally competitive – and also remove current inhibitions from productions claiming both Incentives on a single project. Such changes would encourage Footloose projects to choose to locate in Australia, providing major benefits for the economy and sector, and would remove the uncertainty and delays caused by the unreliable Top Ups process.

⁵ "Technicolor to Build \$20m VFX Studio in South Australia's Adelaide", Pip Bulbeck in *The Hollywood Reporter* (5th February, 2018)

⁶ "MYEFO: screen agency bows to Alien and Thor demand", Michael Bodey in *The Australian* (16th December, 2015)

This report analyses the likely impact of these proposed changes, together with reforms to the Producer Offset proposed by the House Committee, which would see the Film and TV offsets equalised at 30%. We find that were they to be adopted, GVA from the sector could rise to A\$1.7 billion by 2021-22 – a 39.3% increase from 2016-17. This would be accompanied by a 46.9% increase in Australian jobs and income respectively.

Table 7 - Total GVA, FTE and Income Impacts of the House of Representatives Committee Proposed Offset Reforms

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2018-19	1,350	109,552	7,471
2019-20	1,439	116,975	7,978
2020-21	1,519	123,737	8,439
2021-22	1,588	129,618	8,840

Source: Olsberg•SPI analysis

We consider the projection of A\$1.6 billion GVA in 2021-22 following reform to be conservative, as it is based on an acceleration of current growth trends. This uplift - which would increase jobs and wages by 37.5% - would have a significant effect upon the sector, and return great value to the Australian economy through higher GVA returns from the sector.

The Australian Film & TV Bodies have also proposed changes as part of a recent public consultation on the future of the Offsets. These proposals would see a 40% Producer Offset for Film and TV production, and the increase of the Location Offset to 30%, matching the PDV Offset; we estimate such reforms would generate even greater economic activity.⁷ By 2021-22, this model is projected to generate A\$1.9 billion in GVA for the Australian economy, with the economic activity generated supporting a total 156,252 FTE jobs.

Table 8 - Total GVA, FTE and Income Impacts of the Australian Film & TV Bodies' Proposed Offset Reforms

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2018-19	1,490	121,464	8,284
2019-20	1,635	133,716	9,119
2020-21	1,773	145,452	9,920
2021-22	1,900	156,252	10,656

Source: Olsberg•SPI analysis

Such a change would be transformative for the Australian sector, and is likely to result in the attraction of major private investment to increase the productive capacity of the sector, through, for example, the expansion of existing production studios and potentially significant construction of new facilities, in response to demand. Based on developments in UK and Georgia, we estimate that by 2021-22, the growth driven by the Australian Film & TV Bodies' proposals would result in the construction of up to 265,000 square feet of additional stage space, with private investment of at least A\$96 million required for this.

This would see even greater value returned to the Australian economy.

⁷ The Australian Film & TV Bodies consist of Australian Home Entertainment Distributors Association (AHEDA), Australian Independent Distributors Association (AIDA), Australian Screen Association (Australian Film & TV Bodies), Independent Cinema Association (ICA), National Association of Cinema Operators (NACO) and Motion Picture Distributors Association (MPDAA).

2. THE SCREEN PRODUCTION SECTOR IN AUSTRALIA

2.1. The Development of the Sector in Australia

The Offsets came into use in July 2007, and over that period just over A\$7.2 billion of production spend been attracted through the model.⁸ The Incentives are split into four major categories:

- The Location Offset, initially introduced at a rate of 15%, which was increased in July 2011 to 16.5%;
- The PDV Offset for digital animation, post-production, and visual effects, which was increased from 15% to 30% in July 2011;
- The Producer Offset for Film, available to productions that pass the Significant Australian Content Test (SACT), and which gain a cinematic release, which has a rate of 40%; and,
- The Producer Offset for TV Drama, available to independently produced TV content that passes the SACT, at a rate of 20%.

These Incentives replaced previous investor-driven and some selective funding models, and offer a range of benefits for the Australian production sector. Compared to their predecessors, the present Incentives are certain, automatic, and democratic - they are available to all productions that fulfil the criteria.

The Producer Offset offers significant benefits to the Australian production community, providing a strong degree of certainty in their ownership of production IP, upon which a range of companies have built successful businesses.⁹ This has also impacted post-production, digital and visual effects companies, which have grown in strength, not least since the value of the Incentive was increased to 30%.

2.2. Federal, State, and Territory Investments

2.2.1. Federal Investments

The Offsets represent the largest part of the Federal Government's investment in the Australian screen production sector. Through the various schemes, the Incentive has contributed an average of 31% of domestic Film budgets over the last five years, and 12% of TV drama production budgets.¹⁰

Selective funding – provided through Screen Australia – is also available for domestic and co-produced Films, TV, and online content, up to a value of A\$2 million per Film or TV project. Through this funding, Screen Australia spent A\$26.4 million on feature Film production in 2016-17, A\$15.1 million on general TV drama, and A\$9.4 million on other TV drama (such as children's).¹¹

In the Footloose element of the market – international productions with a choice of jurisdictions in which to base themselves – the PDV Offset is a valuable tool, and has

⁸ A previous model, the Refundable Film Offset, was introduced in 2001 at 12.5%, and replaced in 2007; this former model is not considered as part of this Study

⁹ *Skin in the Game*, Screen Australia (November 2017)

¹⁰ *Screen Australia Drama Report 2016-17*, pp. 9 and 17; domestic TV Drama has used both the Producer and PDV Offset in recent years

¹¹ *Screen Australia Annual Report 2016-17*, pp. 76-79; figures for production spend only, Screen Australia also invests in development and circulation of projects

contributed to the attraction of productions like *The Lego® Batman Movie*, which leverage the Incentive for animation production. The Location Offset, however, is now relatively uncompetitive at 16.5% by international standards. For example, Georgia (US) operates a 30% incentive, the UK 25%, and New Zealand 20+5%.¹²

In certain cases in order to compensate for the Location Offset's current weakness, discretionary top-up funding has been provided by the Federal Government to selected productions. In the most recent cases, such as *Aquaman*, the effect of this top-up grant has been to provide an effective 30% Location Offset to the inbound production, though the mechanism through which such cases are decided is unclear. This leads to Australia not being considered for valuable projects at an early stage of development, or losing out at when a decision point comes, owing to a lack of certainty about whether the top-up will happen. As a result of this, the country is considered for far fewer Footloose projects than it should be, given its outstanding locations, facilities, cast and crews and its attractiveness as a base for lead cast and crews.

2.2.2. State Investments

Alongside the Federal Government initiatives, a number of states also offer investment and grant schemes for the Film and TV sector. These aim to attract productions into the states and territories of Australia – both from international or domestic sources – and provide additional funding on top of the Federal Offsets. This can be seen in the PDV Offset space, where South Australia has recently launched a fund to top this up to an effective 40%, which has driven additional facilities investment from Technicolor.

This funding requires specific outcomes from the production – whether in terms of jobs, training, or investment impacts – to generate benefits for the state governments. Despite these positive outcomes, however, our work suggests that these regional incentives are not sufficient to attract Footloose productions in the absence of a competitive Offset, nor do they exist at such a scale as to make the Location Offset attractive, in the absence of the Federal top-up funding noted above.

2.3. Production Spend, 2007-08 to 2016-17

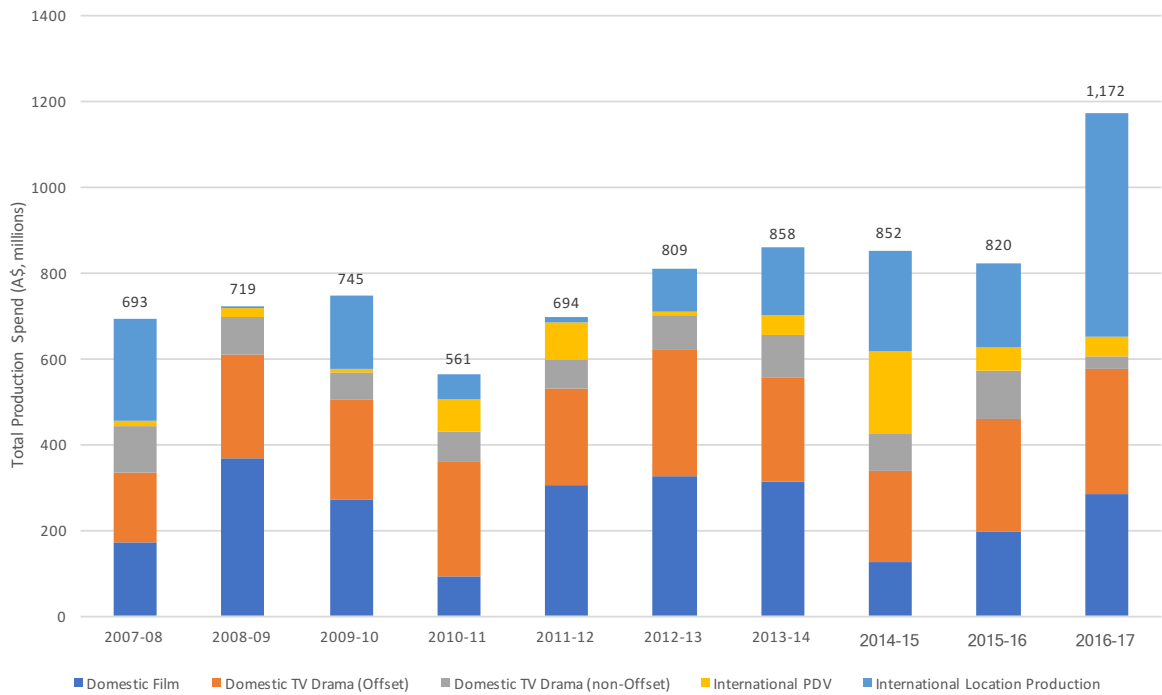
Since the introduction of the Offsets, production spending in Australia has grown, albeit unevenly, and in recent years this growth has become more pronounced.

A number of changes to the nature of the screen sector have driven this. In the Film sector, Australian domestic productions increasingly face a difficult market for finance, although the strength of the Offset helps to defray a good amount of this challenge.¹³ For the Footloose production market, Australia has been much more attractive to international productions in recent years, but only with productions that have received discretionary top-up funding. This underlines the strengths of Australia as a production destination, but also the weaknesses of the current Location Offset in the international market.

¹² New Zealand offers a 5% uplift where certain conditions are met, which in practice most Footloose production receives

¹³ Financing for domestic Film productions is a global challenge, not one limited to Australia

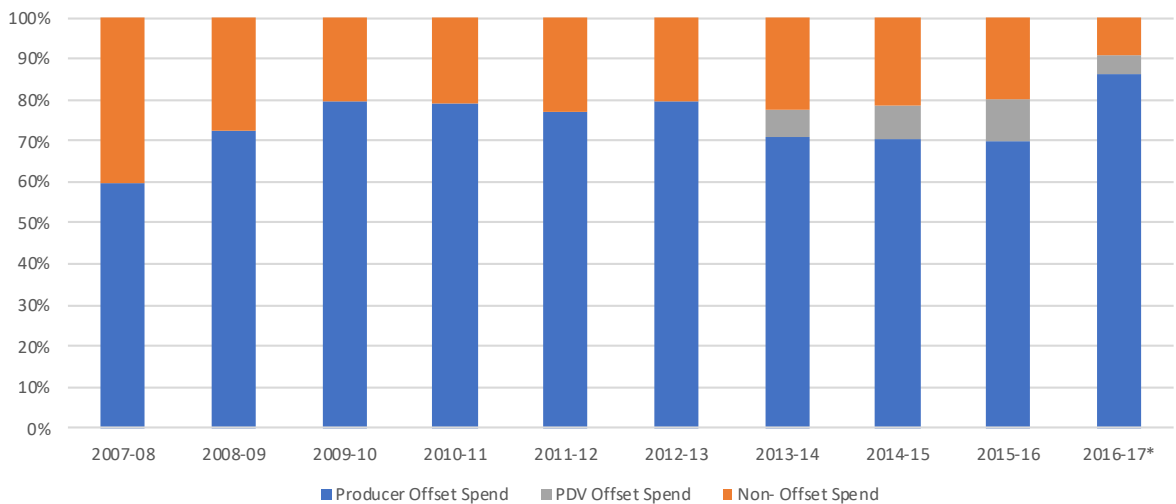
Figure 1 - Production spending in Australia, 2007-08 to 2016-17



Source: Screen Australia Drama Report, Olsberg•SPI analysis

Domestic TV drama production has also grown stronger, as the Producer Offset has supported company growth. There is an increasing percentage of production spend in the Offset category, rather than the non-Offset category, which helps to support Australian production companies, as the recent *Skin in the Game* report from Screen Australia demonstrated. The PDV Offset has also seen strong growth, particularly in domestic and international animation production, and post-production and VFX, where Australia is increasingly renowned in the international market.

Figure 2 - Domestic TV Drama Spending by form of Offset Used, 2007-08 to 2016-17



Source: Screen Australia Drama Report, Olsberg•SPI analysis

3. IMPACT OF THE LOCATION OFFSET

3.1. Use of the Location Offset

The Location Offset is Australia's major production Incentive for international Footloose productions. This rebate scheme came into effect on 1 July, 2007, replacing the previous Refundable Film Tax Offset.

