Study on the Economic Contribution of the Motion Picture and Television Industry in Australia

Report presented to the MPA and ANZSA by Olsberg•SPI

13th November, 2019

OLSBERG · SPI

CONTENTS

1. EXECUTIVE SUMMARY

The Australian Screen Sector has responded well to the challenges posed by the internet, which have resulted in a variety of changes to the sector's production and distribution model. The sector's 2017-18 gross value add was up 15% compared to 2012-13, whilst overall employment was down 6% over the same period. This was driven by a shift away from distribution of physical discs to digital distribution, both in transactional and subscription models. Retail jobs were lost as the sector shifted towards digital, with more value added in production (up 31%) and digital VOD distribution, leading to a 23% overall improvement in gross value add contribution per employee in the screen sector compared to 2012-13.

It is notable that this transformation was achieved despite a limited contribution of international production taking place in Australia in 2017-18. This was the result of the lack of competitiveness of Australia's incentive scheme due to the lack of availability of top-up grants that year. Whilst the establishment of the Location Incentive in May 2018 has already resulted in a significant turnaround in international investment in Australia, the capped nature of the incentive will mean that the 2016-17 peak will not be equalled in the next four years.

The capped nature of the Location Incentive compares unfavourably with international comparators such as the UK's tax reliefs, while IP enforcement in Australia continues to limit the ability of creators to monetise their content. While this remains the case, spending and jobs increases will continue to fall behind countries such as the UK and Canada.

1.1. Purpose of the Report

This report presents the findings of a Study of the Economic Contribution of the Motion Picture and Television Industry in Australia (Screen Sector), conducted for the Motion Picture Association (MPA) and Australia New Zealand Screen Association (ANZSA) by the independent consultancy Olsberg•SPI.

The Screen Sectors have been analysed according to the following industry sub-sectors:

- Production;
- Distribution;
- Cinema exhibition;
- Television broadcast; and
- Home entertainment, including physical purchases and rentals, and Video on Demand (VOD).

The economic measures that have been assessed for each segment are:

- Output, the total spending associated with the sector;
- Gross Value Added, a measure of goods and services provided in a geographical area, industry, or sector of the economy;
- Full-Time Equivalent (FTE) job creation, which is used given the freelance nature of the workforce, and standardises employment to the average annual workload of a full-time employee;
- Wages, including Pay-as-you-Go taxation and superannuation payments, to these FTE employees; and,
- Taxation, at federal and state level in Australia.

The core year which has been analysed is 2017-18. To assess the extent of growth in recent times, the report also looks back to 2012-13, analysing data from the previous point at which a similar study was undertaken, but using our current methodology to ensure comparability.

To present a sense of the future potential of the Screen Sectors, this report makes conservative estimates of likely activity for all segments, for each of the three years to 2021-22.

To bring additional context to the findings, we have also conducted a number of case studies concerning a selection of businesses and related issues in Australia's Screen Sector, which are contained in relevant parts of the report. Finally, to provide some international context, the report also contains a policy comparison with the highly-successful screen industries in the UK.

1.2. Summary of Key Findings

This report shows that the screen sectors in Australia generated an important economic contribution to the Australian economy in 2017-18, showing total GVA growth of 15% from 2012-13, despite the ongoing impacts of digitisation, which have had a fundamental and disruptive impact on how consumers access films and TV.

This is reflected in metrics for the home entertainment industry, where the 36% growth in GVA contribution has come from the transition away from physical purchases and rentals (the latter has almost completely disappeared) into a fast-growing VOD sector. This growth is a strong example of the industry's quick and efficient response to the disruption caused by the internet. Additionally, across the screen industries, the value added per employee was up 23%, reflecting the efficiency of the more streamlined distribution model ushered in by this digital growth, which has economic benefits for consumers, though it has led to the loss of jobs in some areas such as distribution and retail.

Analysis of production activity presents a more nuanced picture. While both employment and value added were up (9% and 31% respectively) in the production sector between 2012-13 and 2017-18, production activity fell from 2016-17 – primarily a result of government policy, with the removal of the previous, discretionary 'top-up' programme at the federal level for international location shoots saw this activity dry up completely, which caused a 53% decrease in film production spending.

The ad-hoc approach of the top-ups is being replaced from 2018-19 with a structured increase to the Location Offset through the introduction of a new Location Incentive, that combines with the Offset to provide a 30% grant equivalent which could incentivise a potential A$260 million of production spend per year on average.[1]

We estimate, this new policy could drive a projected 26% growth over the next three years in total output associated with the production spend. But despite this anticipated future growth, production spending will still fall short of the heights seen in 2016-17, as the capped budget for the Location Incentive effectively caps the amount of inbound investment that can be attracted.

Separately, we anticipate that revenues are projected to grow 13% in exhibition, in home entertainment by 14%, and in broadcast by 4% over the same period.

[1] The Location Incentive provides A$140 million of total incentive over four years, at a rate of 13.5% (on top of the 16.5% Location Offset); assuming each year sees the same production spend attracted, this funding can incentivise a net A$260 million of production per year

The one sector which sits apart from this is distribution, which will continue to shrink to 2021-22, as a result of the ongoing digital transformation of the sector. While theatrical distribution is expected to remain relatively solid, physical home entertainment is being rapidly displaced by VOD. However, we anticipate that the distribution sector will return to growth during the early 2020s.

Production growth compares unfavourably with the UK, where a range of uncapped incentives have driven a 13.6% CAGR increase in incentive-supported production spend between 2013 and 2018.[2] By comparison, since 2012-13, growth in production spend of feature film and TV drama in Australia has been negative – at -0.4% CAGR – with 2016-17's strong film production results having been an outlier.

Aside from this consistency in incentive policy, the UK was much earlier to provide a range of strong IP enforcement policies to support to the sector, including strong site-blocking tools, a voluntary agreement with search engines, and a dedicated IP crime unit. Australia's recent reforms to the Copyright Act move domestic IP law closer to the UK's benchmark.

1.3. Current Economic Impacts (2017-18)

In 2017-18, the Australian screen industries generated a total output of A$22.50 billion, generating A$9.19 billion in Gross Value Added (GVA), and 84,982 total FTE jobs. A$2.59 billion in taxation was associated with the activities of the sector.

Table 1 – Screen Sector Impacts in Australia, 2017-18

	Direct	Indirect	Induced	Total
Output (A$, m)	8,077.6	7,270.9	7,155.3	22,503.8
GVA (A$, m)	3,305.8	2,960.3	2,920.7	9,186.9
FTE Jobs	24,771	30,163	30,047	84,982
Wages (A$, m)	1,385.4	1,713.7	1,545.3	4,644.4
Taxation (A$, m)	932.2	834.8	823.6	2,590.6

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

The TV broadcast sector was a key driver of this success, having delivered A$10.82 billion of the total output in the sectors, and A$4.87 billion in GVA. The production sector, however, had a greater impact on Full-Time Equivalent (FTE) jobs, generating 26,570.

Film exhibition also had a good year, generating A$1.92 billion in total output, and 11,137 total FTE jobs, while home entertainment showed strong growth from 2012-13 as a result of the expansion in SVOD. Distribution, however, continues to struggle, reflecting the ongoing impact of digitisation and changing consumer behaviour in this part of the market.

[2] CAGR refers to Compound Annual Growth Rate, which represents the annualised growth rate between the first and last points in a dataset
Source: *Screen Business*, Olsberg•SPI with Nordicity (October, 2018)

Table 2 – Total Impacts in Australia by Sector, 2017-18

	Produc-tion	Distribu-tion	Exhibi-tion	Broad-cast	Home Enter-tainment	Total
Output (A$, m)	4,571.4	2,433.5	1,916.1	10,816.4	2,766.4	22,503.8
GVA (A$, m)	1,638.0	872.0	686.6	4,870.1	1,120.1	9,186.9
FTE Jobs	26,570	14,144	11,137	22,987	10,143	84,982
Wages (A$, m)	1,007.7	536.4	422.4	2,168.5	509.4	4,644.4
Taxation (A$, m)	461.8	245.9	193.6	1,373.4	315.9	2,590.6

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

1.4. A Recent Period of Intense Change in the Screen Sector

This change has affected the various components of the Australian screen sector in different ways, with distribution seeing the largest decline compared to 2012-13. By contrast, production, broadcast, and home entertainment are all increasing, the former two driven by a growth in domestic content creation, and the latter two by the transition to digital, and the changing audience demands which this has created.

Table 3 – Comparison of Screen Sector Output in Australia (A$, m), 2012-13 and 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	1,601.1	1,515.4	1,454.9	4,571.4	17%
Distribution	852.3	806.7	774.5	2,433.5	-18%
Exhibition	671.1	635.2	609.9	1,916.1	8%
Home Entertainment	1,200.1	791.3	775.0	2,766.4	9%
Broadcast	3,753.0	3,522.4	3,540.9	10,816.4	23%
Total	**8,077.6**	**7,270.9**	**7,155.3**	**22,503.8**	**13%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

Growth in the home entertainment sector reflects the changing shape of the media market in Australia, with physical sales declining rapidly, and physical rental almost entirely disappearing. In their place, VOD (particularly SVOD) services have proven highly popular, providing an ever-increasing selection of content to Australian audiences, and delivering much stronger GVA returns to the economy than the physical home media models they have replaced.

While the production component of the sector appears strong, in reality the story is more complex. The production of screen content in Australia saw a boom in 2016-17, driven by the availability of a variety of selective Federal and State top-up grants which, when used, had the effect of improving the strength of the Location Offset's offer. This allowed Australia to exploit its wide range of competitive advantages for screen production.

This funding did not continue to the same extent the following year, and consequently total production levels dropped 13% between 2016-17 and 2017-18, leading to similar falls in economic impacts, driven predominantly by the 40% decrease in feature film and TV drama production.

1.5. Expectation of Continued Growth Across the Sector

This top-up system has now been replaced with the Location Incentive, a 13.5% capped grant, which provides additional funding to successful applicants fulfilling selected criteria, and can support annualised average production spend of A$260.0 million between 2018-19 and 2021-22. This will stimulate an increase in total production spend in Australia, which we anticipate will reach A$3.92 billion by 2021-22, an increase of 26% from 2017-18.

Table 4 – Projected Screen Sector GVA in Australia (A$, m), 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	722.4	683.8	656.5	2,062.7	26%
Distribution	300.5	284.4	273.1	858.1	-2%
Exhibition	271.3	256.8	246.6	774.7	13%
Home Entertainment	618.2	355.9	341.7	1,315.8	17%
Broadcast	1,768.3	1,673.7	1,606.9	5,049.0	4%
Total	**3,680.8**	**3,254.5**	**3,124.8**	**10,060.2**	**10%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

Such increased production spend will drive strong growth in the economic impact of the production sector, while home entertainment is also projected to grow fast, as Australian consumers continue to benefit from the digital transition, and the introduction of new VOD services. Cinema exhibition is also projected to grow strongly from a revenue perspective.

We anticipate that Australia's broadcast sector will grow marginally over the period, though exceptional events such as the 2020 Tokyo Olympics may stimulate significant expansion. While distribution – which as we note comprises one mature segment in theatrical exhibition, and one declining in DVD/Blu-ray – will shrink over the period in aggregate, analysis suggests that by 2021-22, the impact of digitisation will have been fully digested, and growth should restart shortly thereafter.

1.6. Measures to Enhance Future Potential

While this growth is positive, and welcomed by the Australian screen sectors, data from the UK shows that with consistent policies to support and develop the industry, much more consistent growth could be achieved. Compared with Australia, the UK operates a straightforward, unlimited incentive system for both domestic and international productions, and this has driven strong growth in production spend, job creation, and GVA impact over the last decade.

During the period from 2012-13 to 2017-18, total production spend in Australia has shrunk at an average 0.4% per year, the UK has achieved 13.6% growth, with footloose production – projects which have the choice to locate in a variety of production territories – driving this. Such production spend has contributed to a fast-growing screen sector workforce – with FTEs impacted by incentive-supported productions equalling Australia's total industry – and strong

growth in taxation income. This has led to a situation in which the film and high-end TV drama components of screen sectors make up 0.33% of the entire UK economy, whereas Australia's production sector comprises just 0.09%.

This success has been protected by a world-leading Intellectual Property (IP) regime, which comprises a mixture of legal tools (in particular site-blocking, which was in place four years prior to its introduction in Australia in 2015), a strong and well-funded IP crime unit (PIPCU).[3] As early as 2011, the UK Government urged search engines to do more to disrupt access to infringing content. Provision of a suite of measures ensures that creative businesses of all sizes are able to protect their IP in the UK, and safeguards investment.[4]

Australia is moving in this direction with recent reforms to the Copyright Act particularly welcome, and the ACCC's preliminary recommendation to have ACMA develop a mandatory code clarifying what platforms are required to do under threat of being held liable an encouraging development.

It's not possible to estimate the full impacts which these changes would have in Australia, but an uncapped incentive, with strong support for the IP rights of the industry, would be an invaluable contribution to the next decade of growth in the sector. Support for IP rights, in particular, is hard to quantify, but in other territories it has been critical in providing investors with the confidence to invest more in screen infrastructure and production, increasing the value of the industry, and presenting the country around the world.

[3] PIPCU's website is available at: https://www.cityoflondon.police.uk/advice-and-support/fraud-and-economic-crime/pipcu/Pages/default.aspx

[4] Although of course overall revenues for productions derive from global exploitation, and thus stronger international enforcement remains a policy priority for the UK for example.

2. METHODOLOGY OF THE STUDY

To deliver the analysis contained in this report, Olsberg•SPI undertook a methodological approach which we have previously used in a variety of locations, including Ireland, the UK, the state of Georgia (US) and Malaysia, which was adapted for the specific data available in Australia.

We began by collecting data from a variety of sources in Australia, including:

- The Australian Bureau of Statistics (ABS);
- Screen Australia;
- Motion Picture Distributors Association of Australia (MPDAA);
- Australian Home Entertainment Distributors Association (AHEDA);
- IBIS World; and,
- Australia's broadcasters

These data predominantly related to turnover and consumer spending in the sectors studied, and were analysed using Input-Output (I-O) tables produced by the ABS. A full outline of our methodology can be found in Appendix 1 of this Study.

In presenting our findings, we use one decimal place for all figures in tables, with the exception of FTE Jobs. As these relate to employment figures, whole numbers are used. Within the text, figures in millions are presented to one decimal place, and figures in billions to two.

The reader should also note that where projections are made on future impacts, the year 2018-19 is not included. At the time of writing, this year had recently finished, but data were not yet available ot the research team.

2.1. Note on Terminology

Throughout this report, we use the term 'output' to relate to expenditure relating to the sub-sector of the creative economy being analysed. This is divided into direct and indirect output, which represent the expenditures – also referred to as 'turnover' – by companies or projects operating in each sector, and induced outputs, relating to the re-spending of wages.

This is demonstrated in the film and TV production sector, where production spending (i.e., the budget of the content) is split between direct output, largely the hiring of cast and crew directly by projects, and indirect output relating to the supply of goods and services; induced output relates to the re-spending of wages in the wider economy by direct and indirect employees.

Our other findings are calculated by reference to these outputs.

For the purposes of this report, the term 'VOD' (Video on Demand) is used to refer collectively to a range of different business activities. VOD includes a range of sub-sections – including Transactional VOD ('TVOD'), Subscription VOD ('SVOD'), and Advertising-supported VOD ('AVOD'). Where we refer to VOD, this refers to all of these elements collectively.

TVOD can be further broken down into Electronic Sell-Through ('EST') and Download to Rent ('DTR'), but we do not use these terms in this report.

3. SUMMARY OF QUANTITATIVE FINDINGS

This chapter summarises our economic impact findings for the Australian screen sectors in 2017-18. A comparison with 2012-13 – the previous year for which this study was produced – is provided, together with our projections for impacts in 2021-22, the final year of the recently-introduced Location Incentive.

3.1. Output

3.1.1. 2017-18

Total screen sector output in 2017-18 is estimated at A$22.50 billion, an increase of 13% from 2012-13. This was driven by growth in the production, broadcast, and home entertainment sectors. Production growth was focused on increased content spending as a result of domestic productions, while home entertainment benefitted from the transition to VOD services, which generate more consumer spending in Australia than the physical rental they replaced.

Table 5 – Screen Sector Output in Australia (A$, m), 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	1,601.1	1,515.4	1,454.9	4,571.4	17%
Distribution	852.3	806.7	774.5	2,433.5	-18%
Exhibition	671.1	635.2	609.9	1,916.1	8%
Home Entertainment	1,200.1	791.3	775.0	2,766.4	9%
Broadcast	3,753.0	3,522.4	3,540.9	10,816.4	23%
Total	**8,077.6**	**7,270.9**	**7,155.3**	**22,503.8**	**13%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

Despite this strong growth, production spending was down on their outcomes for 2016-17, by 13%. This resulted from the major falls in international production spend in Australia caused by the withdrawal of the top-up system, which made Australia's incentive scheme internationally uncompetitive.

3.1.2. 2021-22 Projections

The former federal top-ups have been replaced, at least in part, by the introduction of the Location Incentive in the current fiscal year. This secondary incentive for footloose production attracted to Australia provides an effective combined 30% incentive for up to A$260.0 million of eligible production spend per year, and is generating greater interest in Australia as a production destination. The recent extension of the PDV and Location Offsets to VOD services has already resulted in announcements for several major projects, and will strongly benefit the production sector, leading to a projected 26% growth in overall spending, with online production growing by a projected 354%.