Since 2007, there have been a small number of changes to the scheme, though the broad model has remained relatively stable:

- From 1 July, 2010, the former requirement to spend 70% of the total production budget on Qualifying Australian Production Expenditure (QAPE)¹⁴ for productions in the A\$15-50 million range was waived; and,
- In May 2011, the value of the Incentive was increased from 15% of QAPE to 16.5%, to reflect the fact that GST components of spend were no longer considered eligible for QAPE. In addition, spending on some elements of audit, legal, insurance, and company fees were made eligible.

Following these changes, the Location Offset has remained a 16.5% Incentive on QAPE spend, with a qualifying production spend in Australia of A\$15 million. It is run alongside the PDV Offset for digital production (Chapter 5, below), but only one of these can be claimed on a single production.¹⁵

Over the past decade, spending on Film and TV production worldwide has continued to grow, with Footloose production making up a large part of this. Reflecting this growth in production spending, the number of territories with incentive systems – and the speed at which many territories' incentive is approved – has increased since the launch of the Location Offset. This is exemplified by the UK, which raised its incentive for Film production from 20% to 25% in 2012, and introduced a TV production incentive in the same year. The state of Georgia, meanwhile, now provides a very successful tax credit with an effective 30% rebate rate.¹⁶

In addition to the Incentive for all qualifying productions, discretionary federal top-up funding has also been provided to a number of projects, such as *The Wolverine*, *Thor*, *Aquaman*, and *Pirates of the Caribbean: Dead Men Tell no Tales*, in the last five years. These ad-hoc funding provisions have brought the effective Incentive for all major projects to an equivalent 30% Offset rate. Such top-ups can be slow to be granted, and the selective nature of the decision creates uncertainty, which presents a major challenge for productions wishing to use Australia's locations and facilities. This reflects the fact that, while pre-production can be a long process, once a release date for a production is set, the decision on where to locate must be taken quickly, which the present model does not allow for.

As the top-up acts as an effective extension of the Location Offset for given projects, we treat it in this way for the purposes of this analysis. However, from the perspective of a production company wishing to bring Footloose production into Australia, the lack of certainty around whether top-up funding will be granted makes it impossible to budget for when a production is being planned. It also inhibits capital expenditure into facilities, which requires certainty on production spend across a number of years to justify. Thus Australia compares unfavourably to

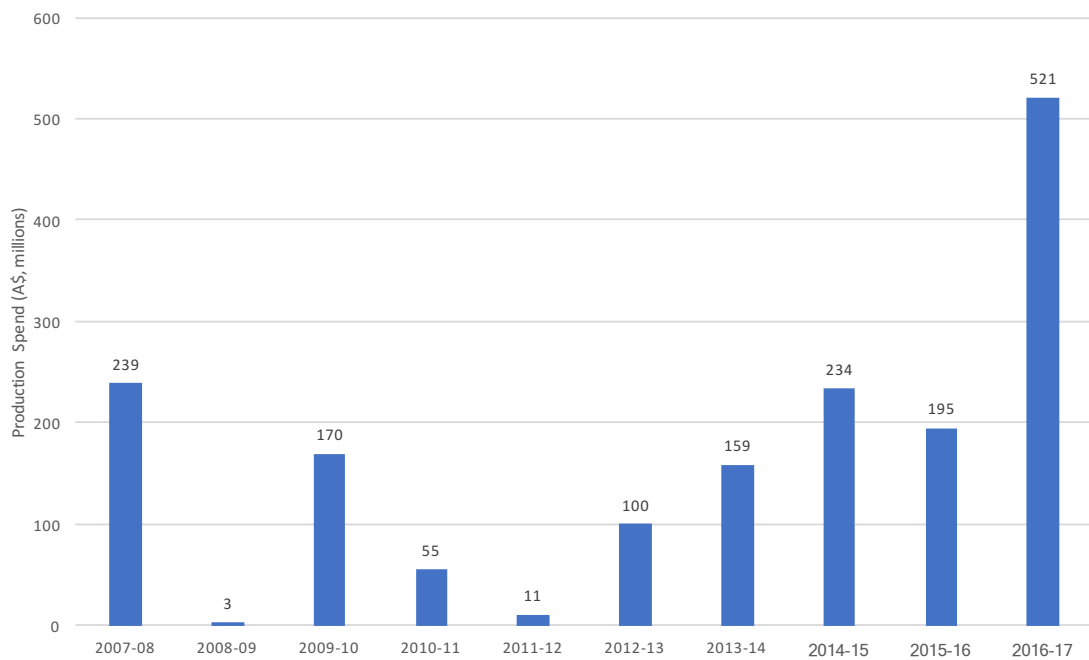
¹⁴ QAPE represents the portion of the production budget which is eligible for the Offset

¹⁵ All three offsets - PDV, Location, and Producer - are currently mutually-exclusive, with only one able to be used per production

¹⁶ Georgia provides a 20% basic rebate, together with a 10% top-up for productions carrying the 'Georgia Peach' logo in their end credits - in practice, all productions (except advertising) take this additional 10%

the UK, where the stability of the Film Tax Relief supported at least £425 million (A\$755m) of new capital expenditure between 2007 and 2014.¹⁷

Figure 3 - International Film and TV Production Spend in Australia, 2007-08 to 2016-17¹⁸



Source: Olsberg•SPI analysis of Screen Australia Drama Report and media reporting

NB: productions analysed above include both Location Offset and any separate Federal top-up funding received

The impact of this top-up funding can be clearly seen in recent years. In 2016-17, all of the US-originated Footloose productions accessing Australia’s facilities – representing the majority of the expenditure – were granted this discretionary funding, with a result that the value of international production spending in Australian hit a peak of A\$521 million. This top-up spending was not seen in any other year of production, and resulted in 2016-17 having more than double the previous production spend within any single year.

However, it falls a long way short of the C\$3.76 billion (A\$3.78 billion) attracted to Canada during 2017, or the £1.69 billion (A\$3 billion) seen in the UK last year, with consultees suggesting their stronger incentive systems were the leading cause.¹⁹ Also, and in marked contrast to Australia, the incentive systems on offer in these countries allow both physical production and post-production/VFX to be undertaken on a single project. By contrast, the Australian system presently prohibits the use of the PDV Offset on a production which has received the Location Offset, and as such projects using the Location Offset find themselves unable to use Australia’s world-leading post-production companies at the end of physical production.

The first instances of the Federal top-up funding were financed by a discrete amount generated by the sale of a Film-related real estate asset and was distributed in a relatively speedy

¹⁷ *Economic Contribution of the UK’s Film, High-End TV, Video Game and Animation Programming Sectors*, Olsberg•SPI with Nordicity (February 2015)

¹⁸ “International” means screen content production in Australia without Australian creative involvement

¹⁹ *Profile 2017*, CMPA et al., p. 5; and *Film, high-end television and animation programmes production in the UK: full-year 2017*, BFI. Also see Chapter 8.1 of this report for further details on incentive levels in these territories.

manner.²⁰ This source has been exhausted and although requests for top up still occur, there is delay and doubt about whether they will be forthcoming.

The low base incentive rate and lack of certainty and speed in relation to top-up funding seriously inhibits the attraction of Australia (as noted above) as the Location Offset at 16.5% is considered by most to be uncompetitive. Our qualitative research indicates that this delay and uncertainty has led to the loss of up to A\$350 million of Footloose production since 2016-17.

While Australia's geographical isolation can be a challenge for incoming productions, from an economic impact perspective, this isolation tends to generate significant benefits once productions are in the country. As sets cannot be easily moved out, nor individuals quickly brought in, the Australian market - whether Film crew or companies supplying the sector - captures a large percentage of production spend. This is reflected in the strong secondary impacts noted below.

The international production spend in Australia originates from a number of different markets, with Asian territories - particularly China - being increasingly interested in using the talents and locations of the Australian market. US-originated Films and TV series, however, continue to be the largest Footloose users of Australia as a production destination, as the spike in 2016-17 demonstrates.

This physical production spend is distributed predominantly along Australia's East Coast states of New South Wales, Victoria, and Queensland. All three jurisdictions have a strong physical production offer, with studios of international standard, a wide variety of locations, and a good crew offer. This being said, data on the spending by individual productions seen for this report show that even where physical productions are all based on the East Coast, impacts have been received in all states. Spending on just one Footloose project tends to go across all states and territories, as both crew and goods or services for the production will be brought in from across the country, with Footloose productions bringing in the best available supplies.

NSW and Victoria both build this international production on top of their base of domestic productions, but in Queensland, production growth is primarily driven by Footloose project spend. As Screen Australia's *Drama Report* highlights, by leveraging such international productions, Queensland has become the second-largest content production destination within Australia, and it helps to spread the benefits of production outside of the South East.²¹

Australia has been highly regarded by major international producers as an attractive location for their content, within the context of the competitive global Footloose production market; the territory boasts a strong, diverse location offer, with international-level crews, and a solid facilities sector, including studios and post-production companies. However, the low value of the Location Offset - and the fact that it cannot be used alongside the PDV Offset within a single production - inhibits the ability of the Australian sector to leverage its various qualities; this is addressed further in Chapter 9, below.

3.2. Direct Impacts

This section of the report will address the direct impacts of Location Offset-supported production in Australia, from the introduction of the Incentive in 2007 to the present. These direct effects come from the initial expenditure within the industry itself, for example on salaries and wages to actors and crew, raw materials for building sets, and standard production costs such as the rental of camera, lighting and other equipment.

²⁰ This was the sale of the Lindfield Studios site, which was owned by Film Australia (now Screen Australia)

²¹ *Drama Report 2016-17*, p. 22

3.2.1. GVA

Inbound Film and TV production generates substantial levels of economic activity for the Australian economy. This is measured as Gross Value Added (GVA) which is the sectoral equivalent to the Gross Domestic Product (GDP) figure commonly quoted for national finances.

Table 9 - Direct GVA Impacts of Location-Offset-supported Production Spending

	<i>Direct GVA (Millions of A\$)</i>
2007-08	81.6
2008-09	-
2009-10	57.2
2010-11	18.0
2011-12	-
2012-13	32.3
2013-14	56.0
2014-15	76.1
2015-16	68.2
2016-17	139.9

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

NB: no impacts assumed in 2008-09 and 2011-12 as total recorded value of international production spend was below the A\$15m threshold for receipt of the Location Offset

Since the introduction of the Location Offset, the direct GVA impact of Offset-supported international Film and TV spend in Australia has varied, reflecting the differing levels in production spend. As this economic impact follows production spend, the highest figure was seen in 2016-17 - the most recent year - with A\$139.9 million in direct economic impact calculated.

3.2.2. Jobs and Income

The production of screen content also generates a large number of jobs, with large income effects.

Table 10 - Direct FTE and Income Impacts of Location Offset-supported Production Spending

	<i>Direct FTEs</i>	<i>Income (Millions of A\$)</i>
2007-08	6,380	428
2008-09	-	-
2009-10	5,163	340
2010-11	2,196	110
2011-12	-	-
2012-13	2,713	207
2013-14	4,187	319
2014-15	6,428	491
2015-16	5,928	452
2016-17	9,059	691

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

NB: no impacts assumed in 2008-09 and 2011-12 as total recorded value of international production spend was below the A\$15m threshold for receipt of the Location Offset

Since the introduction of the Location Offset, international Film and TV productions in Australia have been responsible for just over A\$3 billion in total gross income. This has

supported significant numbers of Full Time Equivalent (FTE) employees, peaking at 9,059 in 2016-17.²²

The most recent year's income of A\$691 million does not compare strongly with Australia's competitors in the Footloose production market. In Canada, which has a competitive system of federal and provincial labour tax credits, labour income from Foreign and Location Service production of Film and TV content in 2016-17 was C\$1,766 million (A\$1,793).²³ Further evidence of Australia falling below its competition include markets such as the UK and the US state of Georgia. This is underlined in the 2016 Film LA production report, which shows Georgia had the most major Film productions that year, with 17, while the UK attracted the largest spend by Hollywood studios.²⁴ By contrast, Australia attracted four productions in the same period – this was the highest for some time, driven by the availability of top-up funding.

In all cases, their inventive systems provide certainty of what value would be delivered. In the case of the Location Offset, attracting Footloose projects, the current uncertainty and delays surrounding Federal top up decisions is harming Australia's competitiveness and the willingness of investors to create more production capacity.

3.3. Case Study – Thor: Ragnarok

Marvel's recent Film *Thor: Ragnarok* is a compelling example of Australian talent being leveraged in the service of a highly successful Footloose production, which in the process supports a wide range of jobs across the country.

Shot at Village Roadshow studios and surrounding locations on the Gold Coast, Queensland during 2016, the production supported 1,300 jobs over the course of a full year, providing an estimated A\$142 million for the Queensland economy.²⁵ The production used the studios between January and December, taking a 40,000 square foot stage with two purpose-built outdoor sets in adjacent backlot space. More than 35 separate sets were built for the production, both at Village Roadshow and other locations in the state.

In conjunction with the physical production process, *Thor: Ragnarok* used a number of Australian VFX companies – including Iloura, Luma, and Rising Sun Pictures – to undertake highly-skilled PDV work in Adelaide, Melbourne, and Sydney. These facilities providers generated cutting-edge VFX content for the Film, working over a period of 18 months, helping to enhance the physical sets into an otherworldly sci-fi landscape, as well as to translate Marvel's vision into reality through major set-piece scenes, such as a gladiatorial contest between Thor and the Hulk.

The project was Marvel's first physical production in Australia, and proved to be a major success for the company. Kevin Feige, the studio's president, was quoted afterwards as saying that the production "...ended up being perhaps one of the best experiences we've ever had. It was the happiest crew I'd ever seen on one of our movie sets."²⁶

²² As Film and TV production is a freelance industry, FTEs are used as a measure of employment to allow comparability with the employment impacts of the wider economy; this follows the model that 1 FTE is equivalent to the average annual workload of a full-time employed individual

²³ *Profile 2017*, CMPA, AQPM, and Telefilm Canada (5th February, 2018) p. 25

²⁴ *Feature Film Study 2016*, Film LA (2017) p. 11

²⁵ <http://www.ausfilm.com.au/news/hammer-time-thorragnarok-in-cinemas-now/>

²⁶ <http://www.kftv.com/news/2017/10/23/thor-ragnarok-filmed-at-queensland-studio>

As part of the shoot, Marvel also worked with Brisbane’s Gallery of Modern Art on a highly-successful exhibition of the art of the Marvel Cinematic Universe, which is explored in chapter 3.6, below.

3.4. Secondary Impacts

Alongside the direct impacts of production spend, the activity generated by Film and TV production activity leads to increased economic activity through its spending on suppliers, and the re-spending of both in the wider economy. These multiplier effects of production spending are broken into:

- **Indirect effects** - the second-round impacts on other sectors of the economy resulting from the direct expenditures of the primary industry. For example, as expenditures on filmmaking increase, one would expect increased demand for Film marketing, advertising and PR; and,
- **Induced effects** - the impacts on other sectors because of the higher incomes that have been caused by the increased demand seen in the direct and indirect effects. Therefore, expenditure in the economy has knock-on effects and ultimately leads to a greater economic impact.

This section of the report analyses the impact of Location Offset production through this element of economic impact.

3.4.1. Indirect Impacts

Film production utilises supplies and services from a wide range of different locations, and due to the relative geographical isolation of Australia, much of this is purchased from within the domestic market. This reflects the large costs inherent in bringing such goods and services into Australia, and generates a high level of indirect impact from the Australian hosting of Footloose Film and TV projects.

Table 11 - Indirect GVA, FTE and Income Impacts of Location Offset-supported Production Spending

	Indirect GVA (Millions of A\$)	Indirect FTEs	Indirect Income (Millions of A\$)
2007-08	68.5	8,118	506
2008-09	-	-	-
2009-10	53.6	5,891	361
2010-11	17.8	2,799	127
2011-12	-	-	-
2012-13	35.3	4,206	276
2013-14	58.1	6,490	370
2014-15	86.2	9,965	681
2015-16	74.3	9,190	585
2016-17	152.3	14,044	894

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

NB: no impacts assumed in 2007-08 and 2011-12 as total recorded value of international production spend was below the A\$15m threshold for receipt of the Location Offset

As with the direct impact of productions, this varies with the volume of international spending attracted into the market. However, as 2016-17 shows, the impact of an effective 30% Incentive - generating A\$206.5 million of GVA, with 22,443 indirect FTE jobs - can be substantial for the Australian economy.

3.4.2. Induced Impacts

As noted above, the direct and indirect activity associated with Footloose production in Australia generates induced impacts as a result of the raised wages it creates.

Table 12 - Induced GVA, FTE and Income Impacts of Location Offset-supported Production Spending

	Induced GVA (Millions of A\$)	Induced FTEs	Induced Income (Millions of A\$)
2007-08	56.7	7,232	433
2008-09	-	-	-
2009-10	49.8	5,431	336
2010-11	16.2	2,432	113
2011-12	-	-	-
2012-13	31.1	3,316	227
2013-14	51.9	5,116	317
2014-15	76.2	7,856	562
2015-16	65.8	7,245	488
2016-17	135.0	11,071	746

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

NB: no impacts assumed in 2007-08 and 2011-12 as total recorded value of international production spend was below the A\$15m threshold for receipt of the Location Offset

Within Australia, this impact is estimated at up to A\$135.0 million of GVA in 2016-17, supporting 11,071 FTEs of employment, and providing A\$746 million of additional wages.

3.4.3. Total Impacts

Summing these areas of economic impact together, we are able to identify the total economic impact of Footloose production spend in Australia.

Table 13 - Total GVA, FTE and Income Impacts of Location Offset-supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	206.8	21,730	1,367
2008-09	-	-	-
2009-10	160.6	16,485	1,036
2010-11	52.0	7,428	349
2011-12	-	-	-
2012-13	98.7	10,235	710
2013-14	166.0	15,793	1,007
2014-15	238.5	24,249	1,734
2015-16	208.3	22,364	1,525
2016-17	427.2	34,175	2,331

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

NB: no impacts assumed in 2007-08 and 2011-12 as total recorded value of international production spend was below the A\$15m threshold for receipt of the Location Offset

This shows that in 2016-17 - the largest year of international production spend in Australia - Footloose projects in Australia generated a total A\$427.2 million of GVA, supporting 34,175 total FTEs of employment, who were paid A\$2.3 billion in total income.

3.5. Alignment with State and Territory Incentives

Alongside Federal Offset and top-up spending, several of Australia's states and territories also provide incentives - often in the form of discretionary grant funding - to attract international productions to their jurisdictions. This funding is provided in addition to that provided through Federal funding streams.

In a number of cases, this can make a significant difference to the production location decision - this is demonstrated by the third season of *The Leftovers* in Victoria, where the state provided a financial incentive on Victorian production spend which, when added to the Location Offset, encouraged the production to stay in Australia. However, as such state incentives are relatively rare for Footloose projects, and negotiated on a case-by-case basis, this does not allow for the kind of certainty seen with other jurisdictions with multiple incentives, such as Canada. Our analysis also suggests such cases are infrequent - often, state funding doesn't provide the scale of finance required to make a difference to a major production, as would be provided by a larger Federal Incentive.

State and territory funding more often plays a role in providing an additional reason for larger-budget productions with access to top-up to come to a particular jurisdiction, or to attract smaller projects. This is seen in NSW, where state money defrays some of the additional costs associated with filming in a popular state, and helps to provide the final 5% of the budget. Such funding can also be focused on smaller productions, for example those from Asia - in particular China - that wish to use Australian crews and locations, and where long-term benefits in relationships and tourism are highly likely.

These benefits represent key reason for states and territories to compete for Footloose productions, but there are also a number of areas in which such an incentive can assist in the development of other aims and objectives. The engagement of local cast and crew is one key aim, and is seen in the requirements of Queensland's state funding; this obliges a Queenslanders to be part of the creative team, assisting with knowledge transfer. Such benefits can also be seen through more targeted programmes, such as "Scream Queensland", through which Kirk M. Morri, a world-leading professional who is editing the Queensland-shot *Aquaman*, provided editing notes for Film trailers shot by local students.

As we note above, the majority of this activity has occurred in the three East Coast states with more developed Film infrastructures. States with smaller industries, such as Tasmania, take a different approach. Some larger international productions may choose to go there for specific creative reasons - for example, *The Light Between Oceans* - but for the most part, Tasmania focuses on mid-sized Australian productions; these also help to develop the local industry, in a similar way to how major Footloose shoots do in the larger Australian sectors.

Our analysis of the situation with state and territory funding in Australia suggests that, while these jurisdictions do not have the financial resources to make up the shortfall found in the present Location Offset for larger productions in the same way as Canada's provinces, they nonetheless play an important role. The funding provided by states and territories provides an important top-up to the Federal incentives, and drives the engagement of Footloose and other inward productions with local Film and TV sectors. As a result of such engagement, there is good evidence that such funding has a positive effect for the local industries that the states and territories wish to support, spreading the benefits of production spending from the three major hubs in Victoria, NSW, and Queensland.

3.6. Spillover Impacts

Tourism is a key part of the suite of benefits from Australia's investment in Footloose productions, as proven in various studies. In 2016, Deloitte published an evaluation of the

impact of all production spending in Australia, which showed that total screen-induced tourism expenditure of international visitors to the country amounted to A\$725 million per year.²⁷ Approximately 144,000 international tourism visits were directly associated with Australian screen content, while of those visitors not directly drawn by Australian screen content, 85,000 stayed an additional period to see locations featured on Australian Film and TV.²⁸

Domestic tourism is also impacted by the production of Footloose content in Australia, as the recent example of *Thor: Ragnarok* in Queensland demonstrates.²⁹ Organised in partnership with Screen Queensland, the production put on an exhibition about the Marvel Cinematic Universe at Brisbane's Gallery of Modern Art. Attracting 275,000 paid visitors – compared with just over 2 million for the gallery as a whole in 2016-17 – this ran between May and September 2017, and ended up being the biggest show in the history of the gallery, drawing a range of art, comic book, and Film enthusiasts, and engaging local Film students to produce elements of the exhibition explaining pre- and post-production.³⁰

Queensland has also benefited from infrastructure investment as a result of Location Offset-supported productions, with Warner Bros. investing in the development of a water tank in Brisbane for *Fool's Gold*. For the most part, however, Australia already had a strong base of studio infrastructure at the time the Location Offset was introduced.

There is also a positive impact on the quality and technical expertise of the crew available to domestic productions. Australian crew are highly regarded by US studios, often working around the world with major US projects, and anecdotal evidence suggests there is a wide degree of crossover between those working in this area, and the crew on larger-budget domestic shoots. Such crossover further assists with the transfer of skills from experts on Footloose productions to those working earlier in their careers, and those enhanced skills can also improve the production quality of domestic Film and TV productions.

²⁷ *What are our stories worth? Measuring the economic and cultural value of Australia's screen sector*, Deloitte Access Economics (2016) p. 27

²⁸ *ibid*, p. 27

²⁹ It is likely that most of these tourists were domestic, though they may also include some screen influenced tourists, as mentioned above

³⁰ *Board of Trustees Annual Report 2016-17*, Queensland Art Gallery p. 11

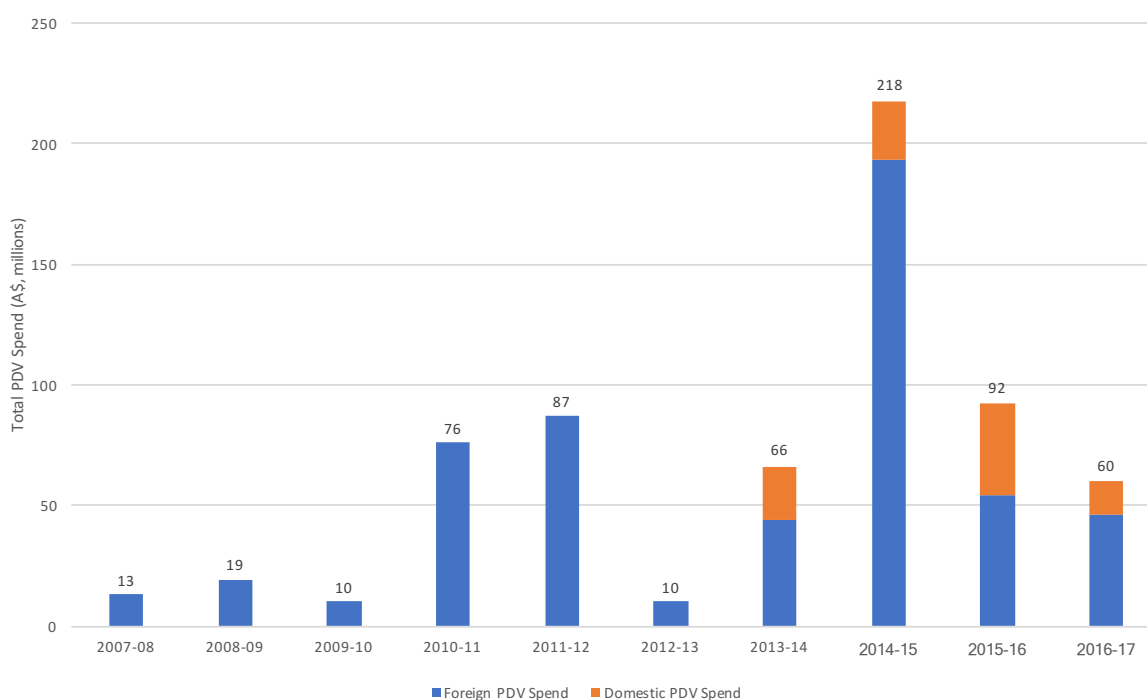
4. IMPACT OF THE PDV OFFSET

4.1. Use of the PDV Offset

The Post, Digital, and Video Effects (PDV) Offset was introduced in July 2007 at the same time as the Location Offset. Aimed at supporting the development of a post-production, visual effects, and digital animation sector within Australia, this Offset - as with the Location Offset - originally offered a 15% Incentive. At launch, the minimum spend threshold was A\$5 million.

This threshold was reduced in July 2010, falling to the present A\$500,000. The value of the Incentive, meanwhile, was raised to 30% of QAPE from July 2011; both of these changes were in response to the lack of competitiveness of the PDV Offset in the global marketplace.