Together with ongoing growth in the VOD sector of Home Entertainment, the continuing strength of the Exhibition sector in Australia, and anticipated growth in Broadcasting, we project a 10% increase in the output of the Australian screen sectors to 2021-22. Distribution turnover is expected to continue falling to 2021-22, but is expected to return to growth at some

point over the next few years, as the impacts of digitisation on this part of the sector are fully realised.

Table 6 – Screen Sector Output in Australia (A$, m), 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	2,016.1	1,908.2	1,832.1	5,756.5	26%
Distribution	838.7	793.8	762.1	2,394.6	-2%
Exhibition	757.2	716.7	688.1	2,161.9	13%
Home Entertainment	1,449.3	862.6	828.2	3,140.1	14%
Broadcast	3,927.4	3,717.2	3,569.0	11,213.6	4%
Total	**8,988.8**	**7,998.4**	**7,679.5**	**24,666.8**	**10%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

While this represents strong growth from the most recent year, production spending – the largest driver – will not expand so strongly compared to 2016-17. Film production spending in particular is projected to decrease by 18% – from A$927.0 million to A$760.1 million – inhibited by the cap on the Offset. Sectoral growth will instead be driven by expansions in the TV production industry (up 14%), particularly outside drama, and in online (824%).

3.2. GVA

3.2.1. 2017-18

Output related to the screen sectors in Australia resulted in strong GVA growth, with a total of A$9.19 billion representing a 15% increase over 2012-13. This was driven by broadcast and production, though as with output, production impacts were down on 2016-17.

Table 7 – Screen Sector GVA in Australia (A$, m), 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	573.7	543.0	521.3	1,638.0	31%
Distribution	305.4	289.0	277.5	872.0	-8%
Exhibition	240.5	227.6	218.5	686.6	20%
Home Entertainment	496.4	314.7	309.0	1,120.1	36%
Broadcast	1,689.8	1,586.0	1,594.3	4,870.1	12%
Total	**3,305.8**	**2,960.3**	**2,920.7**	**9,186.9**	**15%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.2.2. 2021-22 Projections

We project that the introduction of the Location Incentive and the continuing growth of the VOD sector in Australia will drive GVA growth in production and home entertainment to 2021-22, with these elements forecast to be up 26% and 17% respectively. Combined with increasing economic activity in the film exhibition and broadcast segments of the market, the total economic contribution of the sector is projected to increase 10% by the final year of the Location Incentive programme.

Table 8 – Screen Sector GVA in Australia (A$, m), 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	722.4	683.8	656.5	2,062.7	26%
Distribution	300.5	284.4	273.1	858.1	-2%
Exhibition	271.3	256.8	246.6	774.7	13%
Home Entertainment	618.2	355.9	341.7	1,315.8	17%
Broadcast	1,768.3	1,673.7	1,606.9	5,049.0	4%
Total	**3,680.8**	**3,254.5**	**3,124.8**	**10,060.2**	**10%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.3. FTE Jobs

3.3.1. 2017-18

Job creation associated with the screen sectors totalled 84,982 in 2017-18, a 6% fall from the figures seen in 2012-13. This was predominantly driven by changes in the distribution and exhibition sectors, which are continuing to adapt to the demands of a more digital industry, and the home entertainment sector, where labour-intensive retail and rental operations have been replaced by VOD services, which employ fewer, but more highly-skilled individuals. Overall, the impact has been the generation of higher productivity jobs across the sector.

Table 9 – Screen Sector FTE Job Creation in Australia, 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	7,526	9,646	9,399	26,570	9%
Distribution	4,006	5,135	5,003	14,144	-23%
Exhibition	3,155	4,043	3,940	11,137	0%
Home Entertainment	2,935	3,622	3,587	10,143	-35%
Broadcast	7,150	7,718	8,119	22,987	10%
Total	**24,771**	**30,163**	**30,047**	**84,982**	**-6%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.3.2. 2021-22 Projections

We project that the number of FTE jobs associated with the screen sectors will increase 10% to 2021-22, with expansions in the production, exhibition, and broadcast spaces but continued falls in home entertainment and distribution. The marginal overall fall reflects the fact that higher-productivity jobs in production, broadcast, and VOD are replacing lower productivity retail positions, which predominate especially in-home entertainment.

Production-related jobs are expected to reach a higher level than 2016-17, the peak year of spending, as a result of ongoing growth in domestic production, strong growth in the VOD sector, and the attraction of international projects which aren't sensitive to incentives. This said, we anticipate that this peak is lower than it would have been in the case of an uncapped 30% incentive; the 26% projected growth rate is also much lower than the 62% increase in total FTE jobs observed in the UK – where the incentive is uncapped – between 2013 and 2016.[5]

Table 10 – Screen Sector FTE Job Creation in Australia, 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	9,477	12,146	11,835	33,458	26%
Distribution	3,942	5,053	4,923	13,918	-2%
Exhibition	3,559	4,562	4,445	12,566	13%
Home Entertainment	2,780	3,356	3,356	9,493	-6%
Broadcast	7,482	8,077	8,497	24,056	5%
Total	**27,241**	**33,193**	**33,056**	**93,490**	**10%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.4. Wages

3.4.1. 2017-18

Wages associated with this labour totalled A$4.64 billion in 2017-18, a 16% increase over the period of the previous study. Production and exhibition drove this increase, while home entertainment stayed flat, despite the 6% reduction in FTE numbers; this reflects the change from low- to high-productivity jobs we note above.

[5] *Screen Business*, Olsberg•SPI with Nordicity (October 2018) p. 13

Table 11 – Screen Sector Wages in Australia (A$, m), 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	301.6	370.8	335.3	1,007.7	28%
Distribution	160.6	197.4	178.5	536.4	-10%
Exhibition	126.4	155.4	140.5	422.4	18%
Home Entertainment	152.1	187.9	169.5	509.4	-2%
Broadcast	644.7	802.3	721.5	2,168.5	24%
Total	**1,385.4**	**1,713.7**	**1,545.3**	**4,644.4**	**16%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

For 2016-17, total wages related to production were 13% higher than 2017-18, having increased 48% over 2012-13 as a result of productions drawn to Australia by the top-up system.

3.4.2. 2021-22 Projections

This scale of growth is projected again to 2021-22, as the impact of the Location Incentive and growth in VOD production is felt – the result of increased domestic and footloose production spend in Australia is expected to be a 26% total increase in production sector wages. Together with a 13% increase in exhibition, this will drive a 10% total increase in employee remuneration associated with the screen sectors.

Table 12 – Screen Sector Wages in Australia (A$, m), 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	379.8	466.9	422.2	1,268.9	26%
Distribution	158.0	194.2	175.6	527.8	-2%
Exhibition	142.6	175.3	158.6	476.5	13%
Home Entertainment	162.8	201.5	181.6	545.9	7%
Broadcast	674.7	839.6	755.0	2,269.3	5%
Total	**1,517.9**	**1,877.5**	**1,693.0**	**5,088.4**	**10%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.5. Taxation

3.5.1. 2017-18

We find that total tax receipts generated by the Australian screen sectors amounted to A$2.59 billion in 2017-18, an increase of 20% from the tax estimated for 2012-13. This growth was driven by the home entertainment (especially VOD), production, broadcast, and exhibition sectors, with taxation associated with distribution being marginally down.

Table 13 – Screen Sector Taxation in Australia (A$, m), 2017-18

	Direct	Indirect	Induced	Total	Comparison to 2012-13
Production	161.7	153.1	147.0	461.8	36%
Distribution	86.1	81.5	78.3	245.9	-5%
Exhibition	67.8	64.2	61.6	193.6	25%
Home Entertainment	140.0	88.7	87.1	315.9	41%
Broadcast	476.5	447.2	449.6	1,373.4	16%
Total	**932.2**	**834.8**	**823.6**	**2,590.6**	**20%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

3.5.2. 2021-22 Projections

Driven by rising production spending, and increasing consumer spend on Australian-domiciled VOD services, we project that taxation associated with the sector will increase 8% by 2021-22, to A$2.80 billion. The exhibition sector is also projected to provide strong increased tax revenues as a result of its underlying growth, while minor increases are projected in broadcast. Taxation associated with distribution is expected to decline, given the lower turnover of the sector.

For the purposes of these taxation results, we assume no change in the overall tax burden for Australian businesses and individuals, at a combined federal and state level.

Table 14 – Screen Sector Taxation in Australia (A$, m), 2021-22

	Direct	Indirect	Induced	Total	Comparison to 2017-18
Production	201.1	190.3	182.7	574.1	24%
Distribution	83.6	79.2	76.0	238.8	-3%
Exhibition	75.5	71.5	68.6	215.6	11%
Home Entertainment	172.1	99.1	95.1	366.2	16%
Broadcast	492.2	465.8	447.2	1,405.2	2%
Total	**1,024.4**	**905.8**	**869.7**	**2,799.9**	**8%**

Source: Olsberg•SPI analysis
NB: numbers may not sum due to rounding

4. PRODUCTION

The production sector in Australia has undergone a period of significant change over the last few years. As our data will show, the availability of top-up grants provided a brief but major increase in film production spend during 2016-17, generating an unprecedented level of economic impact. This fell equally dramatically in 2017-18, following the loss of this investment.

The Location Incentive provides a partial replacement for this, and will drive growth of the production sector in Australia to 2021-22, together with the ongoing rapid expansion of demand for original content in the VOD sector – which now have access to the Location and PDV offsets – and to a lesser degree demand in TV. However, spending on international production in Australia will not reach the same levels seen at the height of the top-ups, leading to a lower rate of job creation and GVA than would have occurred with an uncapped Offset.

4.1. Introduction

Production represents the first stage in the value chain of film and television content, and for the purposes of this report includes pre-production; principal photography; post, digital, and visual effects (PDV); music; and audio post-production. It represents the stage at which an idea is developed from a blank page to a completed piece of content which can then be distributed – through the stages which follow in subsequent chapters – to the audience.

Our analysis of production spending in Australia breaks down into three categories – film production, which is destined primarily for release in cinemas; TV production, aimed at distribution using television services; and Online Drama production, which has its first release on VOD services.

4.2. Film Production

4.2.1. Approach

To assess the value of film production in Australia, we use data from Screen Australia's *Drama Report*. This provides an assessment of all physical and PDV production undertaken in Australia, broken down by financial year. The film production datasets for the relevant years – 2012-13, 2016-17, and 2017-18 – were taken from this data-set, and added to film-related PDV spending to form a total spend figure.

Data for 2016-17 are provided as this year represents a major high point for the film production sector in Australia. Driven by the top-ups, production spending in this year was much higher than other years covered, and we have therefore evaluated this year in addition to those assessed in the wider analysis to provide a complete picture of the performance of the Australian film industry in recent years. This analysis will also provide valuable context for the reader on the wider findings of this study.

4.2.2. 2012-13 Findings

This analysis showed that in 2012-13, total film production spend in Australia was A$485.0 million, which including induced spending, was responsible for A$708.4 million of total output.

Table 15 – Impacts of Film Production in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	231.5	253.5	223.4	708.4
GVA (A$, m)	74.5	81.5	71.9	227.9
FTE Jobs	1,174	1,820	1,435	4,428
Wages (A$, m)	41.7	55.5	45.7	142.8
Taxation (A$, m)	20.2	22.1	19.5	61.8

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

We find that this production spending was responsible for A$227.9 million of total GVA, 4,428 FTE jobs receiving A$142.8 million of wages, and A$61.8 million of total taxation.

During 2012-13, this production spend was predominantly domestic in origin; of the total $485 million, 67% (A$325 million) was domestic, while the remaining 33% (A$160 million) was footloose, and split between physical production and PDV expenditure.

4.2.3. 2016-17 Findings

By 2016-17, driven by the highly-successful top-up system, which boosted the Location Incentive and attracted a number of major productions including *Aquaman* and *Thor: Ragnarok* to Australia, total film production spend had almost doubled to A$927.0 million. Of this, 69% was international in origin, and 31% domestic, with the vast majority of the international production spend being physical production.

Table 16 – Impacts of Film Production in Australia, 2016-17

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	476.2	450.8	432.8	1,359.8	91.9%
GVA (A$, m)	170.7	161.5	155.1	487.2	113.8%
FTE Jobs	2,239	2,869	2,796	7,903	78.5%
Wages (A$, m)	89.7	110.3	99.7	299.7	109.8%
Taxation (A$, m)	48.1	45.5	43.7	137.4	122.2%

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

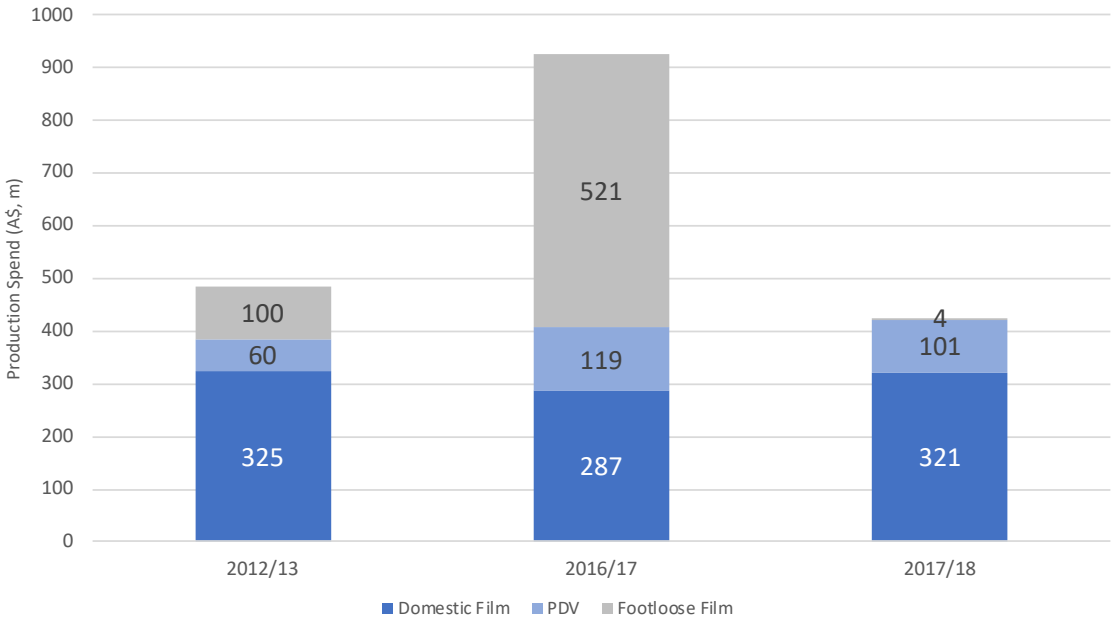
This jump in production spend had a similarly dramatic result when we consider its impacts on the Australian economy. Total GVA associated with film production was up 113.8% to A$487.2 million, job creation was up 78.5% to 7,903 FTEs, and wages were up 109.8% to A$299.7 million.

The tax take associated with film production was A$137.4 million across the three phases of activity.

4.2.4. 2017-18 Findings

The impact of these top-up grants can be seen in 2017-18, the base year for this study – total production spending dropped 53% to A$433.0 million, as while domestic productions continued to grow, just A$4 million of non-PDV international spending was attracted.

Figure 1 – Australian Film Production Spend by Kind, 2012-13, 2016-17, and 2017-18



Source: *Drama Report*, Screen Australia
NB: physical production spend drawn from production chapter of report, PDV from PDV services chapter

Table 17 – Impacts of Film Production in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13	Change v. 16-17
Output (A$, m)	222.5	210.5	202.2	635.2	-10.3%	-53.3%
GVA (A$, m)	79.7	75.4	72.4	227.6	-0.1%	-53.3%
FTE Jobs	1,046	1,340	1,306	3,692	-16.6%	-53.3%
Wages (A$, m)	41.9	51.5	46.6	140.0	-2.0%	-53.3%
Taxation (A$, m)	22.5	21.3	20.4	64.2	3.8%	-53.3%

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

This collapse in international production spending had a large negative impact on the scale of economic contribution of the film production sector in Australia, with total GVA falling to A$227.6 million. FTE job creation was down to 3,692, with over 3,000 fewer FTEs directly supported by Australian film production. Wages and taxation also fell by 53% each.

Though dramatic, this fall in production spend is at least in part temporary in nature; this is because 2017-18 fell between the ending of the ad-hoc top-up system which fuelled the successes of 2016-17, and a structural reform to the system, which sees the introduction of the Location Incentive in 2018-19.