Figure 4 - PDV Offset-supported Spend in Australia, 2007-08 to 2016-17



Source: Olsberg•SPI analysis of Screen Australia Drama Report

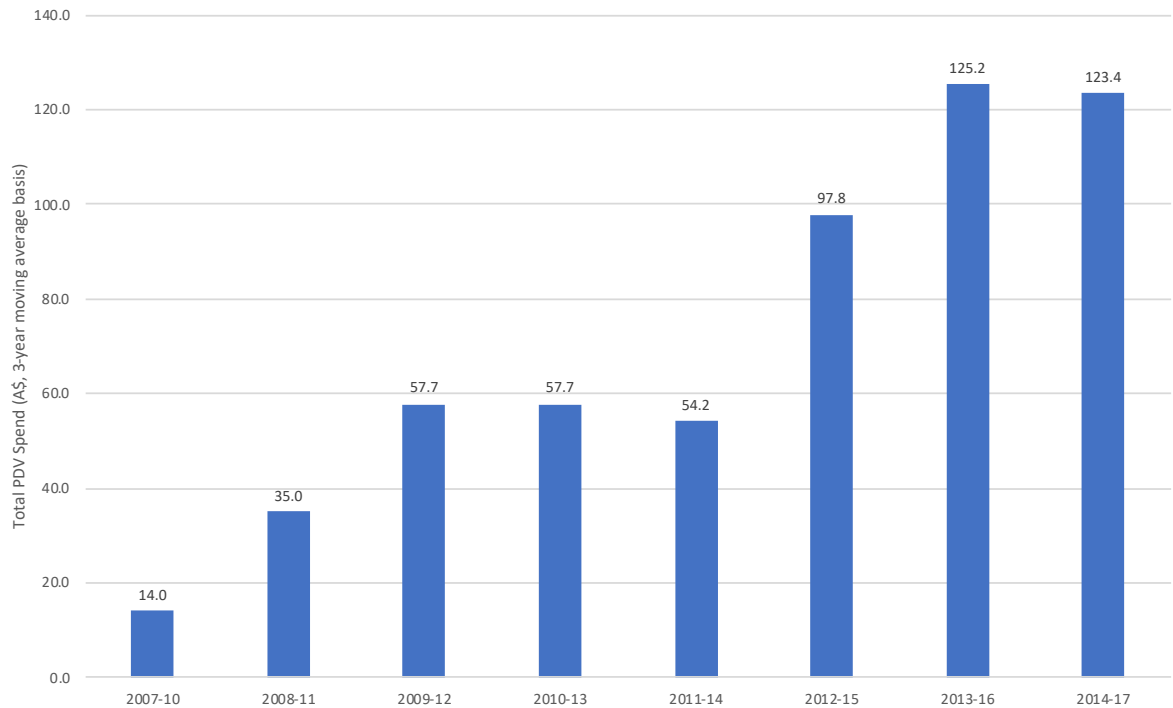
PDV Offset increased to 30% in 2011-12

NB: changes in the reporting of data in the PDV sector likely account for significant increase in spend suggested for 2014-15; a three-year moving average approach is used below to provide a more consistent picture of spend

Since the two changes were made, the value of production spend through the PDV Offset has risen, albeit unevenly. The *Drama Report* shows that A\$13 million was spent by foreign PDV productions in the first year of the Offset, a value that rose unevenly to peak at A\$218 million (including domestic productions) in 2014-15.

This is not immediately seen within the dataset, but looking at the spending on a three-year moving average basis, the pattern becomes apparent. This approach is desirable given the model through which the animation sector, in particular, operates. Whereas the data presented in the *Drama Report* places all spending on the day when the final certificate was granted, this spending will have actually occurred over an extended period of two years or more up to that date.

Figure 5 - PDV Offset-supported Spend in Australia, 2007-08 to 2016-17 (3-year moving average basis)



Source: Olsberg•SPI analysis of Screen Australia Drama Report

The Animation industry within Australia has been one of the major beneficiaries of the PDV Offset – the availability of the 30% Incentive has led to production of significant international projects, such as *The Lego® Batman Movie* and the *Lego® Ninjago* movies, in Australia. Such production is also increasingly used for the Australian children’s sector, which has increasingly leveraged the PDV Offset to produce high-quality animated content for domestic TV. This is seen with *Moody Street Kids*, which was originally animated predominantly in Malaysia due to the lower cost-base there, but where a large amount of spend has been re-shored in more recent series due to the availability of the Offset.

The impact of the PDV Offset within the post-production and VFX markets in Australia is seen in the scale of projects that Australian companies now work on; whereas Australian firms used to attract A\$1-2 million work packages, they can now access projects in the A\$5-10 million range. Australia has, as a result, become a major global provider of such services, with its companies now seen by the US studios as world class.

Despite this quality, the lack of ability to use both the Location and PDV Offsets within a single production is a challenge for international projects. Producers who would like to do post-production and VFX here on a Location Offset-supported production are presently required to go elsewhere, due to the rules of the two schemes, and the insufficiency of the 16.5% Location Offset compared to other incentives for digital production.

4.2. Direct Impact

4.2.1. GVA

Table 14 - Direct GVA Impacts of PDV Offset-Supported Production Spending

<i>Direct GVA (Millions of A\$)</i>	
2007-08	4.4
2008-09	6.5
2009-10	3.4
2010-11	24.9
2011-12*	26.6
2012-13	3.2
2013-14	23.1
2014-15	70.8
2015-16	32.3
2016-17	33.7

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*PDV Offset increased to 30% in 2011-12

As with the Location Offset, productions using the PDV Offset in Australia generate a direct economic contribution to the nation's current account, and the economic value of PDV Offset-supported production has grown significantly over the period. This is apparent when the data are considered on a three-year moving average basis, which shows average growth from A\$9.2 million of GVA in the first three years of the offset to A\$96.2 million in the most recent three. This reflects the underlying growth in the Australian PDV sector across post-production, VFX, and animation.

Table 15 - Direct GVA Impacts of PDV Offset-Supported Production Spending (3-year moving average basis)

<i>Direct GVA (Millions of A\$)</i>	
2007-10	9.2
2008-11	22.9
2009-12	36.8
2010-13	36.8
2011-14	36.1
2012-15	68.3
2013-16	88.5
2014-17	96.2

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

4.2.2. Jobs and Income

Table 16 - Direct FTE and Income Impacts of PDV Offset-Supported Production Spending

	Direct FTEs	Income (Millions of A\$)
2007-08	347	23
2008-09	505	34
2009-10	304	20
2010-11	3,035	152
2011-12*	2,780	174
2012-13	271	21
2013-14	1,729	132
2014-15	5,979	456
2015-16	2,807	214
2016-17	2,178	166

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*PDV Offset increased to 30% in 2011-12

The production of PDV content within Australia supports a large number of jobs, and provides substantial income benefits. This has ranged from 304 FTEs with A\$20 million in income in 2009-10 to 5,979 FTEs with A\$456 million in income in 2014-15.

Table 17 - Direct FTE and Income Impacts of PDV Offset-Supported Production Spending (3-year moving average basis)

	Direct FTEs	Income (Millions of A\$)
2007-10	385	26
2008-11	1,281	69
2009-12	2,039	115
2010-13	2,029	115
2011-14	1,593	109
2012-15	2,660	203
2013-16	3,505	267
2014-17	3,655	279

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Looking at the data on a three-year moving average basis, the trends in the data become more apparent. This approach shows direct FTEs growing from an average 385, with A\$26 million of labour income, in the first three years of the scheme, to 3,655 FTEs being paid A\$279 million between them in the most recent three years.

4.3. Secondary Impacts

4.3.1. Indirect Impacts

As with the Footloose production sector, projects in the PDV sector lead to the purchase of significant amounts of products and services in the wider economy.

Table 18 - Indirect GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending

	Indirect GVA (Millions of A\$)	Indirect FTEs	Indirect Income (Millions of A\$)
2007-08	3.7	442	28
2008-09	6.3	702	42
2009-10	3.2	347	21
2010-11	24.6	3,868	175
2011-12*	27.7	3,923	216
2012-13	3.5	421	28
2013-14	24.0	2,680	153
2014-15	80.2	9,269	633
2015-16	35.2	4,352	277
2016-17	36.6	3,377	215

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*PDV Offset increased to 30% in 2011-12

In the largest year of production spend studied, this indirect effect generated A\$80.2 million of GVA, supporting 9,269 FTEs of employment, and A\$633 million of income.

Table 19 - Indirect GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending (3-year moving average basis)

	Indirect GVA (Millions of A\$)	Indirect FTEs	Indirect Income (Millions of A\$)
2007-10	4.4	497	30
2008-11	11.4	1,639	79
2009-12	18.5	2,713	137
2010-13	18.6	2,737	139
2011-14	18.4	2,341	132
2012-15	35.9	4,123	271
2013-16	46.4	5,434	354
2014-17	50.7	5,666	375

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

On a three-year moving average basis, the indirect impacts of PDV Offset-supported production in Australia has grown from A\$4.4 million GVA, 497 FTEs, and A\$30 million of income in the first three years to A\$50.7 million GVA, 5,666 FTEs and A\$375 million of income in the most recent.

4.3.2. Induced Impacts

These direct and indirect impacts generate additional spending in the wider economy, which is calculated through induced impacts.

Table 20 - Induced GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending

	Induced GVA (Millions of A\$)	Induced FTEs	Induced Income (Millions of A\$)
2007-08	3.1	393	24
2008-09	5.2	576	35
2009-10	2.9	319	20
2010-11	22.4	3,361	156
2011-12*	24.8	3,236	184
2012-13	3.1	332	23
2013-14	21.4	2,113	131
2014-15	70.9	7,307	523
2015-16	31.2	3,431	231
2016-17	32.5	2,662	179

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*PDV Offset increased to 30% in 2011-12

In 2014-15, the year with the greatest spending, this activity was responsible for a further A\$70.9 million of GVA, with 7,307 FTEs of employment and A\$523 million of wages generated.

Table 21 - Induced GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending (3-year moving average basis)

	Induced GVA (Millions of A\$)	Induced FTEs	Induced Income (Millions of A\$)
2007-10	3.7	430	26
2008-11	10.2	1,419	70
2009-12	16.7	2,306	120
2010-13	16.8	2,310	121
2011-14	16.5	1,894	113
2012-15	31.8	3,251	226
2013-16	41.2	4,284	295
2014-17	44.8	4,467	311

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

On a three-year moving average basis, the induced impacts of PDV Offset-supported production in Australia has grown from A\$3.7 million GVA, 430 FTEs, and A\$26 million of income in the first three years to A\$44.8 million GVA, 4,467 FTEs and A\$311 million of income in the most recent.

4.3.3. Total Impacts

Bringing these together, we see that in the largest single year studied, PDV Offset-supported production was responsible for A\$221.8 million of total GVA, supporting 22,556 FTEs of employment, with A\$1,613 million of total income generated.

Table 22 - Total GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	11.2	1,182	74
2008-09	18.0	1,784	111
2009-10	9.4	970	61
2010-11	71.9	10,264	482
2011-12*	79.1	9,939	574
2012-13	9.9	1,024	71
2013-14	68.6	6,523	416
2014-15	221.8	22,556	1,613
2015-16	98.7	10,589	722
2016-17	102.7	8,218	560

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*PDV Offset increased to 30% in 2011-12

On a three-year moving average basis, the growth in the PDV sector since the introduction of the Offset is clearly demonstrated – each of total GVA, FTEs, and Income has increased to more than ten-times the figure between the first three-year period and the most recent.

Table 23 - Total GVA, FTE and Income Impacts of PDV Offset-Supported Production Spending (3-year moving average basis)

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-10	12.9	1,312	82
2008-11	33.1	4,339	218
2009-12	53.5	7,058	373
2010-13	53.6	7,075	376
2011-14	52.5	5,828	354
2012-15	100.1	10,034	700
2013-16	129.7	13,223	917
2014-17	141.1	13,788	965

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

4.4. Spillover Impacts

Since the introduction of the PDV Offset, major investments have been made in the companies that undertake projects supported by the Incentive. These include Animal Logic and Iloura, both of which have worked on a significant volume of PDV Offset-supported productions, and where company growth has been driven by the international market opportunity offered by the Offset. As noted previously, Technicolor have also invested in a new Australian VFX facility in Adelaide, where they can build on a strong skills base in South Australia, and the recently-announced 10% top-up incentive for PDV production in the state.

In order to support the future growth of the animation sector in Australia, Animal Logic have partnered with the University of Technology Sydney, developing a postgraduate degree in

animation and visualisation.³¹ With capacity for 50 students per year, this represents a significant investment in the future of the Australian PDV sector from both the animation company and the university. The transformative impact of the Offset has, furthermore, allowed Animal Logic to expand into the production of original IP as a result of its success in the PDV space, resulting in the recent release of *Peter Rabbit*, produced with Columbia Pictures.

Rising Sun Pictures, meanwhile, have an educational arrangement with the University of South Australia similar to that between Animal Logic and UTS, with capacity for 18 students per year.³² These sustainable investments demonstrate that stakeholders respond to the certainty provided by a competitive incentive.