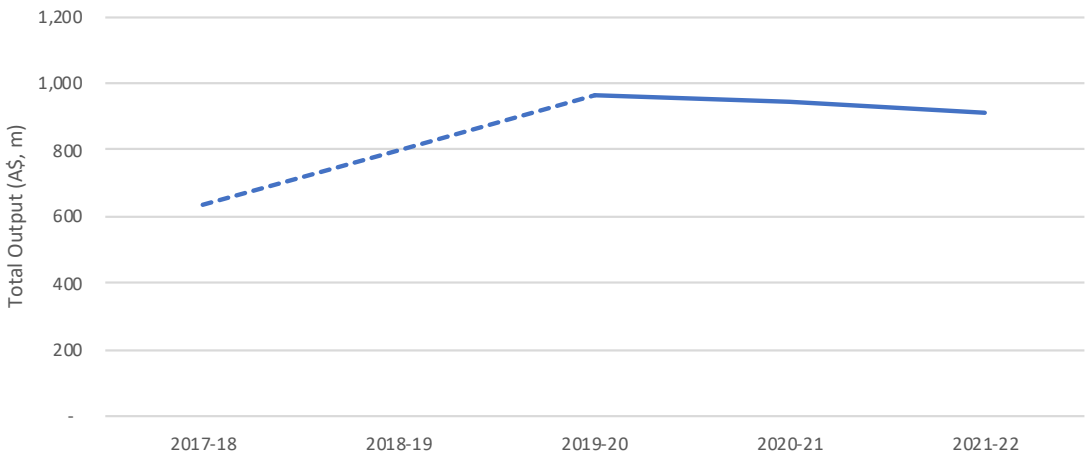
4.2.5. Future Projected Impacts

The Location incentive operates as a top-up grant on the current Location Offset, providing a 13.5% additional grant – providing an effective 30% when combined with the Offset – for productions fulfilling the criteria for the scheme. These include the provision of support from a state or territory government, and its contribution to the Australian economy, and local skills and companies. Projects must exceed a A$15 million qualifying Australian production expenditure threshold for film, or A$1 million per hour for TV, to qualify.

The scheme has a total budget of A$140 million for its four-year term, and given the incentive rate, a total of A$1.04 billion of total production spend can be supported. For the purposes of our projections, we annualise this as a spend of A$260 million per year, though it is likely that productions will not be spread this neatly between the years covered. Indeed, a number of projects have been announced as availing of the incentive in its early years, including *Godzilla vs. Kong*, and two new Marvel films.

As 92% of foreign production spend in Australia in recent years is film, this ratio is applied to the future projections for the Location Inventive. However, as we also assume that 50% of the growth in online drama spend projected now these have access to the Location Offset will avail of the Location Incentive, the total share of film in this is projected to drop from 71% in 2019-20 to 53% in 2021-22.

Figure 2 – Film Production, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

While this new 30% incentive will increase production spend during the next few years, as we show below this will not cause the Australian film production sector to reach the highs of 2016-17, due to the capped nature of the system. Assuming that domestic production and international projects not limited by the Location Incentive cap grow at the current rate, we estimate total film production spend, including PDV, of A$620.5 million in 2021-22.[6]

[6] Projects not currently applying for the incentives include projects applying for the separate PDV Offset, or Chinese productions which come to Australia for technical or creative reasons, and which are not sensitive to the incentive and therefore not limited by the cap on the Location Offset

Table 18 – Projected Impacts of Film Production in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	337.8	319.7	307.0	964.4
GVA (A$, m)	121.0	114.6	110.0	345.6
FTE Jobs	1,588	2,035	1,983	5,606
Wages (A$, m)	63.6	78.2	70.7	212.6
Taxation (A$, m)	33.7	31.9	30.6	96.2

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 19 – Projected Impacts of Film Production in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	329.7	312.1	299.6	941.5
GVA (A$, m)	118.2	111.8	107.4	337.3
FTE Jobs	1,550	1,986	1,936	5,472
Wages (A$, m)	62.1	76.4	69.0	207.5
Taxation (A$, m)	32.9	31.1	29.9	93.9

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 20 – Projected Impacts of Film Production in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	318.8	301.7	289.7	910.2
GVA (A$, m)	114.2	108.1	103.8	326.2
FTE Jobs	1,498	1,921	1,871	5,290
Wages (A$, m)	60.1	73.8	66.8	200.6
Taxation (A$, m)	31.8	30.1	28.9	90.8

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

While this represents a significant growth on the A$433.0 million production spend attracted in 2017-18, it is nonetheless lower than the A$927.0 million in spend in 2016-17, when the top-up grants peaked. This will be composed of A$350.9 million in estimated domestic film expenditure, and A$269.6 million in foreign spend. Including induced spending, total output is projected at A$910.2 million for 2021-22.

As a result of this, despite the expansion the Location Incentive will generate, we estimate a ceiling of 5,606 FTE jobs in 2019-20, a 29% reduction on the 7,903 total FTEs seen in 2016-17, but a 52% increase on the 3,692 FTEs supported in 2017-18. Total jobs are projected to decrease in the film production industry to 2021-22, as a greater share of production is undertaken by the online segment, below.

The same trends – a 50% increase on 2017-18, but a 29% reduction on 2016-17 – are projected in relation to the GVA and taxation elements of impact.

It is clear that the Location Incentive should stimulate major growth in the Australian film production sector, but compared to the uncapped systems seen in countries with which Australia competes for production, including the UK, the impact is inherently limited. As a result of both the lower volume of production which a capped system can support, and the lower interest of the production sector in applying for an incentive which they may not be able to use due to the cap, the Australian production sector will not reach the heights seen in 2016-17 under the Location Incentive.

This issue also impacts investments in the physical infrastructure required for production, where certainty is required, not least given the mismatch between the length of physical productions, and the time required to recoup capital expenditure. Addressing this mismatch can unlock significant investment in new physical capacity, as the PDV Offset in Australia demonstrates, and as the current plans for 2 million square feet of new studio space in Ontario, Canada also indicate.[7]

Productions like *Thor: Ragnarok* entered Australia on a selective top-up basis, which by providing a larger incentive than the current capped system, generated greater job and economic impacts than are presently allowed for. This said, the increased investment will undoubtedly make Australia more attractive for international productions, and attract far greater production spend than would have been the case had the Location Incentive not been available.

Case Study – Animal Logic

An early participant in Australia's PDV market, Animal Logic has steadily grown to be a key component of the PDV service sector in Australia as well as now developing its own animated and hybrid family content. Since its foundation in 1991 as a business focused on the design and production of high-end VFX for commercials and television content, the firm has expanded significantly to provide services to a wide range of film producers.

This has included work on major international franchises, including *The Matrix*, *Harry Potter*, and *The Lego Movie*, as well as key Australian productions such as *The Great Gatsby* and *Australia.* Within these, the firm provided a mixture of visual effects and animation services, building on its reputation for offering high-quality content in a globally-competitive market.

In the last decade, the firm has expanded to produce a range of original content, beginning with the academy-award winning *Happy Feet* in 2006. This expansion has seen the generation of additional high-quality jobs in Australia, as a result of the corporate investment put into the firm. The firm has also expanded internationally, including into the highly competitive Canadian animation market, as a result of the skills and fiscal incentives available there.

This process culminated recently in the production of *Peter Rabbit*, a film adaptation of a classic children's novel, which led the Australian Box Office for domestic productions in 2018 with A$26.7 million in ticket sales, with a total US$351 million (A$499 million) of tickets sold worldwide. More than 700 people worked on the 50 day shoot for the project in New South Wales, with the recently-announced sequel projected to generate 1,500 jobs for the state.

[7] *Best Practice in Screen Sector Development*, Olsberg•SPI for AFCI (September 2019) p. 44

4.3. TV Production

4.3.1. Approach

TV drama production is also included in Screen Australia's *Drama Report*. As with film, we classify both physical and PDV production as television production spend for the purposes of this analysis.

These data were then adjusted for 2017-18 to reflect the fact that VOD investments in drama premiering on a TV network in Australia is counted by Screen Australia as 100% TV production. The value of this was conservatively estimated at 5% of TV Drama spend – a number likely to be an under-estimate – which was carried forward to our Online Drama analysis. Such co-investment arrangements are becoming more common globally, and may require a tweak to Screen Australia's presentation of data in the future to be of value in policy development.

This approach would, however, only capture drama spend – which represents 15%-20% of total TV production in Australia – and as such a further data source is required to ascertain the overall value of TV production spend. To do this, we used the ABS 8679 dataset, a periodical database on the film, TV, and games sectors in Australia provided by the Australian Bureau of Statistics. This was most recently published for the fiscal year 2015-16.

All production sectors other than drama were taken from this dataset, which was then inflation adjusted using data from the Reserve Bank of Australia to provide spend estimates for 2016-17 and 2017-18.

4.3.2. 2012-13 Findings

Our analysis found that total TV production spend in Australia during 2012-13 was A$2.18 billion, which generated a total associated output of A$3.19 billion.

Table 21 – Impacts of TV Production in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	1,041.6	1,140.2	1,005.1	3,186.8
GVA (A$, m)	335.0	366.7	323.3	1,025.0
FTE Jobs	5,281	8,186	6,454	19,921
Wages (A$, m)	187.5	249.6	205.5	642.6
Taxation (A$, m)	90.9	99.5	87.7	278.2

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

This production generated A$1.03 billion in total additional economic activity for the Australian economy, and supported 19,921 FTE jobs, receiving A$642.6 million in total wages. Taxation associated with this activity is estimated at A$278.2 million.

4.3.3. 2017-18 Findings

By 2017-18, total production spending associated with the TV sector in Australia was found to have grown by 19.7%, to A$2.62 billion. This increase in production spend was driven predominantly by increasing spending in the production of sports content, with news and current affairs also showing strong growth over the period.

Table 22 – Impacts of TV Production in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	1,343.7	1,271.8	1,221.1	3,836.6	20.4%
GVA (A$, m)	481.5	455.7	437.5	1,374.7	34.1%
FTE Jobs	6,316	8,095	7,888	22,299	11.9%
Wages (A$, m)	253.1	311.2	281.4	845.7	31.6%
Taxation (A$, m)	135.8	128.5	123.4	387.7	39.4%

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

The impact of this increased production spend was a 34.1% increase in total GVA contribution, which rose to A$1.37 billion. This drove an 11.9% increase in job creation, with employees associated with the sector receiving 31.6% more wages. Total taxation related to TV production in Australia was up 39.4% to A$387.7 million.

Case Study – Matchbox

Matchbox Pictures is a highly-successful Australian production company, which has grown from foundations in Melbourne and Sydney to become a highly-successful global production brand, which produces award-winning content that presents a compelling view of Australia around the world. This has seen *Nowhere Boys* exported to 42 territories worldwide, while *The Slap* was both exported and sold as a format for production in the US.

Aside from success in the market, *Nowhere Boys* was also critically acclaimed, winning a 2014 AACTA Award, a 2016 International Emmy Kids Award, and most recently the BAFTA Children's Award for best international live action programme.

As a result of its successes in the global market, Matchbox has attracted significant investment from NBCUniversal, which now owns the company, and distributes its content globally. This process has allowed Matchbox to build upon its initial production and export achievements, producing ever-larger and more successful Australian drama, which finds an audience both domestically and in the international market. Such drama includes *Clickbait*, a forthcoming Netflix project which Matchbox is producing.

This can be seen in its latest TV project, the recently-commissioned *The Heights*. A TV drama series successfully cultivating diversity within the Australian talent pool and workforce, also presenting authentic Australian stories to a national and global audience, *The Heights* is a strong example of the current success of the Australian TV production sector.

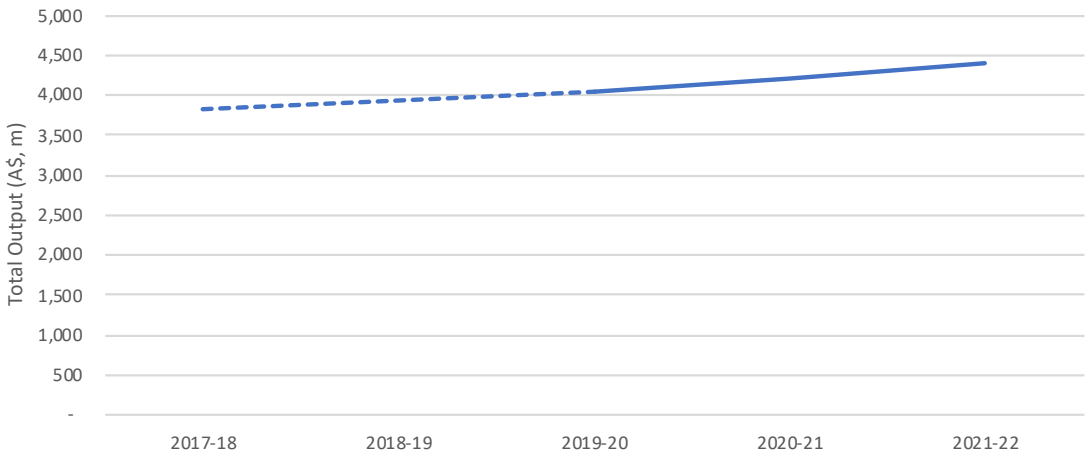
Produced in Perth, the series explores the relationships between a group of residents in a social housing tower with the people in an area being gentrified which surrounds it. The programme has thus provided a basis for discussion of the changing face of urban Australia, and the complex social issues surrounding this, whilst also showing off the Western Australian state capital.

Matchbox's successes also underline the value of the Screen Australia *Enterprise* programme, which supports Australian screen companies. The firm's early-stage growth was helped by public sector financial support and training support, through Enterprise Tasman and Enterprise Development.

4.3.4. Future Projected Impacts

This growth is projected to continue over the next few years, as a result of the ongoing demand for TV content in Australia – in particular sport – and the impact of the Location Incentive, which as noted above should stimulate additional footloose TV drama investment in Australia. Unlike in film, these changes have a smaller impact than the underlying growth in demand for production. We estimate such growth to continue at the 4.6% rate recorded in the ABS dataset for total TV production spend between 2011-12 and 2017-18.

Figure 3 – TV Production, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Table 23 – Projected Impacts of TV Production in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	1,416.6	1,340.7	1,287.3	4,044.6
GVA (A$, m)	507.6	480.4	461.3	1,449.3
FTE Jobs	6,659	8,534	8,316	23,508
Wages (A$, m)	266.9	328.0	296.6	891.5
Taxation (A$, m)	141.3	133.7	128.4	403.4

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 24 – Projected Impacts of TV Production in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	1,476.5	1,397.4	1,341.7	4,215.6
GVA (A$, m)	529.1	500.7	480.8	1,510.6
FTE Jobs	6,940	8,895	8,667	24,502
Wages (A$, m)	278.1	341.9	309.2	929.2
Taxation (A$, m)	147.2	139.4	133.8	420.4

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 25 – Projected Impacts of TV Production in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	1,538.9	1,456.5	1,398.4	4,393.7
GVA (A$, m)	551.4	521.9	501.1	1,574.4
FTE Jobs	7,233	9,271	9,033	25,538
Wages (A$, m)	289.9	356.4	322.2	968.5
Taxation (A$, m)	153.5	145.3	139.5	438.2

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

As a result of this underlying growth, we project total Australian TV production spend of A$3.00 billion in 2021-22, up 14.5% from the figures estimated for 2017-18. This will drive the creation of an additional 3,238 FTEs across the phases of impact, and an extra A$200.0 million in contribution to the Australian economy.

4.4. Online Drama Production

4.4.1. Approach

This segment of the report deals with the production of original content made for online platforms, predominantly VOD platforms. As with the film sector, this spend is drawn from Screen Australia's *Drama Report*, which provides data on original spend on drama content for online platforms, and which is used as the input for this analysis.

This value was then adjusted with the addition of 5% of the TV production figure, reflecting the fact that VOD platforms are investing in the production of drama which premieres on Australian TV, as noted above.[8]

No comparison is provided for 2012-13, as this pre-dates the point at which online drama was separately categorised in the *Drama Report*. This reflects the fact that VOD platforms were not commissioning original content at this point.

[8] As noted in the TV Drama chapter, above, this reflects the fact that the Screen Australia *Drama Report* attributes all expenditure on content to the first channel of domestic distribution in Australia, even where upfront risk is more shared

4.4.2. 2017-18 Findings

As a result of this, we can only generate findings for 2017-18, when the *Drama Report* states that there was A$68.0 million of production spend on original drama content for VOD services in Australia. Including spillover impacts, this production generated a total A$99.7 million in output.

Table 26 – Impacts of Online Drama Production in Australia, 2017-18

	Direct	Indirect	Induced	Total
Output (A$, m)	34.9	33.0	31.7	99.7
GVA (A$, m)	12.5	11.8	11.4	35.7
FTE Jobs	164	210	205	579
Wages (A$, m)	6.6	8.1	7.3	22.0
Taxation (A$, m)	3.5	3.3	3.2	9.9

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

This production spending was responsible for A$35.7 million of total GVA contributions to the Australian economy, 579 total FTE jobs earning A$22.0 million, and A$9.9 million of total taxation.