³¹ "UTS joins with Animal Logic to create new degree in animation", Kelsey Munro in *Sydney Morning Herald* (7th August, 2016)

³² *Rising Sun collaboration – a new dawn for UniSA media arts students*, 25th August, 2015, accessible at: <http://www.unisa.edu.au/Media-Centre/Releases/Rising-Sun-collaboration--a-new-dawn-for-UniSA-media-arts-students/#.Wpgde2acbUJ>

5. IMPACT OF THE PRODUCER OFFSET (TV)

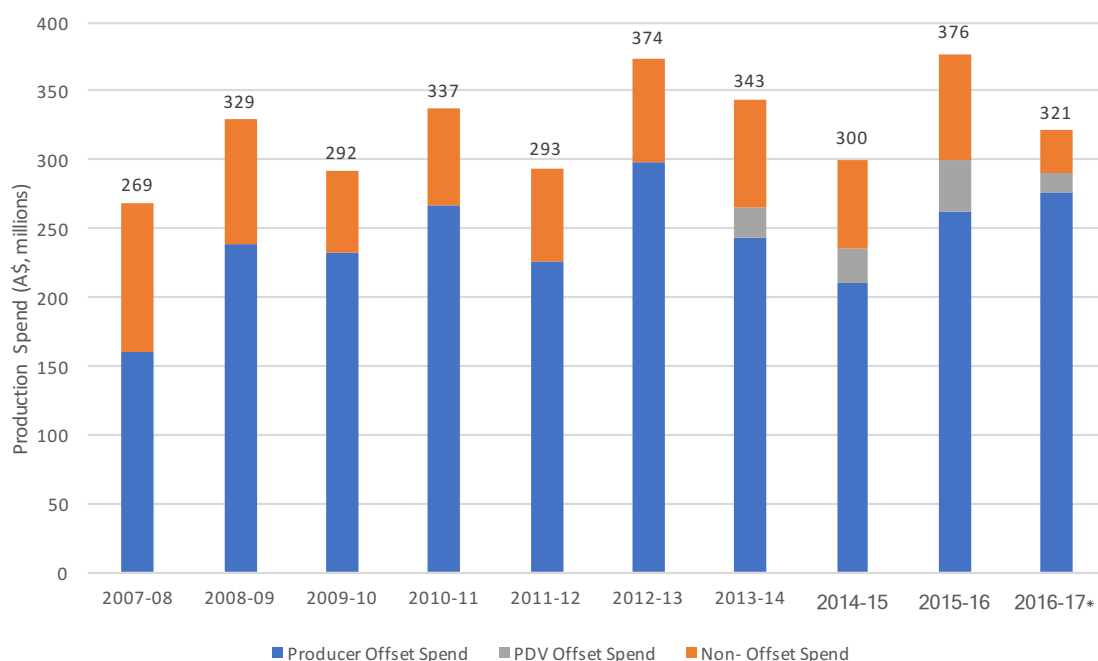
5.1. Use of the Producer Offset in TV

The Producer Offset was introduced in July 2007, alongside the Location and PDV Offsets, introducing a rebate model to replace the previous investor-driven 10B and 10BA Incentive models for Australian domestic screen content production. In doing this, the intention was to support the sector in:

- Becoming more competitive and responsive to audience demand;
- Allowing producers to retain equity in their productions;
- Encouraging Australian talent to work at home;
- Attracting international investment; and,
- Engaging private investment in the screen industries.

Reflecting the respective statuses of the Australian Film and TV markets at the time of its introduction, the Producer Offset provides a value of 20% to TV projects. The maximum run of a single TV project accessing the Producer Offset is capped at 65 hours.

Figure 6 - Domestic TV Drama Spend in Australia, 2007-08 to 2016-17



Source: Olsberg•SPI analysis of Screen Australia Drama Report

* *Drama Report 2016/17* does not separate Producer Offset-supported spend from non-Producer Offset-supported spend; as only one programme (*Home and Away, Season 30*) was directly funded by the broadcaster, the costs of this are assumed to be at the average hourly production spend for Drama noted in the 2016/17 report

NB: PDV Offset component of the spend is not analysed below, but is noted in the graph to inform the reader

The availability of the Producer Offset has had a transformative impact for the independent TV production sector within Australia. This is underlined by *Skin in the Game*, Screen Australia's recent evaluation of the Offset after 10 years, and was also noted by multiple consultees during the research process for this Report.³³

³³ *Skin in the Game: The Producer Offset 10 years on*, Screen Australia (November 2017)

In keeping with the aim of the Offset to allow production companies to retain equity in their productions, the strength of Australian TV production companies has increased markedly during the last ten years. Australian firms have been able to use their ownership of IP within projects supported by the Producer Offset to generate much more capital within their businesses than they had prior to 2007, and in the process have been able to expand their businesses into different elements of the marketplace, such as more international production, or greater vertical integration.

This success is generated as the availability of Offset-supported independent production acts to provide broadcasters a higher quality of production for the relatively small licence fee that they pay. With the Offset, producers can access market finance for independent productions, which helps to increase the quality of the final product, in a way which in-house projects – which do not have access to the Producer Offset – struggle to do.

Consultees within this part of the sector have advised that the structure of domestic Australian TV budgets reflects this change – the broadcaster licence fee can now be as low as 20%, with 30% of funding coming from the market. The data in the *Drama Report* suggests that much of this is inward investment, with an average of 17% foreign investment in Australian TV drama projects between 2012-13 and 2016-17.³⁴ Producers have also noted that raising project finance has become easier across the board over the ten years since the Offset was introduced.³⁵

This increasing availability of finance allows producers to tackle higher-budget productions, with bigger production values and more cultural value for the Australian audience. Such productions provide more certainty in revenue streams, providing a further source of equity to the company, whilst also allowing for greater production quality on screen.

5.2. Direct Impact

5.2.1. GVA

Table 24 - Direct GVA Impacts of Producer Offset-Supported TV Drama Spending

	<i>Direct GVA (Millions of A\$)</i>
2007-08	55.0
2008-09	81.4
2009-10	78.1
2010-11	87.3
2011-12	69.1
2012-13	96.1
2013-14	85.9
2014-15	68.6
2015-16	91.7
2016-17	113.9

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

The direct GVA impact of Producer Offset-supported TV drama production in Australia has grown from A\$55 million in the first year of the Incentive to A\$96.8 million in 2016-17. As with the other sectors studied, this growth has been relatively uneven, but as the evidence from *Skin*

³⁴ *Drama Report 2016-17* p. 17

³⁵ *Skin in the Game* p. 16

in the Game shows, the availability of the Incentive appears to have permanently raised the level of capacity in the domestic sector.³⁶

5.2.2. Jobs and Income

Table 25 - Direct FTE and Income Impacts of Producer Offset-Supported TV Drama Spending

	Direct FTEs	Income (Millions of A\$)
2007-08	4,298	288
2008-09	6,357	431
2009-10	7,046	464
2010-11	10,661	534
2011-12	7,221	452
2012-13	8,085	617
2013-14	6,425	490
2014-15	5,796	442
2015-16	7,965	608
2016-17	7,376	563

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

This production spending generates a large number of jobs within the Australian economy, and as with the direct impact, this figure has grown since the introduction of the Incentive. From a base of 4,298 FTEs in 2007-08, the number of direct FTEs grew to 10,661 in 2010-11, before stabilising around 7,500 by 2016-17.

These employees have received up to A\$608 million in total income, though this has also varied year-to-year, reflecting trends in the wider economy.

5.3. Secondary Impacts

5.3.1. Indirect Impacts

The investment made by the Australian government in Producer Offset-supported TV drama production generates significant indirect impacts within supplier industries.

Table 26 - Indirect GVA, FTE and Income Impacts of Producer Offset-Supported TV Drama Spending

	Indirect GVA (Millions of A\$)	Indirect FTEs	Indirect Income (Millions of A\$)
2007-08	46.2	5,468	341
2008-09	79.8	8,8737	523
2009-10	73.2	8,040	492
2010-11	86.4	13,590	615
2011-12	72.0	10,190	561
2012-13	105.2	12,534	821
2013-14	89.2	9,960	568
2014-15	77.7	8,985	614
2015-16	99.8	12,348	786
2016-17	124.0	11,435	728

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

³⁶ *ibid*, p. 5

These reached a new peak in 2016-17, with A\$124.0 million in indirect GVA, 11,435 FTE jobs, and A\$728 million in indirect income. This represents strong growth from the A\$46.2 million in GVA, 5,468 FTEs, and A\$341 million seen in the first year of the Offset.

5.3.2. Induced Impacts

The re-spending of wages associated with Producer Offset-supported TV drama is also highly beneficial for the Australian economy.

Table 27 - Induced GVA, FTE and Income Impacts of Producer Offset-Supported TV Drama Spending

	Induced GVA (Millions of A\$)	Induced FTEs	Induced Income (Millions of A\$)
2007-08	38.2	4,872	292
2008-09	65.3	7,247	436
2009-10	67.9	7,412	458
2010-11	78.7	11,808	547
2011-12	64.4	8,407	479
2012-13	92.8	9,881	676
2013-14	79.7	7,852	487
2014-15	68.7	7,084	507
2015-16	88.4	9,734	656
2016-17	109.9	9,015	607

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

In 2016-17, this was responsible for a further A\$109.9 million in induced GVA, with 9,015 FTEs of employment generated, and A\$607 million of income.

5.3.3. Total Impacts

Table 28 - Total GVA, FTE and Income Impacts of Producer Offset-Supported TV Drama Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	139.3	14,638	921
2008-09	226.5	22,441	1,391
2009-10	219.1	22,498	1,414
2010-11	252.5	36,059	1,695
2011-12	205.5	25,818	1,491
2012-13	294.1	30,501	2,115
2013-14	254.7	24,236	1,545
2014-15	215.0	21,865	1,563
2015-16	279.9	30,048	2,049
2016-17	347.8	27,826	1,898

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Bringing these impacts together, we find that since its introduction, the total economic contribution of Producer Offset-supported TV drama in Australia has grown from A\$139.3 million in 2007-08 to A\$347.8 million in 2016-17. This production spending supported 27,826 total FTEs in 2016-17, generating A\$1,898 million in total income in that year – this shows substantial growth from the 14,638 FTEs and A\$921 million of income seen in 2007-08.

5.4. Spillover Impacts

As with the *Footloose* productions, there is strong evidence of the ongoing tourism impacts of Producer Offset-supported TV drama production in Australia.

Miss Fisher's Murder Mysteries provides a strong example of this – though new episodes haven't been produced shown for several years, there are still walking tours in Melbourne of the locations in the show. Meanwhile, during the second and third series, exhibitions of the show's costumes were held at various properties of the National Trusts of Australia.

The Doctor Blake Mysteries demonstrated that this phenomenon is not limited to Australia's major towns, having brought a significant tourism boom to the town of Ballarat in Victoria.

6. IMPACT OF THE PRODUCER OFFSET (FILM)

6.1. Use of the Producer Offset in Film

The Film element of the Producer Offset is aimed at supporting domestic and co-produced projects aimed for cinematic release. As it is only available to projects passing the Significant Australian Content Test (SACT), most inward investment production – with the exception of Films like *The Great Gatsby* with significant Australian involvement – are not eligible for this. Given the increased risks involved in producing independent Films, the Incentive in this sector is higher than that for TV, at 40% compared to 20%.³⁷

As with the TV element of the Producer Offset, the Incentive represents a major bonus to the producer – with 40% of the budget guaranteed, the filmmaker has significantly greater flexibility in how they choose to operate. This remains a necessity given the higher level of complexity in the Film market, where patching together a complex set of investments remains necessary to complete the financing and production of independent Films.

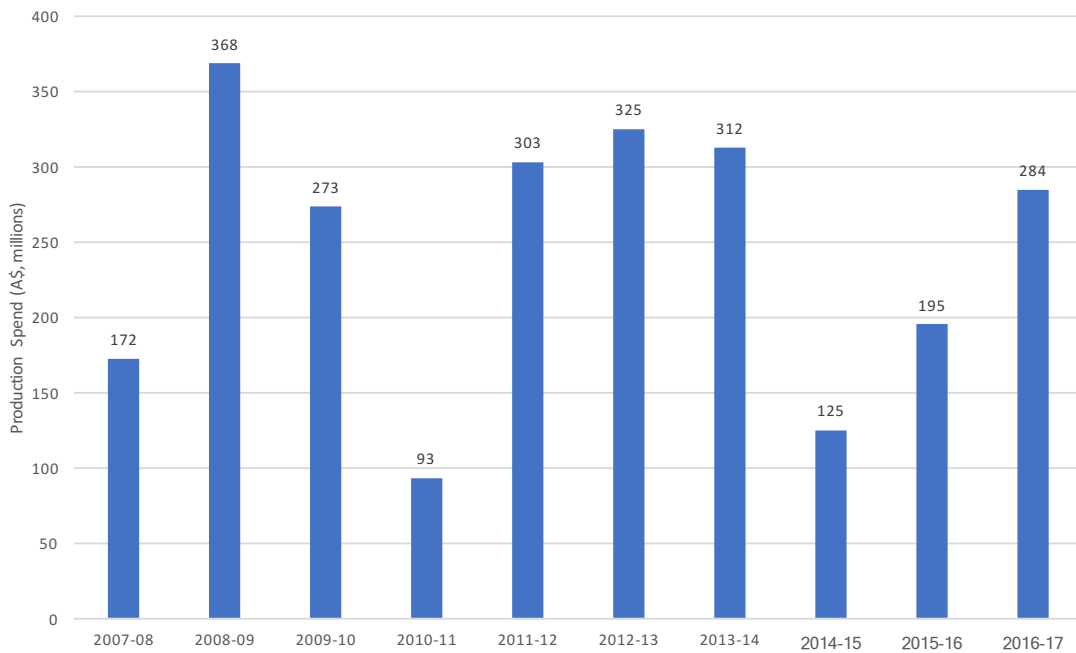
While structured identically to the TV Producer Offset, the use of the Film Offset is noticeably different. Producers in the Film sector are much more likely to trade the equity inherent in the Offset to another party – often to private investors and Australian cast – than those in the TV and documentary space.³⁸

Despite this trading activity, the Offset continues to support an ownership stake for the producer that would not have been possible in the pre-Offset system. This reflects the fact that, despite the former Film Finance Corporation (FFC) potentially financing a higher percentage of the budget in selective funding than Screen Australia now does, there was no guarantee that any equity associated with this investment would be transferred to the producer. Even where it was, often this equity stake would be around 15% of FFC investment, a much lower value than the 40% the producer now starts with.

³⁷ This was articulated in submissions to the *Review of Australian Government Film Funding Support*, conducted by the then-Department of Communications, Information Technology and the Arts in August 2006; it has most recently been underlined in the UK in Olsberg•SPI's *The State of the UK Independent Film Sector* (28th April, 2017)

³⁸ *Skin in the Game* p. 6; 37% of feature producers have traded Offset equity, compared to 2% of TV producers and 6% of documentary producers

Figure 7 - Domestic Film Spend in Australia, 2007-08 to 2016-17



Source: Olsberg•SPI analysis of Screen Australia Drama Report

As the chart above shows, the production spending of Australian domestic feature Films continues to be strong, despite a challenging global market. Consultees have noted that spending is spread across Australia, including into smaller markets such as Tasmania, Western Australia, and the Australian Capital Territory.

6.2. Direct Impact

6.2.1. GVA

As with the other sectors of production studied, Producer Offset-supported Australian Film production generates direct economic benefits for the Australian economy.

Table 29 - Direct GVA Impacts of Producer Offset-Supported Film Production Spending

	Direct GVA (Millions of A\$)
2007-08	58.7
2008-09	125.3
2009-10	91.9
2010-11	30.4
2011-12	92.6
2012-13	104.9
2013-14	109.9
2014-15	40.7
2015-16	68.2
2016-17	98.5

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

The scale of these direct benefits have varied depending on the underlying production spend in the sector, but average A\$82.1 million per annum, peaking at A\$125.3 million in 2008-09.

6.2.2. Jobs and Income

This direct spending also provides for a large number of FTE jobs, and provides strong income benefits for Australian workers.

Table 30 - Direct FTE and Income Impacts of Producer Offset-Supported Film Production Spending

	Direct FTEs	Income (Millions of A\$)
2007-08	4,592	308
2008-09	9,789	664
2009-10	8,291	546
2010-11	3,713	186
2011-12	9,682	606
2012-13	8,818	673
2013-14	8,215	627
2014-15	3,434	262
2015-16	5,928	452
2016-17	6,375	486

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

The scale of this also varies, with direct FTE employment averaging 6,884, and direct income averaging A\$481 million; as with the GVA impacts, the highest year for this was 2008-09, with A\$664 million of income, and 9,789 FTEs.

6.3. Secondary Impacts

6.3.1. Indirect Impacts

Table 31 - Indirect GVA, FTE and Income Impacts of Producer Offset-Supported Film Production Spending

	Indirect GVA (Millions of A\$)	Indirect FTEs	Indirect Income (Millions of A\$)
2007-08	49.3	5,842	364
2008-09	122.8	13,660	805
2009-10	86.1	9,461	579
2010-11	30.1	4,734	214
2011-12	96.5	13,662	752
2012-13	114.8	13,670	896
2013-14	114.0	12,736	727
2014-15	46.0	5,323	364
2015-16	74.3	9,190	585
2016-17	107.2	9,882	629

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Spending on goods and services in the Australian economy also generated major impacts over the period of study. On average, A\$84 million in indirect GVA has been generated annually by Producer Offset-supported Film production spending; this supported an average 9,811 FTEs of employment, and provided on average A\$592 million in income per year.

6.3.2. Induced Impacts

Table 32 - Induced GVA, FTE and Income Impacts of Producer Offset-Supported Film Production Spending

	Induced GVA (Millions of A\$)	Induced FTEs	Induced Income (Millions of A\$)
2007-08	40.8	5,204	312
2008-09	100.6	11,159	672
2009-10	79.9	8,722	539
2010-11	27.4	4,113	190
2011-12	86.4	11,272	642
2012-13	101.2	10,776	738
2013-14	101.9	10,040	622
2014-15	40.7	4,196	300
2015-16	65.8	7,245	488
2016-17	95.0	7,790	525

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

The re-spending of these direct and indirect wages in the wider economy is also responsible for substantial benefits for Australia. On average, these induced impacts amounted to A\$74.0 million in GVA, with 8,052 FTEs of employment, and A\$503 million in wages.

6.3.3. Total Impacts

Table 33 - Total GVA, FTE and Income Impacts of Producer Offset-Supported Film Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	148.8	15,638	984
2008-09	348.7	34,554	2,141
2009-10	257.8	26,473	1,664
2010-11	88.0	12,560	590
2011-12	275.5	34,615	2,000
2012-13	320.8	33,264	2,306
2013-14	325.7	30,991	1,976
2014-15	127.4	12,953	926
2015-16	208.3	22,364	1,525
2016-17	300.6	24,047	1,640

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Summing these together, we find that the impacts of Producer Offset-supported domestic Film production in Australia average A\$240.2 million in GVA, with 25,000 FTEs of employment, and A\$1,575 million in income. The highest year of this impact – 2008-09 – saw a total A\$348.7 million in GVA, with 34,554 FTEs, and A\$2,141 million in income.

6.4. Spillover Impacts

Australian Film production continues to be a significant driver of soft power and tourism revenue for Australia. This is demonstrated by Films such as *Crocodile Dundee*, which continues to generate value for the Australian economy even 32 years after release – the recent screening

of a US\$5 million (A\$7.5m) advert using the character during the Super Bowl represents a strong demonstration of the value domestic Film production can generate.³⁹

³⁹ "Crocodile Dundee tourism ad airs at Super Bowl in US", Aja Styles in *Sydney Morning Herald* (5th February, 2018)

7. RETURN ON INVESTMENT

By generating additional economic activity for Australia, the various Offsets provide a significant return on investment (RoI) within the broader Australian economy. This chapter analyses this RoI from the Offsets (the Investment) in terms of GVA and taxation benefits per dollar of incentive granted.

Due to the format of the economic statistics produced by the Australian Bureau of Statistics, this analysis has to be taken on an aggregate basis, analysing the Offsets collectively. This reflects the availability of figures from the Australian Bureau of Statistics, which allow for the analysis of the industry at a national level, but do not provide the granularity which would be required to reliably assess the separate RoI of each Offset.⁴⁰

7.1. GVA RoI

Through the Offsets, the Australian Federal Government invests on behalf of the entire Australian population. As such, the GVA return –the economic activity contributed by Offset-supported production to the Australian economy as a whole – is the most appropriate measure of RoI generated by the Incentives.

In order to estimate this, the total GVA generated by Offset-supported production (including discretionary Federal top-ups) – as calculated in the chapters above – is divided by the amount of Offset invested in these productions.

Table 34 - GVA Return on Investment from Offsets

	<i>Offset Disbursed* (A\$, millions)</i>	<i>GVA Generated (A\$, millions)</i>	<i>GVA RoI</i>
2007-08	115.0	506.24	4.40
2008-09	181.1	593.24	3.28
2009-10	156.8	646.98	4.13
2010-11	99.0	464.35	4.69
2011-12	172.4	560.05	3.25
2012-13	241.9	723.53	2.99
2013-14	220.4	815.04	3.70
2014-15	204.0	802.70	3.93
2015-16	188.4	795.27	4.22
2016-17	296.2	1,178.40	3.98

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

This analysis shows that the Offsets contribute strongly to the Australian economy. On average, we find that the Australian economy benefits by A\$3.86 in total GVA for each A\$1 of Offset (including discretionary federal top-up funding) disbursed over the ten years the Offsets have been in operation.

7.2. Taxation RoI

In addition to this GVA impact, the productions the Australian Commonwealth invests in through the Offsets pay a variety of taxes, including PAYG, Income Taxes, GST, and Corporate Taxes. To estimate the impact of Offset-supported production on these, tax-to-GVA ratios for

⁴⁰ For an explanation of this methodology, see Appendix 1, below

each of the fiscal years for which the Incentive has existed were applied to the GVA outcomes calculated above, and divided between the cumulative Offsets disbursed.

Table 35 - Taxation Return on Investment from Offsets

	<i>Offset Disbursed* (A\$, millions)</i>	<i>Taxation Generated (A\$, millions)</i>	<i>Taxation Rol</i>
2007-08	115.0	149.34	1.30
2008-09	181.1	159.58	0.88
2009-10	156.8	165.63	1.06
2010-11	99.0	117.95	1.19
2011-12	172.4	146.17	0.85
2012-13	241.9	196.08	0.81
2013-14	220.4	222.51	1.01
2014-15	204.0	221.55	1.09
2015-16	188.4	224.27	1.19
2016-17	296.2	332.31	1.12

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

This analysis shows that over the lifetime of the Offsets, they have generated a positive impact for the Federal Treasury. On average, we find that the Australian federal treasury has received A\$1.05 in total taxation for each A\$1 of Offset (including discretionary federal top-up funding) disbursed over the ten years the Offsets have been in operation.

8. THE FUTURE OF THE OFFSETS

As part of the various reviews presently being undertaken by the Federal Government, the future of the Offsets is currently up for debate. This chapter contextualises the status of the Offsets in the international market, and offers projections of the impact of two sets of changes.

8.1. Domestic and International Context

8.1.1. International Context

Consultations with the global industry have suggested that there are a small number of major territories to which Australia has lost productions over the last decade. These include British Columbia and Ontario in Canada; California, Georgia, and New York in the USA; Hungary; New Zealand; and the United Kingdom.

Table 36 - Summary of Incentives in Key Competitor Territories

<i>Competitor</i>	<i>Rate of Incentive</i>	<i>Requirements</i>
British Columbia	41% of labour refundable credit ⁴¹	Minimum spend C\$100,000-200,000 (TV, per episode), no minimum for Film ⁴²
California	20-25%	Outcome-based ranking system, with different tranches of funding for, i.e., TV pilots and relocating shows
Georgia	20% + 10%	10% uplift for including Georgia promotional logo; production companies must spend US\$500,000 per year to maintain eligibility
Hungary	25%	Cultural test applies
New York	30%	Minimum 10% of budget must be spend in NY for Film productions of more than US\$15 million
New Zealand	20% + 5% uplift	Productions invited to apply for uplift; minimum spend NZ\$15 million (Film), NZ\$4 million (TV), NZ\$500,000 (PDV)
Ontario	21.5% of goods and services, and 35% of labour refundable credit ⁴³	Production company must be ON-based; minimum budget C\$1 million (TV), or C\$100,000-200,000 (TV, per episode) ⁴⁴
United Kingdom	25%	Cultural test applies

Source: Olsberg•SPI Research

As the table above shows, the headline Incentive rate for the Location Offset has fallen behind its global competitors. This presents a major challenge for the Australian market, as the country is seen as an expensive jurisdiction to produce Films in, with a high cost of living and a relatively low Incentive rate. Furthermore, other jurisdictions – especially the UK and Georgia

⁴¹ Blended rate including BC and Federal incentives

⁴² Minimum spend for TV varies by length of episodes

⁴³ Blended rate including Ontario and Federal incentives

⁴⁴ As in BC, minimum spend for TV varies by length of episodes

– also allow for uncapped Above the Line spend, fringes, and other benefits through their incentive structures, making their incentives applicable to a greater range of production spend than is currently possible with the Offset.

Top-ups have helped to address some of these issues, increasing the value of the Location Offset to an internationally competitive level, but their lack of certainty means in many cases productions do not consider Australia as a location for Footloose projects. In other cases, the need for a swift decision once the release date for a project is confirmed makes the use of Australia infeasible, given the long timescales associated with top-up applications. As a result of this, Australia loses many productions that could significantly benefit the country, while for other productions, the lack of ability to use the PDV Offset after physical production has taken place also limits the upside to the Australian economy, workers, and companies.

The impact that this can have is seen with a production such as *The Light Between Oceans*. Though based on an Australian novel, this Film predominantly shot in New Zealand the Film was too small to realistically access top-up funding, while the structure of the production meant that passing the SACT to qualify for the Producer Offset (Film) became impractical. This was a function of an early decision to bring in an American scriptwriter for the project, which would have required significant Australian involvement in the remainder of the project to qualify for the domestic Incentive. While the Film shot a few days in Tasmania for creative reasons, this delivered only small benefits to the Australian sector.

As with a number of other productions which have considered Australia, this Film shot in New Zealand. This is a country at a comparable distance from the US to Australia, and inevitably projects which consider one will consider the other. While New Zealand's headline incentive is not especially generous by international standards, it has a lower cost base and lower fringes compared to Australia, and also allows incentive spending on both physical and digital production within a single project.⁴⁵ With strong crews and a world-class digital production offer, this makes New Zealand a significant competitor, and often allows it to win projects which Australia should be in a better position for, such as *Marco Polo* and *Tomb Raider*.

For other Films with no chance of passing the SACT, such as *The Martian*, Australia would also have been an ideal destination. However, having scouted potential filming locations around the country, the lack of certainty in possible top-up funding led the production to shoot largely in Hungary instead, where the headline rate of the incentive is more generous. For other projects with a less clear creative reason to come to Australia, the country sometimes isn't considered in the first place, as major producers know that the quality of production available can be achieved for lower cost elsewhere.