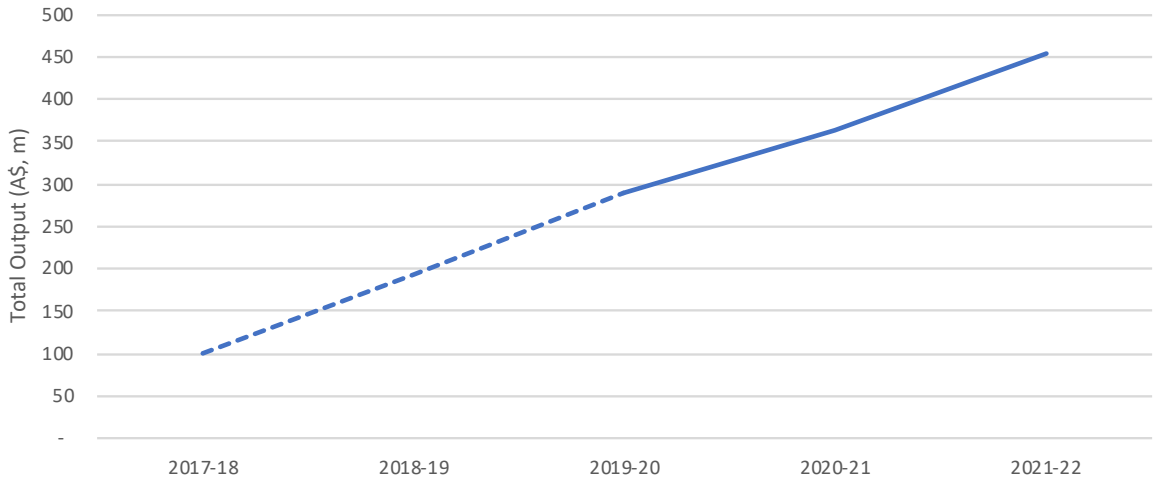
4.4.3. Future Projected Impacts

Over the next three fiscal years, we project strong growth in production spending associated with the Online Drama sector. This component of the market has historically been underutilised in Australia due to the lack of access to the Location and PDV Offsets. However, since this access was granted in May 2019 two major projects have been announced, with *Shantaram* and *Clickbait* projected to spend a combined A$90 million in Australia in 2019-20.[9]

As a result of this, we do not tie our projections to past performance – instead, the projected spending for *Shantaram* and *Clickbait* is utilised as a base, with a 25% increase in production spend then estimated for 2020-21 and 2021-22, reflecting the consumption patterns observed in the sector (see Chapter 8), and the recent expansion of the PDV and Location Offsets to cover production spend from the sector.

[9] https://www.if.com.au/shantaram-to-shoot-in-victoria/ and https://www.if.com.au/tony-ayres-christian-white-entice-netflix-with-clickbait/

Figure 4 – VOD Production, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

This expansion will include the increase associated with access to the Location Offset and Location Incentive, which are already interesting foreign-based VOD platforms, who are keen to access Australia's talent, locations, and stories.

Table 27 – Projected Impacts of Online Drama Production in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	101.4	96.0	92.2	289.6
GVA (A$, m)	36.3	34.4	33.0	103.8
FTE Jobs	477	611	595	1,683
Wages (A$, m)	19.1	23.5	21.2	63.8
Taxation (A$, m)	10.1	9.6	9.2	28.9

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 28 – Projected Impacts of Online Drama Production in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	126.8	120.0	115.2	362.0
GVA (A$, m)	45.4	43.0	41.3	129.7
FTE Jobs	596	764	744	2,104
Wages (A$, m)	23.9	29.4	26.6	79.8
Taxation (A$, m)	12.6	12.0	11.5	36.1

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Table 29 – Projected Impacts of Online Drama Production in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	158.5	150.0	144.0	452.5
GVA (A$, m)	56.8	53.8	51.6	162.1
FTE Jobs	745	955	930	2,630
Wages (A$, m)	29.9	36.7	33.2	99.7
Taxation (A$, m)	15.8	15.0	14.4	45.1

Source: Olsberg•SPI analysis of data from Screen Australia and ABS
NB: numbers may not sum due to rounding

Based on these figures, we estimate a 354% increase in economic contribution from the VOD production sector to 2021-22. This will see GVA rise to A$162.1 million, supporting 2,630 total FTEs, and paying A$45.1 million in taxation. Recently-granted access to the offsets will be major driver in this growth, and is likely see substantial percentage increases in spend given the low starting point, even if the cap on the Location Incentive inhibits the total growth potential of the industry.

Even taking a conservative approach, we estimate total global spending on original drama content from VOD services will be a minimum of US$20.00 billion by the end of the period these projections cover, and potentially as high as US$50.00 billion. Netflix has announced a doubling of its original content spend to US$15.00 billion per year in 2019 – the highest of a total US$81.00 billion of spend from major producers which Variety is projecting for this year – while SVOD services from Amazon, Apple (launching November 1), Disney (launching 19th November), WarnerMedia, and NBCUniversal, among others, will each be producing several billion dollars' worth of content per year in the near future.[10]

At present, Australia attracts around 5.9% of total footloose production spend. This was found to be US$4.6 billion in 2015, according to a recent PwC/Ausfilm study, while Australia's foreign production in the two fiscal years covering calendar year 2015 was A$363.0 million, or US$272.6. million[11] Assuming that Australia captures the same share of this spending, it could expect to receive US$1.18 billion (A$1.74 billion at current exchange rates) of even low-estimate spending, given the limited capacity of many US states to attract additional production expenditure.

[10] *Dare to Stream*, Variety Intelligence (7th May, 2019)
[11] *The Value of Global Footloose Production: An Estimate with Case Studies*, AusFilm and PwC (2018). Footloose film production spend in Australia was A$447.0 million in 2014-15 and A$279.0 million in 2015-16. Currency estimates drawn from European Central Bank annual average exchange rate data.

Australia is, however, not presently able to maximise its capture of this spending. While the highly-welcome extension of the Location and PDV Offsets now allows incentivised VOD production, the cap on the Location Incentive remains very challenging. This is a result of the increased amount of potential expenditure which is eligible to access Australia's Offset system, and the relatively low cap which exists on this incentive.

Case Study – Start VR

While these projections focus on the expansion of the current market for production in Australia, the evolution of the industry is providing a range of new opportunities for Australia's screen sector, of which companies are beginning to take advantage. An example of this is virtual reality, where Sydney's Start VR provides a strong example.

Start VR is a full service virtual reality studio, creating immersive VR content for a variety of national and international markets in education, business, communication and entertainment, prioritising innovation and collaboration to underpin the growth of its business. An example is its Australian Artist Residency Programme, in which leading practitioners from traditional screen media and creative industries collaborate with SVR on new, interactive cinematic VR projects.

This has seen highly-regarded talent such as writer, director and producer Ryan Griffen (*Cleverman*) work with the company, pushing the boundaries of content creation. Another collaboration is the VR Noir project, involving AFTRS, designed to explore the possibilities of virtual reality technology for storytelling. An example is the award-winning, pilot episode of an interactive virtual reality crime thriller VR *Noir: A Day Before The Night*.

As we note above, determining the future for any industry is challenging, but this is particularly the case when emerging technologies are starting to push the boundaries, generating impacts which will take years to become clear. A strong future for VR is, nonetheless, highly likely, particularly in the industrial space where users like Boeing have already adopted it in their manufacturing process. While it is beyond the scope of this report to estimate the precise scale of this, the fact that companies such as Start VR are beginning to facilitate experiments in this regard provides a strong basis for growth, and the capturing of future value in Australia.

5. DISTRIBUTION

Distribution represents a bridge between the producer and the consumer-facing areas of the market, and as such is undergoing a period of substantial evolution. This reflects the ongoing change in the way Australia's consumers engage with content – in particular the evolution from physical rentals and purchases to VOD – which has had a major impact on the value of the Australian distribution sector.

The various components of the distribution sector have responded to this very differently. While theatrical and physical (DVD/Blu-Ray) have reduced in impact due to changes in consumer behaviour, the rapid upward trajectory of the VOD segment has driven growth in this component of the industry.

Taken as a whole, over the last few years, the amount of turnover in this sector has steadily dropped, and despite the ongoing growth of consumer demand for the screen industry's projects, our projections suggest that this will continue into the early 2020s. At the end of this period, however, the impact of this digitisation is projected to have been internalised, and the sector will return to a growth track.

5.1. Introduction

For many productions, distribution represents the second stage of the value chain, following production, and represents the point at which finished projects are taken to the domestic and international market. Distributors take Australian content to cinemas, TV broadcasters, VOD platforms and retail stores within the domestic market, bring foreign content into Australia for theatrical exhibition or broadcast, and export Australian content to international markets.

In the TV market, many productions will be directly commissioned by broadcasters, and as such there will be no distributor operating as an intermediary at that stage. Distribution nonetheless remains important for TV as well as for film. This reflects the fact that TV content will still require distribution in order to reach secondary domestic markets (such as SVOD and physical home entertainment) or to achieve international sales.

5.2. Film Distribution

5.2.1. Approach

To assess the value of film distribution – covering the distribution of films both theatrical and downstream windows – we use figures drawn from the IBIS World Report, *Motion Picture and Video Distribution in Australia*. This provides detailed data on the turnover of distributors in the three sectors of interest, and is used as the input for this analysis. These figures will include the 39.5% film rental cost – the share of box office accruing to distributors – which was drawn from a 1999-2000 ABS survey, and verified through consultations.

All distribution revenues associated with film were apportioned to this sector, together with 50% of those identified as retail, rental, and miscellaneous; the remaining 50% of these categories were apportioned to TV. This reflects the division between film and TV in the Australian retail market in recent years.

5.2.2. 2012-13 Findings

IBIS World states total distribution turnover in Australia was A$2.02 billion in 2012-13, of which we estimate that A$1.27 billion is related to the distribution of Australian and foreign film content.

Table 30 – Impacts of Film Distribution in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	606.5	663.9	585.2	1,855.7
GVA (A$, m)	195.1	213.5	188.2	596.9
FTE Jobs	3,075	4,767	3,758	11,600
Wages (A$, m)	109.2	145.3	119.7	374.2
Taxation (A$, m)	52.9	57.9	51.1	162.0

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

This spending was responsible for the generation of A$596.9 million in total GVA during 2012-13, and 11,600 total FTE jobs. We estimate that A$374.2 million in wages, and A$162.0 million in taxation were related to film distribution activities.

5.2.3. 2017-18 Findings

The total impact of distribution activity fell markedly between 2012-13 and 2017-18, as the impact of digitisation throughout the value chain caused a fall in turnover within the distribution industry. This fall reflected the ongoing change in consumer spending, which is in the process of transitioning from the sale and rental of physical media to VOD content, which is reflected in a separate element below. As we will note in the following chapters, cinema exhibition remains strong in Australia, and as such it is the decline in the market for physical media which is driving this change.

Nonetheless, such online content has a smaller economic impact than physical media, and as a result overall turnover related to the distribution sector in Australia fell to A$1.65 billion. Of this, we estimate that A$934.0 million was associated with the film sector.

Table 31 – Impacts of Film Distribution in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	479.8	454.2	436.0	1,370.0	-26.2%
GVA (A$, m)	171.9	162.7	156.2	490.9	-17.8%
FTE Jobs	2,255	2,891	2,817	7,963	-31.4%
Wages (A$, m)	90.4	111.1	100.5	302.0	-19.3%
Taxation (A$, m)	48.5	45.9	44.1	138.4	-14.5%

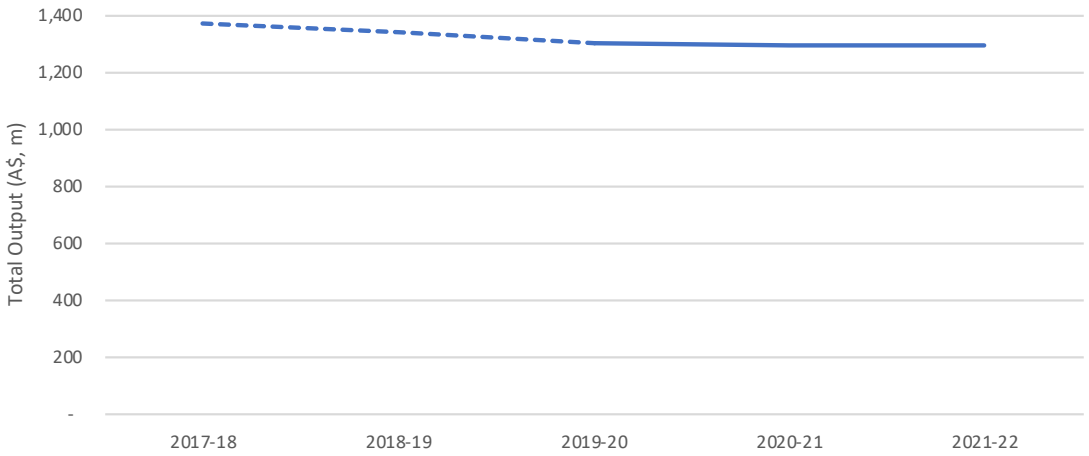
Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

This spending generated a total GVA impact of A$490.9 million, a fall of 17.8% from the figures seen in 2012-13. This production spending generated 7,963 FTE jobs receiving A$302.0 million in wages, decreases of 31.4% and 19.3% respectively. Total taxes of A$138.4 million were estimated, a fall of 14.5% from the 2012-13 estimates.

5.2.4. Future Projected Impacts

To assess the likely future impact of film distribution in Australia, we use the IBIS World projections for the total size of the distribution sector as our input. These imply a fall in total sectoral turnover to 2019-20, followed by a small rise after the industry reaches a nadir, and then grows with increased demand across the VOD sector.

Figure 5 – Film Distribution, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Reflecting the increasing importance of the VOD sector for this growth, we assume that the share of Australian distribution turnover related to online platforms grows at 10% a year, with film and TV falling as a result.[12] As such, the turnover related to film distribution is projected to fall over the three years we consider below.

Table 32 – Projected Impacts of Film Distribution in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	455.3	431.0	413.8	1,300.1
GVA (A$, m)	163.2	154.4	148.3	465.8
FTE Jobs	2,140	2,743	2,673	7,556
Wages (A$, m)	85.8	105.4	95.3	286.6
Taxation (A$, m)	45.4	43.0	41.3	129.7

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

[12] This is a smaller percentage growth rate for online content than in the production space, as we expect that cinema will continue to play an important role for film content

Table 33 – Projected Impacts of Film Distribution in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	452.4	428.2	411.1	1,291.8
GVA (A$, m)	162.1	153.4	147.3	462.9
FTE Jobs	2,127	2,726	2,656	7,508
Wages (A$, m)	85.2	104.8	94.7	284.7
Taxation (A$, m)	45.1	42.7	41.0	128.8

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Table 34 – Projected Impacts of Film Distribution in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	452.2	428.0	411.0	1,291.2
GVA (A$, m)	162.0	153.4	147.3	462.7
FTE Jobs	2,126	2,724	2,655	7,505
Wages (A$, m)	85.2	104.7	94.7	284.6
Taxation (A$, m)	45.1	42.7	41.0	128.8

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

As a result of these changes, we estimate total turnover related to film distribution in Australia will fall to A$880.3 million by 2021-22. This will lead to a 6% decrease in the GVA associated with the sector, alongside a similar decrease in total FTE jobs, though with wages expected to stay relatively steady due to the underlying growth of the Australian economy.

While the film distribution sector will continue to decline to 2021-22, our analysis suggests that this will be a slower process than previously observed. This reflects the fact that the sector is expected to return to growth over the period studied, though with distribution to VOD services taking a greater percentage of turnover, as the industry rebalances due to consumer demand.

5.3. TV Distribution

5.3.1. Approach

As with film distribution, our baseline data for the TV distribution sector is drawn from IBIS World's report, *Motion Picture and Video Distribution in Australia*. In keeping with our approach for film distribution, this includes both the turnover stated as being in the TV sector, and 50% of the turnover in the retail, rental, and miscellaneous categories. TV distribution is therefore estimated to account for 33.6% of total content distribution revenues in Australia.

5.3.2. 2012-13 Findings

Of the A$2.02 in distribution turnover reported in Australia for 2012-13, we estimate that A$751.1 million was associated with the TV sector. Including induced impacts, a total of A$1.10 billion in output is estimated for TV distribution activities in Australia.

Table 35 – Impacts of TV Distribution in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	358.6	392.5	346.0	1,097.0
GVA (A$, m)	115.3	126.2	111.3	352.9
FTE Jobs	1,818	2,818	2,222	6,858
Wages (A$, m)	64.5	85.9	70.7	221.2
Taxation (A$, m)	31.3	34.3	30.2	95.8

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Our analysis shows that this spending generated A$352.9 million in total GVA, supporting 6,858 FTE jobs, and paying A$221.2 million in wages. A total of A$95.8 million in taxation was estimated.

5.3.3. 2017-18 Findings

As with film distribution, by 2017-18 the output associated with TV distribution in Australia had fallen, with an estimated A$565.3 million in total turnover, a fall of 25%.

Table 36 – Impacts of TV Distribution in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	290.4	274.9	263.9	829.3	-24.4%
GVA (A$, m)	104.1	98.5	94.6	297.1	-15.8%
FTE Jobs	1,365	1,750	1,705	4,820	-29.7%
Wages (A$, m)	54.7	67.3	60.8	182.8	-17.4%
Taxation (A$, m)	29.3	27.8	26.7	83.8	-12.5%

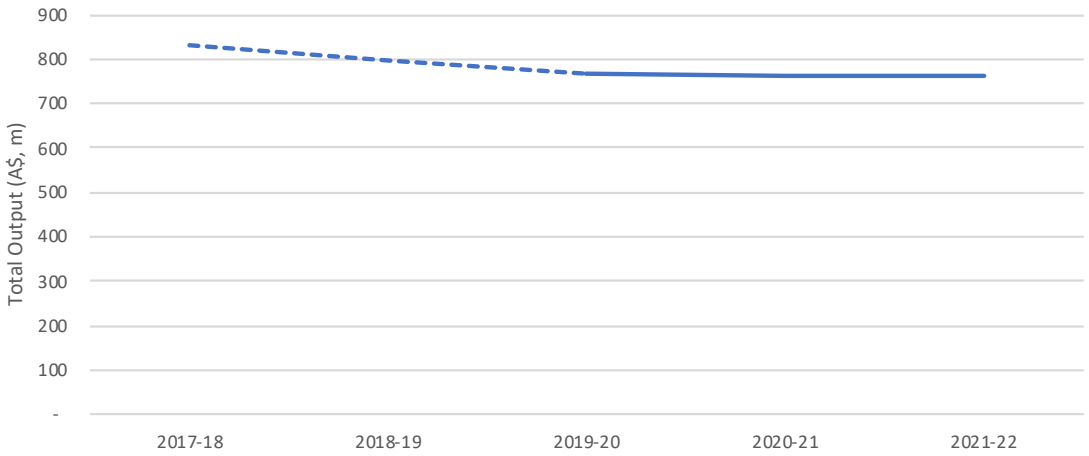
Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

This generated a 15.8% lower contribution to the Australian economy, with A$297.1 million of total estimated GVA. FTE job creation fell 29.7% to 4,820, receiving 17.4% fewer total wages. Taxation was down 12.5% to a total A$83.8 million.

5.3.4. Future Projected Impacts

In keeping with the film distribution sector, we project that the impact of TV distribution will continue to decline to 2020-21 at a faster rate than film distribution, before levelling-off in 2021-22 with A$520.4 million of turnover.

Figure 6 – TV Distribution, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Table 37 – Projected Impacts of TV Distribution in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	269.2	254.8	244.6	768.6
GVA (A$, m)	96.5	91.3	87.7	275.4
FTE Jobs	1,265	1,622	1,580	4,467
Wages (A$, m)	50.7	62.3	56.4	169.4
Taxation (A$, m)	26.8	25.4	24.4	76.6

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Table 38 – Projected Impacts of TV Distribution in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	267.5	253.2	243.1	763.7
GVA (A$, m)	95.8	90.7	87.1	273.6
FTE Jobs	1,257	1,611	1,570	4,439
Wages (A$, m)	50.4	61.9	56.0	168.3
Taxation (A$, m)	26.7	25.2	24.2	76.2

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Table 39 – Projected Impacts of TV Distribution in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	267.4	253.0	243.0	763.4
GVA (A$, m)	95.8	90.7	87.1	273.5
FTE Jobs	1,257	1,611	1,569	4,437
Wages (A$, m)	50.4	61.9	56.0	168.3
Taxation (A$, m)	26.7	25.2	24.2	76.1

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Total GVA associated with the sector is projected to fall marginally between 2017-18 and 2021-22, with our estimates showing an 8% fall to A$273.5 million. This will generate 8% fewer FTE jobs, though as with film, many in the sector will likely work on the VOD sector – particularly SVOD and TVOD – as a greater percentage of the turnover in Australia's distribution sector relates to this market.

Case Study – Miss Fisher's Murder Mysteries

An iconic period drama series produced for TV, containing a gently subversive, light approach to feminist topics, *Miss Fisher's Murder Mysteries* has generated significant soft power for Australia through its international sales. Originally a phenomenal commercial success shown on ABC, it has since been sold to 172 territories around the world, delivering a view of Australia to a wide global audience.

The success of this series can be seen in the continuing popularity of the location tours which are provided by a variety of companies in the show's native Melbourne, both walking and by bus. These continue to attract a large number of tourists, even though the most recent new episodes in the series were released in 2015.

Miss Fisher's Murder Mysteries has also prompted the development of a costume exhibition that has toured nationally, and complimentary VR content exploring other elements of the story. In 2015-16, the National Trust for Australia reported 50,000 paid visitors to the exhibition at their Rippon Lea estate in Melbourne, with Facebook posts about the event reaching more than 240,000 users of the social network.

A feature film – *Miss Fisher and the Crypt of Tears* – is presently in production, and due for release in 2019. The development of this production was supported through a highly-successful crowdfunding campaign, which broke through its A$250,000 target in less than 48 hours, before raising more than A$1.5 million in total funding.

Every Cloud Productions – the production company – is also in the process of developing a TV spinoff series, which when combined with the film will set the scene for further benefits for Australia.

5.4. Online Distribution

5.4.1. Approach

In keeping with the other distribution sectors considered for this report, turnover figures for online distribution of video content were drawn from the IBIS World report, *Motion Picture and Video Distribution in Australia*. For this sub-sector, the figures represent only the 9.7% of

turnover in the distribution industry that are categorised as relating to distribution to VOD providers.

As with production for VOD services, no figures are estimated for 2012-13, as this year pre-dates the introduction of major SVOD services in Australia.

5.4.2. 2017-18 Findings

This 9.7% of distribution turnover amounted to A$159.6 million in 2017-18; including induced output, we find that a total of A$234.2 million of spending was associated with distribution to VOD services in Australia.

Table 40 – Impacts of Online Distribution in Australia, 2017-18

	Direct	Indirect	Induced	Total
Output (A$, m)	82.0	77.6	74.5	234.2
GVA (A$, m)	29.4	27.8	26.7	83.9
FTE Jobs	386	494	481	1,361
Wages (A$, m)	15.5	19.0	17.2	51.6
Taxation (A$, m)	8.3	7.8	7.5	23.7

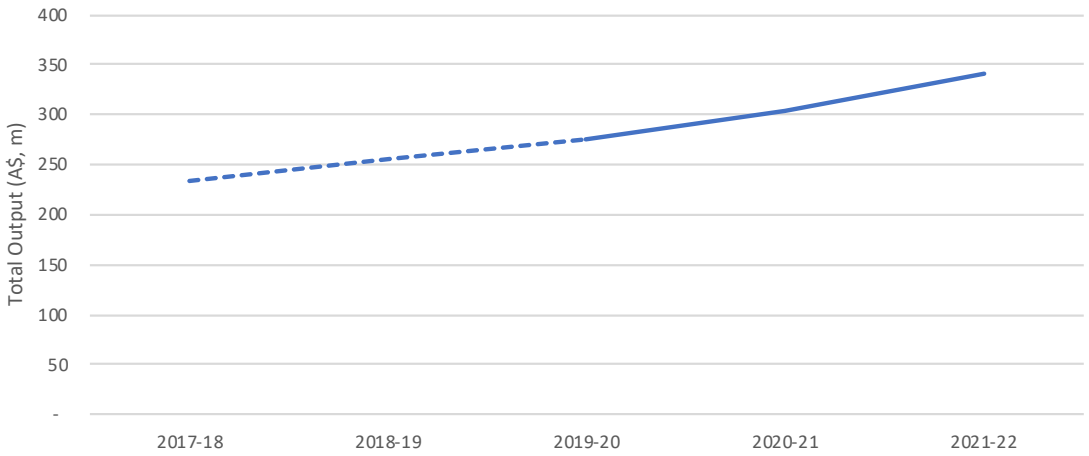
Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

This spending generated a total A$83.9 million in GVA for the Australian economy, supporting 1,361 total FTEs with A$51.6 million in wages in the process. A total of A$23.7 million in taxation was associated with the sector.

5.4.3. Future Projected Impacts

This economic contribution of this sector is anticipated to rise in the next few years, as the declining revenues of the distribution sector turn around, and the share of this turnover accounted for by VOD-related activities increase. We project that distribution to such platforms will rise to 14% of total distribution sector output by 2021-22, with A$340.1 million of total output being generated, a rise of 45% from 2017-18.

Figure 7 – Online Distribution, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Table 41 – Projected Impacts of Online Distribution in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	96.3	91.2	87.6	275.1
GVA (A$, m)	34.5	32.7	31.4	98.6
FTE Jobs	453	580	566	1,599
Wages (A$, m)	18.1	22.3	20.2	60.6
Taxation (A$, m)	9.6	9.1	8.7	27.4

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Table 42 – Projected Impacts of Online Distribution in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	106.7	101.0	97.0	304.7
GVA (A$, m)	38.2	36.2	34.8	109.2
FTE Jobs	502	643	626	1,771
Wages (A$, m)	20.1	24.7	22.3	67.2
Taxation (A$, m)	10.6	10.1	9.7	30.4

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

Table 43 – Projected Impacts of Online Distribution in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	119.1	112.7	108.2	340.1
GVA (A$, m)	42.7	40.4	38.8	121.9
FTE Jobs	560	718	699	1,977
Wages (A$, m)	22.4	27.6	24.9	75.0
Taxation (A$, m)	11.9	11.2	10.8	33.9

Source: Olsberg•SPI analysis of data from IBIS World and ABS
NB: numbers may not sum due to rounding

This additional economic activity will raise the total GVA associated with VOD distribution by 45% to A$121.9 million, while FTE jobs are projected to increase at the same rate to 1,977. We anticipate that this will lead to an increase in associated taxation by 43% from A$23.7 million to A$33.9 million.

6. EXHIBITION

The Australian public's demand for films exhibited in the cinema continues to be strong, and as our data for 2017-18 show, this can occur even when the critical Christmas period is relatively slow. Despite this, the industry remains hit-based, and dependent on the response of the audience to content once it gets released.

As such, while we project a steady growth rate for the industry over the next few years, as we are projecting this from a relatively quiet year in 2017-18, this sector could well expand much faster. In doing this, it will continue to generate a range of opportunities – particularly part time ones – for workers in this sector.

6.1. Introduction

Exhibition represents the first part of the screen industry value chain where feature films are brought from a distributor to the Australian audience. This is done in cinemas and film festivals, with film content normally enjoying an exclusive 'window' for exploitation in this part of the sector before moving downstream to the physical and digital home entertainment windows.

6.2. Film Exhibition

6.2.1. Approach

To assess the value of film exhibition, box office data from the MPDAA were used as the input. These were provided to us on a quarter-by-quarter basis, rather than using the annualised dataset published by the MPDAA and Screen Australia.

Non-box office turnover was added to this as a percentage of the Box Office spend. A 1999-2000 survey by ABS shows that an average of 49% of cinema turnover comes from other sources (such as concessions). The same source indicates that film rentals – the share of box office accruing to distributors – averages 39.5% in Australia; this is deducted from the box office (as it forms part of the film distribution value stated in 5.2) and the remainder added to non-box office turnover to estimate total exhibitor revenues. [13]

6.2.2. 2012-13 Findings

In 2012-13, we find a total turnover in the film exhibition sector of A$1.22 billion, composed of A$673.1 million of retained box office, and A$545.1 million of other turnover.[14] Including induced impacts, this led to a total output from the film exhibition sector of A$1.78 billion.

[13] While these are old data points, consultations with the industry suggest they remain relatively accurate; as neither non-box office turnover nor film rental costs are published in the annual reports of Australia's exhibitors, and our previous research has shown wide variations in these figures for different territories, it is the best available Australian estimate for this study

[14] Though similar to the direct and indirect figures, these represent a different part of our analysis

Table 44 – Impacts of Film Exhibition in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	581.6	636.6	561.2	1,779.4
GVA (A$, m)	187.1	204.8	180.5	572.3
FTE Jobs	2,949	4,571	3,603	11,123
Wages (A$, m)	104.7	139.4	114.7	358.8
Taxation (A$, m)	50.8	55.6	49.0	155.3

Source: Olsberg•SPI analysis of data from MPDAA and ABS
NB: numbers may not sum due to rounding

We find that GVA associated with this output was A$572.3 million, with 11,123 FTE jobs supported, who were paid A$358.8 million. Taxes associated with this activity amounted to A$155.3 million.

6.2.3. 2017-18 Findings

Box office in Australia during 2017-18 rose to A$1.19 billion, of which A$721.7 million was retained by exhibitors; including other spending of A$585.5 million, the total estimated turnover for the sector is A$1.31 billion. This was up on 2012-13, despite the relatively weak Christmas period seen in 2017, the importance of which underlines the critical, and rather unpredictable nature of audience response to key domestic and international film releases for turnover in the exhibition sector.

Table 45 – Impacts of Film Exhibition in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	671.1	635.2	609.9	1,916.1	7.7%
GVA (A$, m)	240.5	227.6	218.5	686.6	20.0%
FTE Jobs	3,155	4,043	3,940	11,137	0.1%
Wages (A$, m)	126.4	155.4	140.5	422.4	17.7%
Taxation (A$, m)	67.8	64.2	61.6	193.6	24.7%

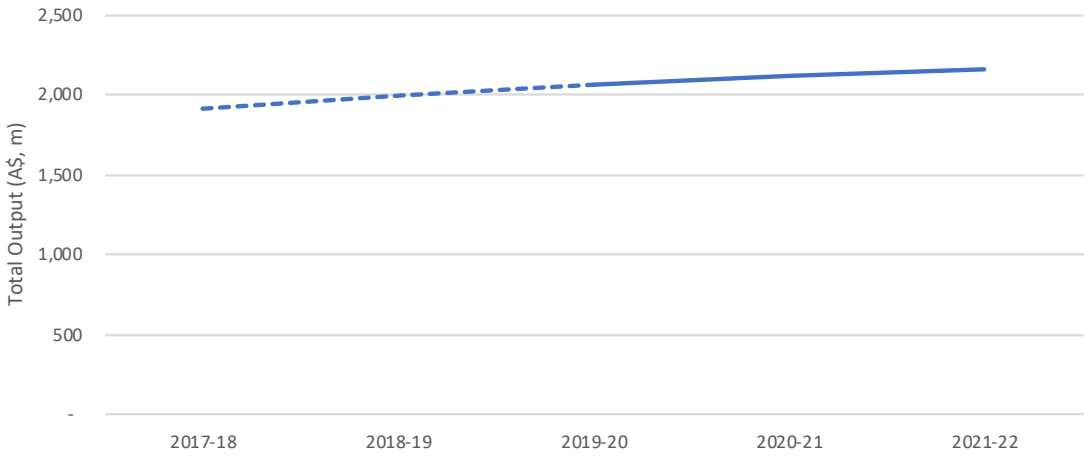
Source: Olsberg•SPI analysis of data from MPDAA and ABS
NB: numbers may not sum due to rounding

This total turnover of A$1.92 billion, up 7.7% on 2012-13, was responsible for A$686.6 million of total GVA, a 20.0% increase, and supported 11,137 total FTE jobs, which represents no change. Taxation was estimated at A$193.6 million in 2017-18, a 24.7% rise.

6.2.4. Future Projected Impacts

As the film exhibition sector is highly dependent on the strength of the product coming into the market, no attempt is made to extrapolate recent trends in the box office. Instead, the RBA inflation target of 2.25% is applied to annual spending on the cinema tickets and concessions to estimate a possible trend for this sector.

Figure 8 – Film Exhibition, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

This analysis suggests that the total Australian box office will reach A$1.32 billion by 2021-22, with A$272.3 million of other turnover associated.

Table 46 – Projected Impacts of Film Exhibition in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	724.2	685.5	658.1	2,067.8
GVA (A$, m)	259.5	245.6	235.8	740.9
FTE Jobs	3,404	4,363	4,251	12,019
Wages (A$, m)	136.4	167.7	151.7	455.8
Taxation (A$, m)	72.2	68.4	65.6	206.2

Source: Olsberg•SPI analysis of data from MPDAA and ABS
NB: numbers may not sum due to rounding

Table 47 – Projected Impacts of Film Exhibition in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	740.5	700.9	672.9	2,114.3
GVA (A$, m)	265.3	251.1	241.1	757.6
FTE Jobs	3,481	4,461	4,347	12,289
Wages (A$, m)	139.5	171.5	155.1	466.1
Taxation (A$, m)	73.9	69.9	67.1	210.9

Source: Olsberg•SPI analysis of data from MPDAA and ABS
NB: numbers may not sum due to rounding

Table 48 – Projected Impacts of Film Exhibition in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	757.2	716.7	688.1	2,161.9
GVA (A$, m)	271.3	256.8	246.6	774.7
FTE Jobs	3,559	4,562	4,445	12,566
Wages (A$, m)	142.6	175.3	158.6	476.5
Taxation (A$, m)	75.5	71.5	68.6	215.6

Source: Olsberg•SPI analysis of data from MPDAA and ABS
NB: numbers may not sum due to rounding

In this scenario, the total GVA associated with the film exhibition industry in Australia will rise 13% to A$774.7 million compared to 2017-18, with an extra 1,429 (13%) FTE jobs created. Activities related with to the sector will pay an additional 12% tax to the Australian government, and 13% more in wages to their employees.

7. TELEVISION BROADCAST

The television broadcast sector in Australia remains the largest contributor within the broader screen sectors. The sector has experienced continued growth, driven by popular drama and sporting products, despite the increasing challenge of VOD within the Australian market.

This strength is expected to continue in future years, and as such we project ongoing gradual growth to 2021-22. However, as with the cinema exhibition sector, content which resonates with the Australian public – such as perhaps the 2020 Olympics, which will be in a proximate time zone – may lead to much more rapid growth.