8.1.2. Domestic Context

The Producer Offsets have proven successful in supporting the creation of culturally-Australian content, however despite this, the market continues to struggle to create the kind of high-end drama content which generates the greatest cultural value on TV. This is reflected in the present broadcast patterns of Australia's three major commercial channels: Seven, Nine, and Ten.

While these services collectively broadcast 23,000 hours of culturally-Australian production per year, ACMA reports that just 3.3% of this (760 hours) is high-value scripted programming,

⁴⁵ In production accounting terms, fringes represent various taxes and additional fees levied against the paycheque of a production freelancer, for example union or guild fees

budgeted at A\$700,000 per hour or greater.⁴⁶ Instead, the channels' current financial challenges lead them to focus their attention on the acquisition of foreign scripted content, a licence for which can be purchased for a much lower cost than the production of original content. In the present market – with the value of TV advertising continuing to fall as a result of competition from online advertising – accessing lower cost, proven, and still high-quality content is tempting for the broadcasters.⁴⁷

Changing the Offset system to address this is a model which has been proven overseas, not least in the UK, where the introduction of the High-End TV Tax Relief in 2014 had a transformative impact on the domestic TV production sector. Since the incentive launched, production of high-end TV drama in the UK has grown from effectively nothing – as neighbouring jurisdictions like Belgium and Hungary hosted major UK TV productions – to £938 million (A\$1.66 billion) in 2017.⁴⁸ This combination of specific challenges and proven success in other markets drives the changes proposed to the Producer Offset from both the House of Representatives' Committee and the Australian Screen Bodies, which are analysed below.

8.2. Proposed Reforms

8.2.1. The Location and PDV Offsets

In order to address this lack of competitiveness, two changes have been proposed by the Australian Film & TV Bodies:

- Australian productions, whether Film or TV, should be able to access a 40% Incentive through the Producer Offset;
- The Location Offset should be increased to 30% of QAPE; and,
- Footloose productions should be able to use both the Location and PDV Offsets on a single project.

Consultations with the sector both domestically and internationally suggest strong support for these proposed changes. At 30%, the Location Offset would become competitive with those incentive models seen in other markets like the UK and Canada. With access to PDV alongside this, there would be a significant advantage for a range of projects compared with shooting in the EU, given the 80% territoriality rules which exist as part of European competition law.⁴⁹

Furthermore, although a number of projects effectively receive a 30% Incentive already through the top-ups, having an Offset set at this level would provide certainty for the industry, increasing the confidence in placing investments and planning future projects within Australia. Were this change to occur, many international productions would strongly consider Australia when putting a budget together, significantly increasing the likelihood that such projects would choose to leverage Australia's strong crew and locations offer. By creating certainty in future throughput of projects, this change would also provide the conditions for future

⁴⁶ <https://www.acma.gov.au/Industry/Broadcast/Television/Australian-content/australian-content-compliance-results>

⁴⁷ "Television advertising revenue drops 3 per cent in six months", Lucy Battersby in *Sydney Morning Herald* (20th February, 2017)

⁴⁸ *Film, high-end television and animation programmes production in the UK: full-year 2017*, BFI (31st January, 2018) p. 6

⁴⁹ The EU's Cinema Communication, which underpins the availability of incentives in European markets, does not allow any production to receive an incentive against more than 80% of its budget, to ensure competition within the European cultural content market

investment in Australia's studio capacity, increasing the productive resources available to the domestic and international sectors.

8.2.2. The Producer Offset

In addition to these proposals, a Committee of the House of Representatives has made other recommendations as part of an investigation into the Film and TV sector. These make similar proposals to those from the Australian Film & TV Bodies, but suggest that the Producer Offset should be harmonised at 30% for both Film and TV productions, which is a 10% decrease for Film and a 10% increase for TV.

This approach would simplify the administration of the Incentive in some ways, not least due to the fact that the decision on which part of the Incentive applies is made at an early stage of the process, but it is not always apparent at that point which is the correct rate to apply. It would also correct a significant challenge within the current model, whereby a Film project with a cinematic release is eligible for a 40% Offset, but if this is released on an OTT platform first, this falls to 20%. As both of these are very good results for the producer, this distinction no longer reflects market conditions.

Despite these benefits, any fall in the Producer Offset for Film to 30% would potentially cause disruption for the independent Film industry in Australia. This reflects ongoing challenges in the financing market for such Films, and the significant risk premium which they hold over broadcaster-supported TV projects.⁵⁰

The impacts of both these sets of reforms are modelled below.

8.3. Impact of the Proposed House of Representatives Committee Reforms

8.3.1. Production Spending

In order to assess the impact of these proposed changes, we analysed the impact of previous changes to the Location and PDV Offsets, and spoke to major international producers to understand how their view of Australia would alter were the Offsets to change.

To carry out the projections, we assumed that on average the high rates of growth seen in recent years across the offsets would gradually slow as spare capacity in the industry is used up. Therefore the observed average growth rate of just over 10% is forecast to slow down to just over 5%, before increasing towards the end of the period in question as investment in the sector generates more crew and facilities capacity. The 5% figure represents the projected medium term growth rate for Australia's CPI added to its GDP.

To project the effect of changes to the Offsets we used two simple assumptions. The government has forecast that reducing the rate for the Films would come at a cost of A\$35 million in the first year, after which we project the slower growth rate than the rest of the industry, reflecting the lower access to capital and skills which would be expected in a riskier sector of the market. For the TV Offset, we project the added boost to the Offset will cause its growth rate to be 50% faster than the other parts of the sector over the period, before also reaching trend growth.

⁵⁰ This is an international challenge, as SPI's recent research, *The State of the UK Independent Film Sector*, highlights

Table 37 - Projected Impacts of House of Representatives Committee Reforms to the Offsets – Total Production Spending (2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	245	414	106	499	1,264
2019/20	238	459	114	535	1,346
2020/21	229	502	121	569	1,421
2021/22	218	542	128	598	1,486

Source: Olsberg•SPI analysis; positive impact for Producer Offset-supported Film a function of underlying economic growth, in spite of the projected fall in Incentives

This analysis suggests that total production spend from Location Productions in Australia would increase to A\$598 million within four years of the change; such a change would also drive up the value of PDV production in Australia to A\$128 million over the same period, through access to Location Offset-supported productions.

Domestic production would also respond to such a change, with TV drama production increasing to a projected A\$542 million by 2021-22. Domestic Film production would, however, fall due to the lower incentive value, and subsequent loss of skills and investment to other elements of the Film and TV sectors. As a result of all this, total production spend through the Offsets is projected to increase to A\$1,486 million within four years of the change.

8.3.2. GVA, Jobs, and Income

In order to project GVA, jobs and income, we used the projected spend from section 8.3.1 as well as data from previous years in order to estimate the 'Type II' or total effects on the broader economy of this spend up to 2021-22. We used the most recent multipliers which were possible to calculate in order to make these projections. No adjustment has been carried out for projected inflation - as such, these figures are in 2017 Australian dollars.

Table 38 - Projected GVA (House of Representatives Committee reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	262	442	114	533	1,350
2019/20	254	491	122	572	1,439
2020/21	245	537	130	608	1,519
2021/22	233	579	136	639	1,588

Source: Olsberg•SPI analysis

Were the proposed changes to be implemented, our projections suggest that this could generate A\$370 million in additional GVA by 2021-22 - this would represent an increase of 34.8% over the figure for 2016-17.

Table 39 - Projected Total Employment (House of Representatives Committee reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	20,725	41,626	14,485	32,715	109,552
2019/20	20,162	46,175	15,540	35,098	116,975
2020/21	19,410	50,516	16,514	37,298	123,737
2021/22	18,488	54,494	17,381	39,256	129,618

Source: Olsberg•SPI analysis

This additional economic activity would generate an additional 35,353 FTE jobs through the direct, indirect, and induced phases of economic impact; this is an increase of 37.5% over 2016-17's figures.

Table 40 - Projected Total Income (House of Representatives Committee reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	1,413	2,839	988	2,231	7,471
2019/20	1,375	3,149	1,060	2,394	7,978
2020/21	1,324	3,445	1,126	2,544	8,439
2021/22	1,261	3,716	1,185	2,677	8,840

Source: Olsberg•SPI analysis

These additional jobs would receive a further A\$2.41 billion in total income by the 2021-22, also representing a 37.5% increase over last year's figures.

8.4. Impact of the Proposed Australian Film & TV Bodies Reforms

8.4.1. Production Spending

A similar model was used to project the possible impacts of the Australian Film & TV Bodies' proposed changes to the Offsets.

In undertaking this, tweaks were made to the model used above, to reflect the likely higher level of movement from in-house to outsourced production which would occur were the Producer Offset for TV to be expanded to 40%. In such an environment – and with the domestic Film Incentive also retained at its current level – it is also reasonable to assume that by the end of the period in question investment in skills and facilities would have expanded the productive capacity of the industry. For example, investment in stage space at studios would allow for the production of more content than would be possible under present conditions, even were the Offsets to be at the proposed levels.

Table 41 - Projected Impacts of Australian Film & TV Bodies Reforms to the Offsets – Total Production Spending (2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	325	465	106	499	1,395
2019/20	349	532	114	535	1,530
2020/21	371	599	121	569	1,660
2021/22	390	662	128	598	1,778

Source: Olsberg•SPI analysis

Compared to the House of Representatives Committee proposal, the Australian Film & TV Bodies approach will balance impacts across domestic and international production. Under this model, domestic Film production is projected to continue along its current path, but domestic TV production will be significantly enhanced, reaching A\$662 million by 2021-22. This will lead to a projected total spend of A\$1,778 million across all forms of content in this year.

8.4.2. GVA, Jobs, and Income

As with the House of Representatives Committee proposals, in order to estimate GVA, jobs and income, we used the projected spend from section 8.4.1 as well as data from previous years in order to estimate the 'Type II' or total effects on the broader economy of this spend up to 2021-22.

Table 42 - Projected GVA (Australian Film & TV Bodies reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	347	496	114	533	1,490
2019/20	373	569	122	572	1,635
2020/21	396	640	130	608	1,773
2021/22	417	707	136	639	1,900

Source: Olsberg•SPI analysis

Were the proposed changes to be implemented, our projections suggest that this could generate A\$721 million in additional GVA by 2021-22 - this would represent an increase of 61.2% over the figure for 2016-17.

Table 43 - Projected Total Employment (Australian Film & TV Bodies reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	27,528	46,735	14,485	32,715	121,464
2019/20	29,534	53,544	15,540	35,098	133,716
2020/21	31,385	60,256	16,514	37,298	145,452
2021/22	33,032	66,582	17,381	39,256	156,252

Source: Olsberg•SPI analysis

This additional economic activity would generate an additional 61,987 FTE jobs through the direct, indirect, and induced phases of economic impact; this is an increase of 65.8% over 2016-17's figures.

Table 44 - Projected Total Income (Australian Film & TV Bodies reforms, 2018-19 to 2021-22, millions of A\$)

	Producer Offset (Film)	Producer Offset (TV)	PDV Offset	Location Offset	Total
2018/19	1,877	3,187	988	2,231	8,284
2019/20	2,014	3,652	1,060	2,394	9,119
2020/21	2,140	4,109	1,126	2,544	9,920
2021/22	2,253	4,541	1,185	2,677	10,656

Source: Olsberg•SPI analysis

These additional jobs would receive a further A\$4.23 billion in total income by the 2021-22, also representing a 65.8% increase over last year's figures.

8.5. Spillover Impacts

Alongside the direct impacts of the production spending, various spillover impacts would also result from the greater number of projects being undertaken in Australia.

8.5.1. Studio Facility Investment

Further investment in studio infrastructure is likely to be required to provide additional space for the productions which will be attracted to Australia if the Location Offset becomes competitive. In order to estimate the potential impact of this, we have used data from Georgia (US), where alongside the growth of production spend from US\$704 million (A\$912m) in 2010 to US\$2.7 billion (A\$3.5bn) in 2017, the amount of permanent stage space has grown from 435,000 square feet to 1.86 million square feet.

Analysis of the Georgian figures suggests that for every additional million US dollars in expenditure, approximately 780 square feet of additional stage space has been constructed. This would equate to 600 square feet per additional one million Australian dollars of spend at current exchange rates.

In order to estimate the value of the additional investment which would therefore be required in Australia, we calculated the amount of additional stage space which would be implied by this ratio, given the additional spend projected above. To estimate construction costs related to this, a measure of A\$362.5 per square foot of stage space was used – this reflects the A\$14.5 million cost of the new, 40,000 square foot Stage Nine at Village Roadshow studios.⁵¹

This analysis implies that:

- In the House of Representatives Committee scenario, above, an additional 119,000 square feet of stage space would be required, at an estimated cost of A\$43 million; and,
- In the Australian Film & TV Bodies' scenario, an additional 265,000 square feet would be needed, with an estimated cost of A\$96 million.

This represents quite a conservative analysis, given that we do not include any of the workshop or office space which any studio requires. Modern studio facilities tend to require at least the same square footage of such support buildings as they do stage space, adding substantial additional build costs, which would support Australian workers and suppliers.

8.5.2. Screen Tourism

Increased screen tourism spend would also be expected, though as this is dependent on the specific nature of the projects being undertaken, no reasonable basis exists to project the extra value Australia will generate from this.