7.1. Introduction

Akin to cinema, television broadcast represents a traditional medium through which TV content is presented to the audience. For the purpose of our analysis, this takes place either using a traditional linear broadcasting approach – either over the air, or through cable or satellite – or via BVOD services related to traditional broadcasters, such as ABC iView, or Foxtel Now.[15]

Television broadcast is a major driver of value in the Australian screen sectors, with a wide number of services reaching the Australian population. This sector continues to generate major economic impacts, but is increasingly being challenged by VOD platforms, which we assess in chapter 8.

7.2. Television Broadcast

7.2.1. Approach

To identify the impact of the television broadcast sector in Australia, an analysis was undertaken of the accounts of broadcasters operating in the market. Their total turnover was identified, from which stated investments in content – whether direct production investment or acquisition – were deducted. This reflected the fact that such content will have been captured in the production element of this study, above.

As some of Australia's broadcasters publish their accounts on a calendar year basis, rather than fiscal year, basis, these accounts were averaged out to fit the fiscal years used for our analysis. Furthermore, Network Ten was taken over by CBS in 2017, leading to a break in its publication of separate accounts – as such, the Ten data for 2016 was inflated using the average annual increase in spending on non-production elements of 2.17% identified from ABS 8679 dataset.

To validate these estimates, a comparison was run against the ABS 8679 dataset – on film, television, and games activity in Australia – which breaks out spending in the TV sector for 2015-16. Using this comparison, we found our estimates to be within a small margin of error to those produced by the ABS, and as such they were brought forward.

7.2.2. 2012-13 Findings

This analysis showed that total non-production turnover in the Australian TV sector in 2012-13 was A$6.22 billion. With the inclusion of induced spending, the total output associated with the sector this year is estimated at A$8.81 billion.

[15] For the purposes of this analysis, broadcaster-related VOD platforms are included as "Television Broadcast", all other VOD services are included in the VOD section of chapter 8

Table 49 – Impacts of TV Broadcast in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	3,271.4	2,953.4	2,589.3	8,814.1
GVA (A$, m)	1,621.0	1,463.4	1,283.0	4,367.5
FTE Jobs	6,070	7,729	7,128	20,928
Wages (A$, m)	505.5	684.8	559.7	1,750.0
Taxation (A$, m)	439.9	397.1	348.2	1,185.2

Source: Olsberg•SPI analysis of data from ABC, SBS, Seven, Nine, Ten, Foxtel, and ABS
NB: numbers may not sum due to rounding

We find that this spending generated a total contribution to the Australian economy of A$4.37 billion, and supported 20,928 FTE jobs. Taxation of A$1.19 billion is estimated.

7.2.3. 2017-18 Findings

By 2017-18, the total value of non-production spending associated with Australian broadcasters had risen to A$7.28 billion, driven by factors such as the renegotiation of sports rights, and the ongoing growth of the underlying sector. This led to a 22.7% increase in the overall output associated with the sector, to A$10.82 billion.[16]

Table 50 – Impacts of TV Broadcast in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	3,753.0	3,522.4	3,540.9	10,816.4	22.7%
GVA (A$, m)	1,689.8	1,586.0	1,594.3	4,870.1	11.5%
FTE Jobs	7,150	7,718	8,119	22,987	9.8%
Wages (A$, m)	644.7	802.3	721.5	2,168.5	23.9%
Taxation (A$, m)	476.5	447.2	449.6	1,373.4	15.9%

Source: Olsberg•SPI analysis of data from ABC, SBS, Seven, Nine, Ten, Foxtel, and ABS
NB: numbers may not sum due to rounding

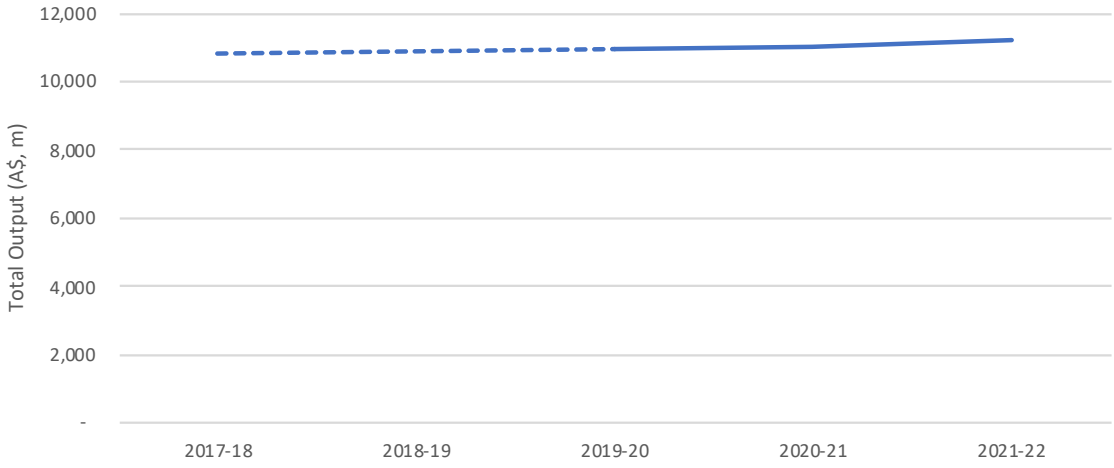
The impacts of this rise in total spending were an 11.5% increase in total GVA associated with the TV broadcast sector in Australia to A$4.87 billion, with FTE jobs up 9.8% to 22,987, and wages increasing 23.9% to A$2.17 billion. Taxation associated with the sector also rose 15.9% to A$1.37 billion.

7.2.4. Future Projected Impacts

Reflecting the underlying approach for elements of our analysis, we build our forward projections from the non-production turnover for 2017-18, inflating this by the ABS-implied growth rate of 2.17% per year.

[16] This estimate is based on a linear extrapolation of Foxtel revenues – those stated in the Telstra annual report for FY 2018 are part year, so an average of those for 2016-17 and 2018-19 was taken to estimate revenues in this important industry player

Figure 9 – TV Broadcast, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

This approach reflects the underlying unpredictable elements which can drive aspects of broadcaster revenues in major territories. As an example of this, the 2020 Olympics – which unlike the last two incarnations are in a nearby time zone – are likely to drive strong viewership in the 2019-20 and 2020-21 years, given Australia's typical success at these events, and the mandatory free-to-air nature of the event in Australian law.[17]

Table 51 – Projected Impacts of TV Broadcast in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	3,825.5	3,620.7	3,476.3	10,922.5
GVA (A$, m)	1,722.5	1,630.2	1,565.2	4,917.9
FTE Jobs	7,288	7,867	8,276	23,431
Wages (A$, m)	657.2	817.8	735.4	2,210.4
Taxation (A$, m)	479.4	453.7	435.6	1,368.7

Source: Olsberg•SPI analysis of data from ABC, SBS, Seven, Nine, Ten, Foxtel, and ABS
NB: numbers may not sum due to rounding

Table 52 – Projected Impacts of TV Broadcast in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	3,862.5	3,655.7	3,510.0	11,028.3
GVA (A$, m)	1,739.1	1,646.0	1,580.4	4,965.5
FTE Jobs	7,359	7,943	8,356	23,658
Wages (A$, m)	663.5	825.7	742.6	2,231.8
Taxation (A$, m)	484.0	458.1	439.8	1,382.0

[17] The 2022 FIFA World Cup will not fall in this period, as unusually it will be held in the Australian summer, and therefore appear in the 2022-23 dataset

Source: Olsberg•SPI analysis of data from ABC, SBS, Seven, Nine, Ten, Foxtel, and ABS
NB: numbers may not sum due to rounding

Table 53 – Projected Impacts of TV Broadcast in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	3,927.4	3,717.2	3,569.0	11,213.6
GVA (A$, m)	1,768.3	1,673.7	1,606.9	5,049.0
FTE Jobs	7,482	8,077	8,497	24,056
Wages (A$, m)	674.7	839.6	755.0	2,269.3
Taxation (A$, m)	492.2	465.8	447.2	1,405.2

Source: Olsberg•SPI analysis of data from ABC, SBS, Seven, Nine, Ten, Foxtel, and ABS
NB: numbers may not sum due to rounding

As a result of this, we project that total output associated with the TV broadcast sector in Australia will rise by 3.7% between 2017-18 and 2021-22, reaching A$11.21 billion. This will drive a 3.7% increase in GVA to A$5.05 billion, producing 4.7% more FTE jobs, and raising wages by the same percentage.

Taxation associated with the sector is projected to increase 2.3% to a total A$1.41 billion.

8. HOME ENTERTAINMENT AND VOD

The home entertainment sector is the one which has seen the biggest change over the last few years. In 2012-13, physical purchases of content remained big business in Australia, while rental remained strong. Both of these elements have now declined substantially, with VOD services – both transactional and subscription - growing enormously in their place, driven by increasing consumer demand for content in a digital format.

This has seen the home entertainment part of the sector grow dramatically and change in shape, with VOD now being by far the largest single component of this industry. We project this growth will continue over the next few years, as the VOD sector continues to develop and provide ever-greater consumer value in Australia. Physical sales, meanwhile, are projected to continue their decline, though a committed audience is expected to continue buying content in this form.

8.1. Introduction

Home entertainment and EST and VOD – which contains TVOD, AVOD, and SVOD elements – is the final significant part of the consumer-facing value chain for the products of the Australian screen sector.[18] It generally follows cinema exhibition and TV broadcast, representing a secondary revenue source for film and TV content after the primary window. Some content now achieves its first release on VOD platforms, though until recently this has remained a relatively limited approach for Australian-produced content.

Cinematic release is not the only element of the value chain which VOD has disrupted – as the data below will show, it has almost entirely supplanted DVD/Blu-ray rental in Australia. For this reason, we consider VOD as part of Home Entertainment, though it would be equally valid to place it elsewhere in the analysis.

8.2. Film Home Entertainment

8.2.1. Approach

Our analysis of home entertainment in Australia is composed of two key elements: manufacturing and retail sales.

Firstly, IBIS World figures for manufacturing of film and TV content on recorded media (DVD or Blu-ray) are used. Though some of these will be exported, this value is nonetheless created in Australia, and is therefore of interest to this study. This production value was multiplied by film's share of the retail market for all recorded media to estimate the value of film manufacturing in Australia.

Secondly, physical retail sales, taken from the AHEDA yearbook, were multiplied by film's share of the retail market to assess the retail turnover associated with film home entertainment.

8.2.2. 2012-13 Findings

In 2012-13, total turnover related to the Film Home Entertainment sector was A$766.4 million, composed of A$228.5 million in physical manufacturing, and A$537.6 million in retail turnover. Including induced spending, a total of A$1.12 billion of output is estimated.

[18] Where AVOD services are connected to an Australian broadcaster – i.e. ABC iView – this will have been captured in the Broadcast section of the report, as annual reporting does not allow for disaggregation of spending

Table 54 – Impacts of Film Home Entertainment in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	365.9	400.5	353.0	1,119.4
GVA (A$, m)	117.7	128.8	113.6	360.1
FTE Jobs	1,855	2,876	2,267	6,998
Wages (A$, m)	65.9	87.7	72.2	225.7
Taxation (A$, m)	31.9	35.0	30.8	97.7

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

This turnover generated A$360.1 million of contribution to the Australian economy, and 6,998 FTE jobs paying a total A$225.7 million. Overall taxation payments are estimated at A$97.7 million.

8.2.3. 2017-18 Findings

By 2017-18, turnover associated with the film home entertainment sector in Australia had fallen to A$502.0 million, of which A$184.6 million was related to physical manufacturing, and A$317.4 million to the retail of finished content. This fall reflected the ongoing transition of the Australian consumer spend from physical to digital media, with the spend being transferred to the VOD part of the sector, analysed below.

Table 55 – Impacts of Film Home Entertainment in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	257.9	244.1	234.3	736.3	-34.2%
GVA (A$, m)	92.4	87.5	84.0	263.8	-26.7%
FTE Jobs	1,212	1,554	1,514	4,280	-38.8%
Wages (A$, m)	48.6	59.7	54.0	162.3	-28.1%
Taxation (A$, m)	26.1	24.7	23.7	74.4	-23.9%

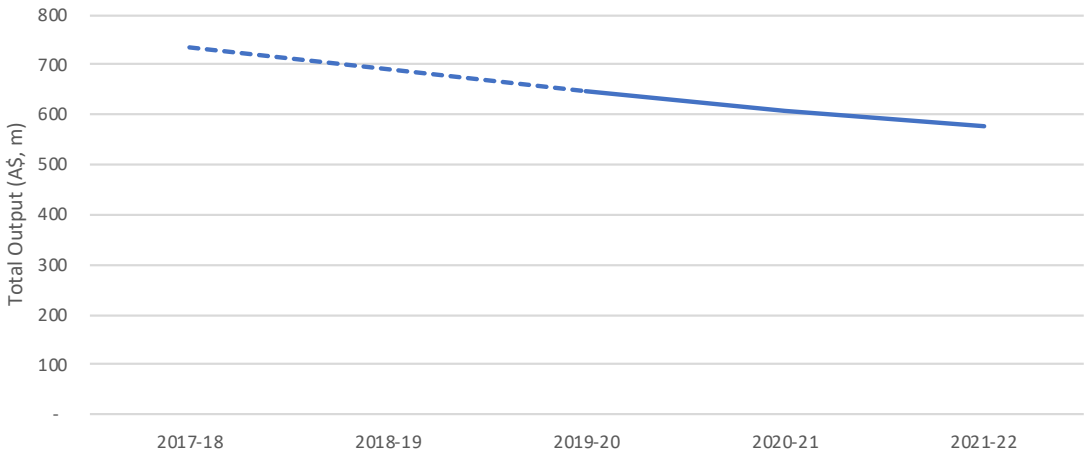
Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

This decreasing spending led GVA associated with film home entertainment to fall 26.7% to A$263.8 million, leading to a 38.8% fall in FTE employment; jobs are particularly hard hit in this sector as retail is a labour-intensive industry, with relatively low value-add per employee. Compared with 2012-13, taxation associated with the sector was down 23.9% to A$74.4 million.

8.2.4. Future Projected Impacts

Our expectation is that this slow decline will continue over the next few years, as physical media becomes an increasingly niche component of consumption. This is reflected in the IBIS World projections for the manufacturing of screen content, which will fall 4% to 2021-22. There has already been rationalisation in the production of physical media in Australia in response to this market change, with Technicolor having consolidated with Sony DADC.

Figure 10 – Film Home Entertainment, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

It is reasonable to expect that the 9-10% annual declines in physical retail observed in recent years in Australia will continue in the near future, and this is the baseline for our sales projections. This said, consultations with the industry suggest a plateau in this decline is near, so it is equally likely that the industry reaches its nadir over the period in question, as the limit of consumers' willingness to swap physical for digital media is reached.

Table 56 – Projected Impacts of Film Home Entertainment in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	226.4	214.3	205.7	646.3
GVA (A$, m)	81.1	76.8	73.7	231.6
FTE Jobs	1,064	1,364	1,329	3,757
Wages (A$, m)	42.6	52.4	47.4	142.5
Taxation (A$, m)	22.6	21.4	20.5	64.5

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

Table 57 – Projected Impacts of Film Home Entertainment in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	213.3	201.9	193.9	609.1
GVA (A$, m)	76.4	72.3	69.5	218.3
FTE Jobs	1,003	1,285	1,252	3,540
Wages (A$, m)	40.2	49.4	44.7	134.3
Taxation (A$, m)	21.3	20.1	19.3	60.7

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

Table 58 – Projected Impacts of Film Home Entertainment in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	201.5	190.7	183.1	575.2
GVA (A$, m)	72.2	68.3	65.6	206.1
FTE Jobs	947	1,214	1,183	3,343
Wages (A$, m)	38.0	46.7	42.2	126.8
Taxation (A$, m)	20.1	19.0	18.3	57.4

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

This leads to total sales associated with the sector of A$392.2 million in 2021-22, generating A$575.2 million in total output, a fall of 22% compared to 2017-18. GVA associated with the sector is also projected to fall 22% to A$206.1 million, with a total of 937 fewer jobs created, and 22% lower wages. Taxation associated with the sector is projected to fall 23% to A$57.4 million.

8.3. TV Home Entertainment

8.3.1. Approach

The approach taken for TV home entertainment is similar to that for film, and uses the value of TV content in the Australian physical marketplace to estimate the market share of disc reproduction to be attributed to TV. As with film, IBIS World's figures are used to ascertain the value of manufacturing undertaken, and AHEDA's yearbook provides data on retail turnover associated with TV home entertainment.

8.3.2. 2012-13 Findings

Using this approach, we estimate that turnover associated with TV home entertainment in Australia was A$654.0 million in 2012-13; of this, A$195.2 million was associated with physical manufacturing, and A$359.2 million with physical retail. Including induced impacts, a total of A$955.3 million in output was estimated.

Table 59 – Impacts of TV Home Entertainment in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	312.3	341.8	301.3	955.3
GVA (A$, m)	100.4	109.9	96.9	307.3
FTE Jobs	1,583	2,454	1,935	5,972
Wages (A$, m)	56.2	74.8	61.6	192.6
Taxation (A$, m)	27.3	29.8	26.3	83.4

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

This activity generated A$307.3 million in GVA, and 5,972 total FTE jobs, who were paid A$192.6 million in wages. Taxation of A$83.4 million was estimated.

8.3.3. 2017-18 Findings

As with film, consumer spending associated with TV home entertainment fell in Australia after 2012-13. In 2017-18, we estimate a turnover of A$428.4 million related to the sector, with total output estimated at A$628.4 million.