⁵¹ For the purpose of this analysis, we assume that full capacity is reached shortly after the introduction of revisions to the Offsets

9. CONCLUSIONS

9.1. Summary of Impacts

Bringing together the direct impacts across all Offsets, we find that GVA directly related to productions supported by the Offset rose from A\$199.8 million in 2007-08 to A\$386.0 million in 2016-17. This led to job growth from 15,617 FTEs in the first year of the Offsets to 24,989 in the most recent year; direct income to Australians engaged in Offset-supported productions, meanwhile, rose from A\$1.05 billion to A\$1.91 billion.

Table 45 - Direct GVA, FTE and Income Impacts of Offset-Supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	199.8	15,617	1,047.6
2008-09	213.2	16,651	1,129.2
2009-10	230.5	20,803	1,369.1
2010-11	160.6	19,605	981.3
2011-12	188.2	19,683	1,231.2
2012-13	236.5	19,888	1,517.6
2013-14	274.9	20,556	1,568.6
2014-15	256.2	21,637	1,651.1
2015-16	260.5	22,629	1,726.8
2016-17	386.0	24,989	1,906.9

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

Including the indirect and induced impacts generated by Offset-supported production spend, we find a total GVA contribution in 2016-17 of A\$1.18 billion, up from A\$506.2 million in 2007-08. This supported 94,265 FTEs in the most recent year, who earned A\$6.4 billion of total income.

Table 46 - Total GVA, FTE and Income Impacts of Offset-Supported Production Spending

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2007-08	506.2	53,188	3,346.8
2008-09	593.2	58,779	3,642.4
2009-10	647.0	66,426	4,175.9
2010-11	464.4	66,310	3,116.7
2011-12	560.0	70,372	4,065.1
2012-13	723.5	75,024	5,201.8
2013-14	815.0	77,543	4,944.5
2014-15	802.7	81,623	5,835.6
2015-16	795.3	85,364	5,821.7
2016-17	1,178.4	94,265	6,428.7

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

9.2. Return on Investment

The GVA impacts of the various Offsets provide a strong Return on Investment for the Australian economy. This has averaged A\$3.86 in GVA for each dollar in Offset disbursed, including any discretionary top-ups, even as the gross amount of Offset, including top-ups, paid by the Federal Treasury has grown.

Table 47 - GVA Return on Investment from Offsets

	Offset Disbursed* (A\$, millions)	GVA Generated (A\$, millions)	GVA Rol
2007-08	115.0	506.24	4.40
2008-09	181.1	593.24	3.28
2009-10	156.8	646.98	4.13
2010-11	99.0	464.35	4.69
2011-12	172.4	560.05	3.25
2012-13	241.9	723.53	2.99
2013-14	220.4	815.04	3.70
2014-15	204.0	802.70	3.93
2015-16	188.4	795.27	4.22
2016-17	296.2	1,178.40	3.98

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

This economic activity has paid an average of A\$1.05 in taxes back to the Federal Treasury for each dollar in Incentive granted, including discretionary top-ups.

Table 48 - Taxation Return on Investment from Offsets

	Offset Disbursed* (A\$, millions)	Taxation Generated (A\$, millions)	Taxation Rol
2007-08	115.0	149.34	1.30
2008-09	181.1	159.58	0.88
2009-10	156.8	165.63	1.06
2010-11	99.0	117.95	1.19
2011-12	172.4	146.17	0.85
2012-13	241.9	196.08	0.81
2013-14	220.4	222.51	1.01
2014-15	204.0	221.55	1.09
2015-16	188.4	224.27	1.19
2016-17	296.2	332.31	1.12

Source: Olsberg•SPI analysis of Screen Australia Drama Report and data from the ABS

*Offsets include discretionary top-up funding

9.3. Recommendations for Reform

The reforms proposed by the Committee of the House of Representatives would further enhance the beneficial impacts of the incentives for the Australian production sector and economy. By addressing the present low value of the Location Offset compared to Australia's international competitors, the reforms would make the country a much more attractive production destination.

This would result not just in the attraction of some productions - such as *The Martian* - which Australia has missed out on due to uncertainties around top-up funding, but also others that at present do not even consider the country. Furthermore, as a result of the lack of certainty on top-up funding, private investment in the facilities sector which would likely have been required has also been lost.

Table 49 - Total GVA, FTE and Income Impacts of House of Representatives Committee Proposed Offset Reforms

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2018-19	1,350	109,552	7,471
2019-20	1,439	116,975	7,978
2020-21	1,519	123,737	8,439
2021-22	1,588	129,618	8,840

Source: Olsberg•SPI analysis

For this reason, we consider the projection of A\$1.6 billion GVA in 2021-22 following reform to be conservative, as it is based on an acceleration of current growth trends. This uplift - which would increase jobs and wages by 37.5% - would have a major effect upon the sector, and return significant value to the Australian economy through higher GVA returns from the sector.

Table 50 - Total GVA, FTE and Income Impacts of the Australian Film & TV Bodies' Proposed Offset Reforms

	Total GVA (Millions of A\$)	Total FTEs	Total Income (Millions of A\$)
2018-19	1,490	121,464	8,284
2019-20	1,635	133,716	9,119
2020-21	1,773	145,452	9,920
2021-22	1,900	156,252	10,656

Source: Olsberg•SPI analysis

Under the Australian Film & TV Bodies' model, these benefits for the Footloose sector are secured, but growth in the domestic sector is spurred to a greater extent through the expansion of the Producer Offset to 40% for Australian TV productions. Together with the securing of the Producer Offset for Film at this level, the total GVA we project for the Australian economy in 2021-22 would reach A\$1.9 billion, with total wages and jobs rising more than 65%.

Such a model would also likely generate significant private investment into the sector, as new facilities are built to take advantage of the opportunities on offer, further expanding the productive capacity of the industry. We estimate the value of this impact on physical studio space alone at A\$96 million by 2021-22.

10. APPENDIX 1 – IMPACT METHODOLOGY

10.1. Data Gathering

In order to conduct the impact assessment of the Offsets, SPI used data from Screen Australia's *Drama Reports*. These collate spending through the various sections of the production which receive Offsets, and for the purpose of the Location Offset, state on an annual basis the degree to which this contributes to the production budgets of Australian Film and TV productions. Domestic and International use of the PDV Offsets is also stated in this report.

Use of the Location Offset is not stated, but International Film and TV production spend is. This was used as a proxy for use of the Location Offset, as consultations suggested that the small number of non-Offset productions which would be included would not cause a statistically significant divergence from the actual Offset figures. The two years (2008-09 and 2010-11) where total international production fell below the minimum QAPE threshold were entirely discounted.

In order to include top-up funding, media reporting of productions which accessed discretionary Federal funds were sourced. This dataset was then verified through consultation with industry stakeholders.

10.2. Derivation of Impacts

Input-Output (I-O) Tables from the Australian Bureau of Statistics, which were available for six of the years during the study, were used to generate impact data for the report. These tables provide a complete picture of the supply and use of products in the Australian economy, between different sectors and between producers and consumers. We used a standard methodology to derive multipliers from these tables for the relevant sector - 5501 Motion Picture and Sound Recording.

GVA impacts were generated through analysing the I-O tables to Type I and Type II multipliers, which respectively allow the calculation of indirect and induced impacts. These multipliers were applied to the production spending figures identified above to generate direct, indirect, and total economic activity estimates. A sectoral GVA ratio was also identified through the ABS data, which was used to identify the direct GVA impact of production spending.

It was necessary to make a small number of assumptions in undertaking this research. In particular, given that there were only I-O tables available for six of the ten years, some estimations were necessary for missing years; this is not unusual given the amount of labour which is required to generate GVA tables. From an academic standpoint, this is acceptable as multipliers are generally seen to be steady over a period of about five years.

In order to estimate FTE and Income generation as a result of production spending, data from the ABS on employment in the sector were used. Non-Offset related economic activity was removed from this dataset, with the remainder being apportioned between the Offset categories by their share of GVA. As this dataset was only available up to 2014-15, an inflation rate for the sector was estimated, and used for the purpose of generating employment and income estimates after this point.

11. APPENDIX 2 – LIST OF CONSULTEES

The following individuals were consulted during the preparation of this Study:

Sandra Alexander, Line Producer
Rod Allan, Docklands Studios
Kingston Anderson, Australian Directors Guild
Arturo Barquet, NBC Universal
Jason Bath, Animal Logic and Visual Effects Society
Michael Brealey, Create NSW
Ian Booth, ScreenWest
Anne Bruning, Line Producer
Kim Dalton, formerly ABC and AFC
Matt Deaner, Screen Producers Australia
Karen Fouts, Warner Bros.
Gidon Freeman, NBC Universal
Rebecca Hardman, See Saw
Nick Herd, AusFilm
Matt Hodgson, NBC Universal
Mary Ann Hughes, Disney
Sally Ingleton, Screen Territory
Ingrid Johnston, Animal Logic
Hakan Kousetta, See Saw
Matt Kurlanzik, 21st Century Fox
Jeff LaPlante, NBC Universal
Sue Maslin, Film Art Media
Georgie McClean, AFTRS
Tessa Mills, Screen Australia
Paul Muller, Australian Screen Association
Brian O’Leary, NBC Universal
Chris Oliver, formerly Screen Australia
Chris Oliver-Taylor, Matchbox
David Parker, Cascade Films
Monica Penders, Screen Canberra
Tim Phillips, Screen Australia
Debra Richards, AusFilm
Simon Rosenthal, Iloura
Alex Sangston, Screen Tasmania

Impact of Film and Television Incentives in Australia

Matt Sica, NBC Universal

George Sotiropoulos, Australian and Children's Content Review

Michael Tear, Wild Bear

Jenni Tosi, Film Victoria

Nick Velasquez, Sony Pictures Entertainment

Tracey Vieira, Screen Queensland

Michael Walbrecht, Warner Bros.

12. APPENDIX 3 – ABOUT OLSBERG•SPI

SPI provides a range of expert consultancy and strategic advisory services to public and private sector clients, specialising in the worlds of Film, TV, video games and digital media. Formed in 1992, it has become one of the leading international consultancies in these dynamic, creative, screen industries. Its studies have been successfully presented to governments around the world requiring robust, objective and independent information about these important (but not always easy to understand) sectors.

With its trusted insights and track record the firm has a diverse client base that includes:

- Multi-national public authorities
- National governments, including culture, finance and economics ministries
- National Film institutes, screen agencies and Film commissions
- Regional and city development agencies and local authorities
- Trade associations and guilds
- Studios and facilities companies
- Independent companies at all points of the screen business value chain
- National and international broadcasters
- Training and skills development organisations
- Publishers and conference organisers.

Since 2015, SPI has conducted a number of economic impact studies for clients around the world, including:

- A 2015 study of the Economic Contribution of the UK's Screen Sector Tax Reliefs, conducted for a BFI-led consortium,⁵²
- A comparative analysis of Fiscal Incentives operating in Europe, published by the European Audiovisual Observatory;
- An evaluation of the impact of the Film in Malaysia Incentive, including recommendations for reform, undertaken on behalf of Pinewood Iskandar Malaysia Studios;
- A study on the impact of the Norwegian Film Incentive, conducted in 2016 for the Norwegian Film Institute,⁵³
- An evaluation of the impact of the Georgia Film Tax Credit, undertaken on behalf of Pinewood Atlanta Studios; and,
- An economic contribution study and future strategy for the creative industries, conducted for the Irish Government.

SPI has expertise in all other areas of the fast-moving global screen sectors, and the firm's services span:

- Identifying and measuring the cultural value of a productive screen sector
- Assessing the value and impact of tourism linked to a nation or region's screen output
- Strategy and policy development for the creation and management of healthy and sustainable national and regional screen sectors
- Advising on the creation and implementation of fiscal incentives for the screen industries
- Research projects on all aspects of the value chain
- Film commission feasibility studies

⁵² Available at: <http://www.o-spi.co.uk/wp-content/uploads/2015/02/SPI-Economic-Contribution-Study-2015-02-24.pdf>; we are presently undertaking a revision of this study for the BFI

⁵³ Available at: <http://www.o-spi.co.uk/wp-content/uploads/2017/05/NFI-Incentive-Study.pdf>

- Business development advice for content companies
- Advising on inward investment and exports for national and regional public bodies
- Strategic development of studio facilities, including business planning
- Acquisition and divestment advice for owners of SMEs
- International cost comparisons for Film and TV productions

Clients for these services have included:

- Australia Screen Association
- Barcelona Culture Institute
- BBC Worldwide
- British Film Commission
- British Film Institute
- Canada Media Fund
- Canadian Media Producers Association
- Commercial Broadcasters Association (London)
- Council of Europe
- Creative England
- Creative Europe (MEDIA Programme of the European Union)
- Directors UK
- Doha Film Institute
- Emerging Pictures (New York)
- Essential Media (Sydney)
- European Audiovisual Observatory
- Eurimages Fund
- Film City Glasgow
- Film i Väst (Gothenburg)
- FilmTT (Trinidad and Tobago)
- Government of Hong Kong SAR
- Ingenious Media (London)
- Instituto do Cinema e do Audiovisual (Lisbon)
- Irish Film Board
- Mauritius Board of Investment
- Motion Picture Association of America
- The New Zealand Film Commission
- Pinewood Studios Group
- Prime Studios (Leeds)
- Producers Alliance for Cinema and Television (London)
- Screen Australia
- Screenwest (Perth)
- Screen Yorkshire
- UK Interactive Entertainment