Table 60 – Impacts of TV Home Entertainment in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	220.1	208.3	200.0	628.4	-34.2%
GVA (A$, m)	78.9	74.6	71.7	225.2	-26.7%
FTE Jobs	1,034	1,326	1,292	3,652	-38.8%
Wages (A$, m)	41.5	51.0	46.1	138.5	-28.1%
Taxation (A$, m)	22.2	21.0	20.2	63.5	-23.9%

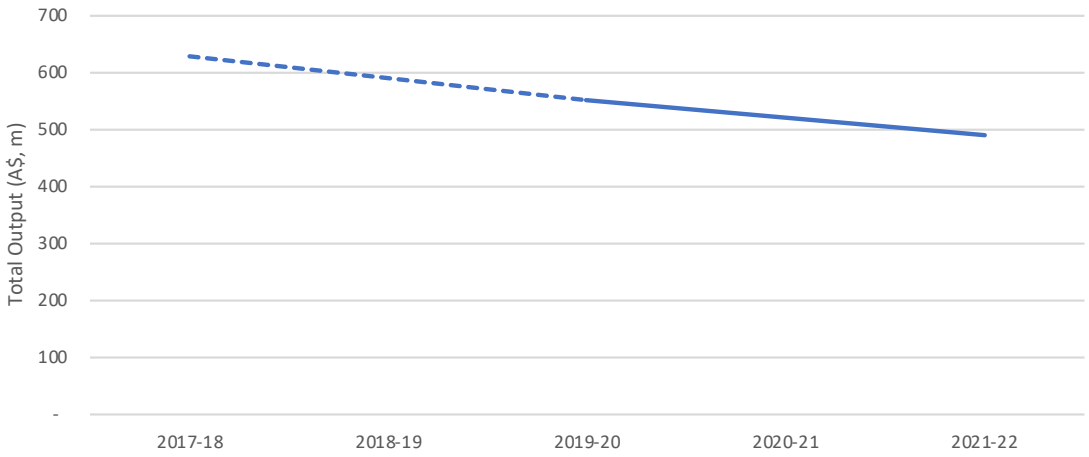
Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

Due to this decline in spending, GVA associated with TV home entertainment in Australia was down an estimated 26.7%, to A$225.2 million, with 38.8% fewer jobs created as a result of this economic activity. Taxation associated with the sector was down 23.9%, to a total of A$63.5 million.

8.3.4. Future Projected Impacts

Our projections see the decline in this sector continuing over the period in question, with TV home entertainment viewers continuing to switch to the VOD sector. As with film a 9% annual decline on retail sales is projected, with a 4% overall decline in physical production also anticipated.

Figure 11 – TV Home Entertainment, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Table 61 – Projected Impacts of TV Home Entertainment in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	193.3	182.9	175.6	551.8
GVA (A$, m)	69.2	65.5	62.9	197.7
FTE Jobs	908	1,164	1,134	3,207
Wages (A$, m)	36.4	44.8	40.5	121.6
Taxation (A$, m)	19.3	18.2	17.5	55.0

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

Table 62 – Projected Impacts of TV Home Entertainment in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	182.1	172.4	165.5	520.0
GVA (A$, m)	65.3	61.8	59.3	186.3
FTE Jobs	856	1,097	1,069	3,022
Wages (A$, m)	34.3	42.2	38.1	114.6
Taxation (A$, m)	18.2	17.2	16.5	51.9

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS

Table 63 – Projected Impacts of TV Home Entertainment in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	172.0	162.8	156.3	491.1
GVA (A$, m)	61.6	58.3	56.0	176.0
FTE Jobs	809	1,036	1,010	2,854
Wages (A$, m)	32.4	39.8	36.0	108.3
Taxation (A$, m)	17.2	16.2	15.6	49.0

Source: Olsberg•SPI analysis of data from IBIS World, AHEDA and ABS
NB: numbers may not sum due to rounding

The GVA impact of this activity is, as a result, projected to decline 22% between 2017-18 and 2021-22, to A$176.0 million. We project that this will result in 798 fewer FTE jobs, and a 22% decline in overall taxation related to the sector, to A$49.0 million.

8.4. VOD Platforms

8.4.1. Approach

To identify the impact of online broadcast in Australia, data from AHEDA's Annual Yearbook were used. This identifies total spending undertaken by consumers in Australia on SVOD subscriptions and digital transactions.

However, as these data also show that at this stage, a number of these firms do not have a permanent Australian domicile. While they pay GST, at the time of writing many do not have

significant Australian employment, and their indirect spending will therefore be predominantly in other jurisdictions – spending for the purposes of our impact analysis was corrected down to 50% of actual outlays in the indirect and induced phases, to avoid overestimating the impact of VOD in Australia. As such, direct output, GVA and taxation is estimated (reflecting the payment of GST), but not FTE jobs, wages, or downstream impacts.

Because VOD platforms have predominantly displaced the rental of DVD and Blu-ray discs in Australia, we have also collated the 2012-13 impacts for the physical rental sector in this section of the report.

8.4.2. 2012-13 Findings

Consumer spending on the rental of physical film and TV content in Australia amounted to A$264.0 million in 2012-13. Including the induced impact of this, we therefore estimate a total output of A$385.6 million.

Table 64 – Impacts of Physical Rental in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	126.0	138.0	121.6	385.6
GVA (A$, m)	40.5	44.4	39.1	124.0
FTE Jobs	639	991	781	2,410
Wages (A$, m)	22.7	30.2	24.9	77.8
Taxation (A$, m)	11.0	12.0	10.6	33.7

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

This economic activity generated A$124.0 million in GVA, and supported 2,410 total FTE jobs, which generated a total of A$77.8 million in wages. Total taxation associated with this sector is estimated at A$33.7 million.

Compared to rental, VOD transactions in Australia were relatively low in 2012-13, with an estimated A$49.5 million of consumer spending. This generated A$69.4 million of total output.

Table 65 – Impacts of VOD Platforms in Australia, 2012-13

	Direct	Indirect	Induced	Total
Output (A$, m)	24.0	25.5	19.9	69.4
GVA (A$, m)	11.2	11.9	9.3	32.3
FTE Jobs	94	20	94	209
Wages (A$, m)	7.2	10.2	8.7	26.1
Taxation (A$, m)	3.0	3.2	2.5	8.8

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

We estimate that A$32.3 million of total GVA was associated with the sector, generating 209 total FTE jobs, and paying A$8.8 million of taxation.

8.4.3. 2017-18 Findings

By 2017-18, this consumer spending had grown 2,250% to A$1.4 billion; of this, A$1.11 billion was related to SVOD, and A$290.3 million to TVOD. As a significant proportion of this SVOD spending is presently directed out of the country, we discount indirect and induced impacts related to this to zero to avoid over-counting Australian impacts.

This process suggests a total Australian output of A$1.40 billion associated was with the sector.

Table 66 – Impacts of VOD Platforms in Australia, 2017-18

	Direct	Indirect	Induced	Total	Change v. 12-13
Output (A$, m)	722.2	338.9	340.7	1,401.8	1918.8%
GVA (A$, m)	325.2	152.6	153.4	631.2	1851.9%
FTE Jobs	688	743	781	2,212	960.3%
Wages (A$, m)	62.0	77.2	69.4	208.6	700.1%
Taxation (A$, m)	91.7	43.0	43.3	178.0	1928.4%

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

This activity was responsible for the generation of A$631.2 million of GVA in Australia, and supported 2,212 total jobs; these figures were up 1,852% and 960% over 2012-13, respectively. Taxation associated with the sector increased 1,928% to A$178.0 million.

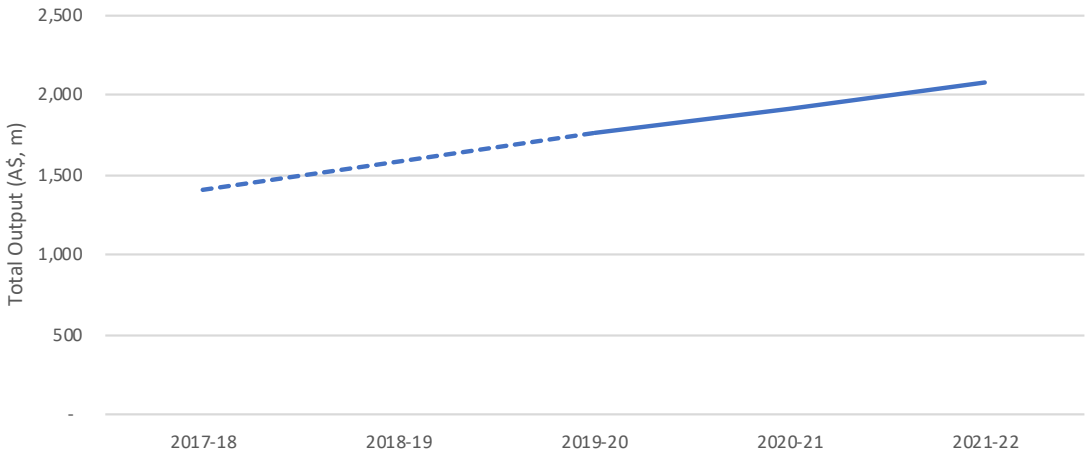
Even including the impacts of physical rental, we find there has been substantial growth in this section of the screen economy, with consumer spending growing 333% from A$323.5 million to A$1.40 billion, while total GVA grew 304% from A$156.3 million to A$631.2million.

8.4.4. Future Projected Impacts

We anticipate ongoing growth within this sector, as the industry continues to innovate, and Australian consumers' engagement with VOD platforms continues to grow. This growth will be seen in the mainstream sector, on major platforms such as Netflix, and in more niche offerings such as Anime Lab (see below).

The growth in spending observed in the transactional space in recent years has been 6.6%, while 9% growth has been seen in spending on subscription VOD. These trends are applied to future years, to generate projected output, and anticipate total consumer spending of A$2.09 billion in this sector by 2021-22.

Figure 12 – Online Home Entertainment, Total Output in 2017-18 and projected years



Source: Olsberg•SPI Analysis
NB: No projection is made for 2018-19, as this year was recently completed at the time of writing

Our analysis assumes that there will be no change in the domicile status of VOD services which currently service Australia from outside the country – consequently, indirect and induced impacts are discounted to zero for these services, and only reflect 50% of total consumer spending.

Table 67 – Projected Impacts of Online Home Entertainment in Australia, 2019-20

	Direct	Indirect	Induced	Total
Output (A$, m)	911.7	431.4	414.2	1,757.4
GVA (A$, m)	410.5	194.3	186.5	791.3
FTE Jobs	868	937	986	2,792
Wages (A$, m)	78.3	97.4	87.6	263.4
Taxation (A$, m)	114.2	54.1	51.9	220.2

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

Table 68 – Projected Impacts of Online Home Entertainment in Australia, 2020-21

	Direct	Indirect	Induced	Total
Output (A$, m)	990.3	468.7	450.0	1,908.9
GVA (A$, m)	445.9	211.0	202.6	859.5
FTE Jobs	943	1,018	1,071	3,033
Wages (A$, m)	85.1	105.8	95.2	286.1
Taxation (A$, m)	124.1	58.7	56.4	239.2

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

Table 69 – Projected Impacts of Online Home Entertainment in Australia, 2021-22

	Direct	Indirect	Induced	Total
Output (A$, m)	1,075.8	509.1	488.8	2,073.8
GVA (A$, m)	484.4	229.2	220.1	933.7
FTE Jobs	1,025	1,106	1,164	3,295
Wages (A$, m)	92.4	115.0	103.4	310.8
Taxation (A$, m)	134.8	63.8	61.3	259.9

Source: Olsberg•SPI analysis of data from AHEDA and ABS
NB: numbers may not sum due to rounding

The total output associated with this sector in 2021-22 is estimated at A$2.07 billion, generating A$933.7 million in GVA, an increase of 48% over 2017-18. This will generate 3,295 total FTE jobs, up 49%, and A$259.9 million of taxation, an increase of 46%.

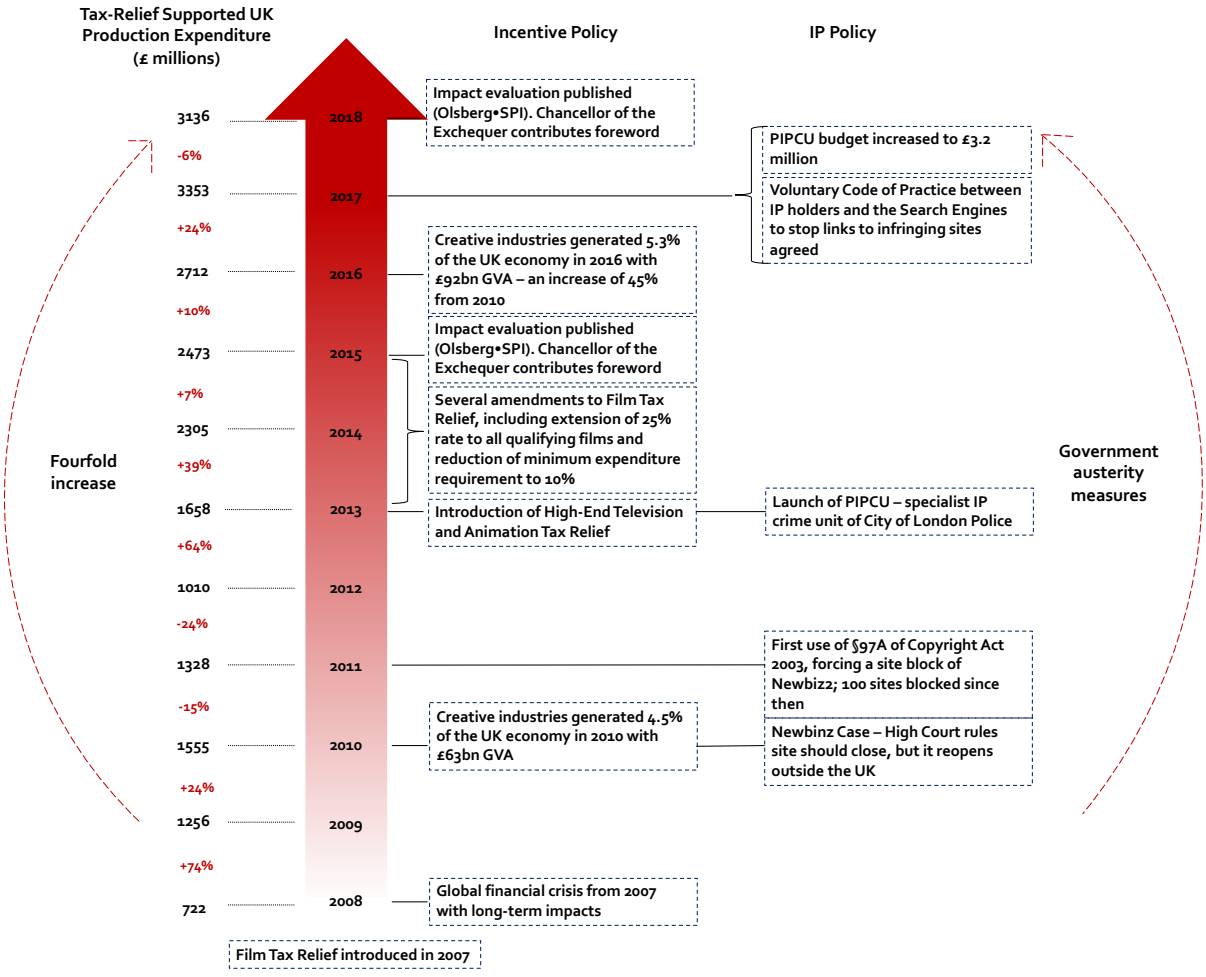
9. UK POLICY COMPARISON

The UK has operated a comprehensive policy for the production of screen content, and the enforcement of IP rights, over an extended period. This section of the Study provides a comparison between the nature and impacts of the UK's screen sector strategy and that of Australia.

9.1. Evolution of UK Film Policy

Since the introduction of Film Tax Relief in 2007, the UK's public sector has been in a period of almost-constant austerity. Despite this, Labour, Coalition, and Conservative administrations have each provided increasing support to the sector, reflecting the increased recognition of the value the sector provides for the UK.

Figure 13 – Tax Relief supported expenditure and public policy in the UK, 2008-18[19]



Source: Olsberg•SPI analysis

[19] At least 100 named sites have been blocked through the application of Section 97A, however a number of actions (i.e., by the Premier League) have led courts to block services fitting activity profiles, for which a count is not clearly available

It is worth noting that, while 2018 shows a fall in expenditure, this is a function of start dates for major productions. For example, the new Bond feature slipped into 2019 alongside other productions, making it likely that this will be another bumper year.

9.2. Impact of UK Film Policy

The impact of this suite of policies has been highly positive, as the following comparison to Australia shows.

Australia	Issue	UK
	Total Creative Industries Growth[20]	
A$99.73 billion	**Size of Creative Sector (FY 2017)**	£101.50 billion (A$186.91 billion)
3.6%	**CAGR Size Growth Rate (FY 2009-FY 2017)**	7.3%
	Incentive Policy	
A$433.0 million	**Film Production Spend (FY 2018)[21]**	£1.92 billion (A$3.53 billion)
-1% CAGR[22]	**Film Production Growth Rate (FY 2013-FY 2018)**	10.5% CAGR
A$348.0 million	**TV Drama Production Spend (FY 2018)**	£896.7 million (A$1.65 billion)
-2.5% CAGR	**TV Drama Growth Rate (FY 2013-FY 2018)[23]**	23.1% CAGR
26,570	**Production FTEs[24]**	65,730
A$1.64 billion	**Production GVA**	£3.18 billion (A$5.84 billion)
	IP Policy	
Copyright Act 2015	**Introduction of Site Blocking**	Copyright Act 2003
Not applicable	**Launch of IP Crime Unit**	September 2013
Not applicable	**Budget of IP Crime Unit**	£3.2 million (August 2017-June 2019, A$5.9 million)
Not applicable	**Code of Practice for Infringing Links**	June 2017

Source: Olsberg•SPI analysis

[20] To examine this, we compare the Creative Industries figures in the UK's *DCMS Sectors Economic Estimates* with the Creative Activity figures in *Cultural and creative activity in Australia, 2008-09 to 2016-17*; the Australian model for this is marginally broader, so caution should be taken in making the comparison

[21] In the UK, calendar year 2018, in Australia, fiscal year 2017-18

[22] Compound Annual Growth Rate, an annualised growth figure between two points

[23] UK Tax Relief for TV Drama introduced in 2013, data not available prior to this point

[24] All sub-sectors, including direct, indirect, and induced, not including downstream impacts; 2016 for UK, 2017-18 for Australia

9.2.1. VOD Production Bases

In recent months, Netflix has announced a number of new production bases around the world, starting with New Mexico, and now including Madrid, Toronto, and the UK.[25] These bases share a range of features, in particular strong above-the-line, good crew, high-quality and available production infrastructure, and uncapped fiscal incentives.

Australia aligns with the vast majority of these, but while these strengths are sufficient to attract spending from VOD platforms on specific series, the capped nature of the incentive is an inhibition to more permanent investment.

9.3. Australian IP Policy

By comparison to the situation in the UK, Australia's Copyright Act, passed in 1968 had, until recent years, not undergone reform to reflect the changing face of intellectual property infringement in the internet age. While providing widespread rights for users of copyrighted works, the law did not provide for strong enforcement of copyright through site blocking, for example, and limited remedies for copyright owners enforcing their rights against those outside of Australia who facilitated access to infringing content.

This changed in 2015, with a package of amendments to the Copyright Act moving Australia towards international best-practice in this area, providing a much greater framework for the provision of injunctions in relation to websites outside of Australia which provide access to infringing content.

These measures were further updated in 2018, with additional mechanisms provided to rights holders. Injunctions under section 115A of the act now provide much stronger tools for IP owners to require ISPs to block access to pirate sites, and allow for proxies or mirrors of blocked sites to be taken offline without expensive litigation.

These updates also facilitate the removal of links to infringing sites overseas from search engines operating in Australia, limiting backdoor access. Meanwhile, sites which have the primary effect of infringing or facilitating infringement can also be blocked, expanding the scope of the law beyond those with the "primary purpose of infringing", and requiring site-owners to properly police the use of the services they provide.[26]

While this provides a legislative solution which moves Australia closer to that provided for in the UK following the Newbinz2 case, the enforcement system in Australia remains less

---

[25] *New Mexico: https://www.indiewire.com/2018/10/netflix-buys-new-mexico-studio-abq-tax-incentive-hollywood-production-hub-1202010820/*
Madrid: https://media.netflix.com/en/press-releases/netflix-establishes-its-first-european-production-hub-in-madrid
UK: https://variety.com/2019/tv/news/netflix-uk-production-hub-shepperton-studios-pinewood-charlize-theron-the-old-guard-120325890/
Toronto: https://variety.com/2019/digital/news/netflix-toronto-production-hub-canada-1203142537/

[26] *Copyright Amendment (Online Infringement) Bill 2018*, Schedule 1, Article 2(1)(b)

developed. In particular, there is no direct comparator to PIPCU, which provides straightforward, user-friendly initiatives to help the creative industries to enforce their rights.

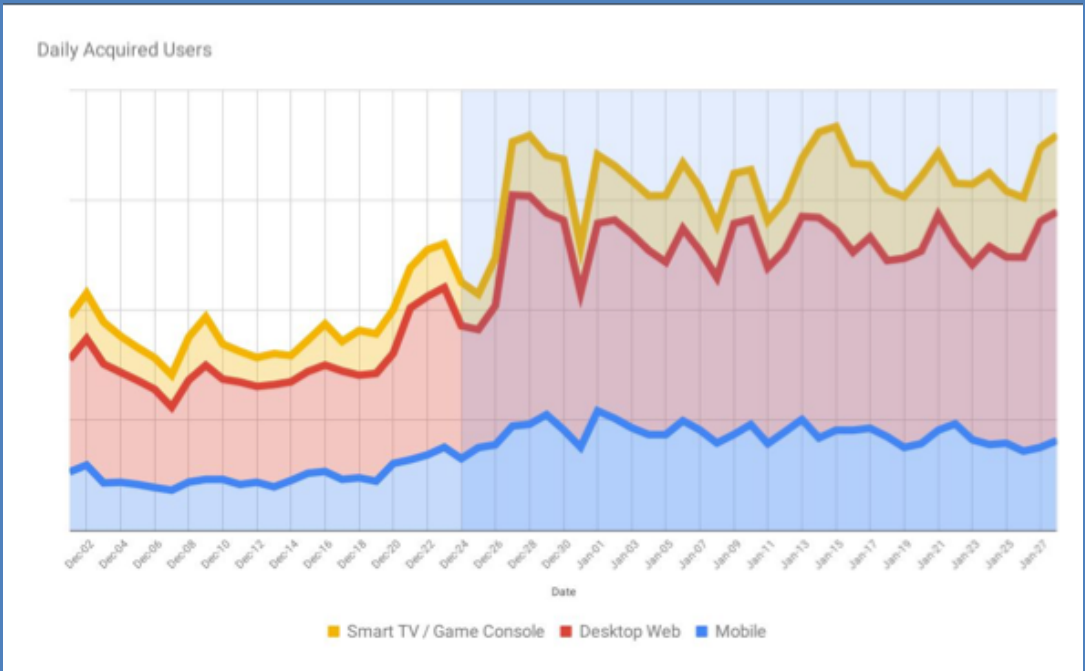
Case Study – Impact of Site Blocking in Australia

Madman is a multi-armed producer and distributor of content, which owns a number of specialist VOD services. One of these, AnimeLab, was built on the company's traditional expertise in the Japanese Animation sales sector, providing content directly to the market through the provision of an AVOD/SVOD platform focused on this market.

This has been highly successful, but until recently the impact of this legal service has been stymied by the availability of the same content freely on pirate sites. As a consequence of this, AnimeLab has struggled to compete, even when it has offered selected pieces of content for free in addition to its paid provision.

This has begun to change since the introduction of the updated Copyright Law, as the result of the implementation of measures in December 2018 flowing from a site-blocking case. Following this, AnimeLab has seen a 70-80% increase in the number of daily new user registrations, with streams of successful shows increasing by up to 115%.

Figure 14 – Impact of Site Blocking on AnimeLab New User Registrations.



Source: Madman; period of enforcement in blue

While this is early in the process, this is taken as a sign that the revisions to the law are already having a positive outcome in directing users to legal services, and is a very positive outcome for the sector. As this continues, it will generate greater value for the Australian screen sectors, who will be able to capture the value created by consumers in Australia, either through advertising or direct spend.

Similarly, until May 2019, no agreement existed with the search engines, which had facilitated illegal access to copyrighted material through the way in which they prioritise search results,

while their advertising often inadvertently supported sites which provide infringing content. Working with search engines to ensure that they limit such access – either voluntarily, or through legislative means – is vital to the future success of the AV sectors. This immediately resulted in the blockage of 832 sites by Google, according to a report in the *Sydney Morning Herald*.[27]

Given the range of smaller businesses upon which the IP-generating industries in Australia and around the world are based, and the large number of freelance workers their activities support, there is much to commend the UK's approach if it could be adopted in other locations. Such smaller companies do not normally have access to the capital required to defend their IP through court proceedings.

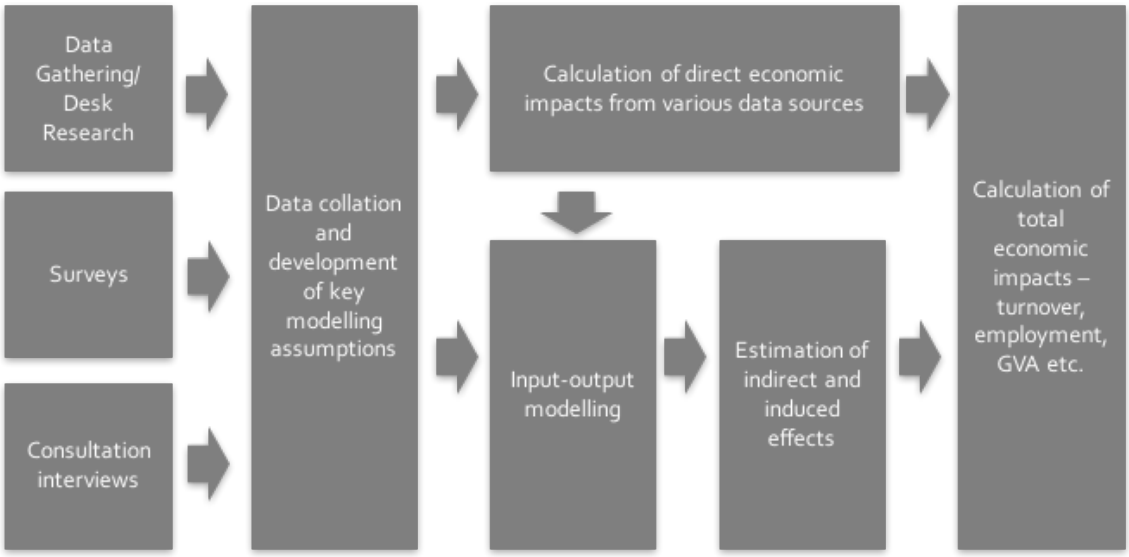
[27] "'From enemies to allies': Google removes piracy websites from search results", Jennifer Duke in *Sydney Morning Herald* (13th May, 2019)

10. APPENDIX 1 – METHODOLOGICAL APPROACH

To develop this analysis, Olsberg•SPI undertook a series of key steps, using as our basis a methodological approach which we have implemented for similar studies in a range of countries, including Ireland, the UK, the state of Georgia (US) and Malaysia.

This was adapted marginally for the specific data available in Australia, and is outlined below.

Figure 15 – Steps to Calculate Total Economic Impact



10.1. Data Sources

In order to begin analysis, a period of data-gathering and analysis was undertaken, through which the following data sources were used to construct a picture of the impact of the screen sector value chain in Australia during the period in question:

- The Australian Bureau of Statistics (ABS) Input-Output (I-O) tables for Australia, Survey on Household Wealth, Dataset on Film, Television, and Games in Australia (2015-16), and Dataset on Household Internet Access in Australia;
- Screen Australia's *Drama Report* series;
- Box Office data collated by the Motion Picture Distributors Association of Australia (MPDAA);
- The Australian Home Entertainment Distributors Association's (AHEDA) *Annual Yearbook* series;
- IBIS World's reports, *Reproduction of Recorded Media in Australia*, and *Motion Picture and Video Distribution in Australia*; and,
- Annual reports from Australia's broadcasters

A full list of sources for this analysis can be found in the Bibliography, in Appendix 2 to this Report.

10.2. Analysis Model

10.2.1. Analysis of I-O tables

Quantitative analysis of these data were undertaken, predominantly using an input-output model developed through an assessment of the ABS I-O tables.

Two sets of multipliers were created, one for ANZSIC group 551, Motion Picture and Video activities.[28] This includes production, post-production, distribution, and exhibition phases associated with motion picture and video activities, and was used as the basis for analysis of all elements of this work with the exception of TV and VOD broadcast.

These elements were analysed using a similar set of multipliers for ANZSIC group 562, television broadcasting, which collates the data for free-to-air, cable, and other subscription broadcasting. While there is a separate group for internet broadcasting (ANZSIC group 570, internet publishing and broadcasting), this produced some unusual results in the indirect phase when applied on VOD spending; as such, ANZIC group 562 was used across both broadcast elements.

Across all areas, this I-O analysis produces multipliers which allow us to assess the impact of spending associated with the sectors studied in three areas, reflecting the three phases of economic activity in a standard impact study:

- Direct – that element of impact which occurs directly within the element of the sector being studied (i.e., for film production, the value generated by the direct hiring of cast and crew, and other direct spending);
- Indirect – the impacts associated with the purchasing of goods and services from non-screen sector companies (for example, legal advice, financing, catering, and transport associated with productions); and,
- Induced – impacts generated as a result of the additional economic activity resulting from the re-spending of wages earned in the direct and indirect phases, which increases economic activity across the broader Australian economy.

10.2.2. Application of I-O multipliers

To begin determining the impact of spending, we first used the output multipliers produced by our analysis of the ABS data to ascertain what share of turnover for each sector of screen production was direct and which indirect. This analysis reflects the fact that stated turnover will include both direct spending and the purchase of goods and services, and must be divided using the multipliers to avoid double-counting.

The induced multipliers were applied to these results to ascertain the total turnover for Australian businesses resulting from screen sector spending; for the purposes of this Study, we refer to this as Output.

GVA multipliers were applied to these results, allowing the determination of the value added in each of the phases of economic impact, and thus the direct, indirect, and induced contributions from the screen sector to the broader Australian economy.

Employment was assessed in terms of full-time equivalents (FTEs) – these represent the workload of each component of the sector in comparison to the average workload for a full-time employed Australian worker. FTEs are used as a result of the large proportion of freelance workers in the sector, in order to allow comparison with other industries which have a different approach to employment

This analysis was undertaken by first applying an employment-to-GVA multiplier to the direct GVA generated by the sector, which provided an analysis of the direct employment impact of

[28] ANZSIC refers to the Australia and New Zealand Standard Industrial Classification system, which is an agreed methodology for classifying industrial data between the ABS and Statistics New Zealand. Due to limited availability at the four-digit level (used in our UK study), three-digit ANZSIC codes are used in this instance

each sub-sector studied. I-O employment multipliers were applied to the results of this analysis to determine the indirect and induced employment arising from this activity.

Income associated with this employment – which for the purposes of this analysis includes all wages, employer social security contributions, and superannuation contributions – was also calculated by reference to the GVA generated. Wages-to-GVA multipliers were applied to the direct GVA output, with income effect multipliers used to determine the indirect and induced wage outcomes.

Finally, taxation was estimated by the generation of a taxation model for each fiscal year, which allowed us to assess the contribution of these sectors to Federal, State, and Territory treasuries in Australia. To do this, the published tax take as a percentage of GDP was used, and applied to the GVA findings at each stage of the value chain, and for each component of impact studied, to estimate the benefits to Australia's fiscal position arising from the economic activity this sector generates.

11. APPENDIX 2 – BIBLIOGRAPHY

2015 Yearbook, Australian Home Entertainment Distributors Association (2016)

2016 Yearbook, Australian Home Entertainment Distributors Association (2017)

2017 Yearbook, Australian Home Entertainment Distributors Association (2018)

8679.0 Film, Television and Digital Games, Australia, 2015-16, Australian Bureau of Statistics (15th June, 2017)

C1620 Reproduction of Recorded Media in Australia, IBIS World (November 2017)

Content. Audience. Connection, Annual Report 2018, Seven West Media (2018)

J5512 Motion Picture and Video Distribution in Australia, IBIS World (November 2017)

Delivering world class content everywhere, Annual Report 2017, Seven West Media (2017)

Delivering world class media comment, Annual Report 2016, Seven West Media (2016)

Drama Report, Production of feature films, TV and online drama in Australian in 2016/17, Screen Australia (2017)

Drama Report, Production of feature films, TV and online drama in Australian in 2017/18, Screen Australia (2018)

Event Hospitality and Entertainment Limited Annual Report 2016, Event Hospitality and Entertainment Limited (2016)

Event Hospitality and Entertainment Limited Annual Report 2017, Event Hospitality and Entertainment Limited (2017)

Event Hospitality and Entertainment Limited Annual Report 2018, Event Hospitality and Entertainment Limited (2018)

Film, high-end television and animation programmes production in the UK: full-year 2018, BFI (31st January, 2019)

Investing in Audiences, Annual Report 2017, Australian Broadcasting Corporation (6th October, 2017)

Nine Entertainment Co. FY16 Final Results, Nine Entertainment Co. (25th August, 2016)

Nine Entertainment Co. FY17 Final Results, Nine Entertainment Co. (24th August, 2017)

Nine Entertainment Co. FY18 Results, Nine Entertainment Co. (23rd August, 2018)

Online and On Demand 2017, Trends in Australian online viewing habits, Screen Australia (undated)

Screen Business, How screen sector tax reliefs power economic growth across the UK, Olsberg•SPI with Nordicity (October 2018)

Stories worth talking about, *SBS Annual Report 2017*, SBS (2017)

Telstra Annual Report 2016, Telstra (2016)

Telstra Annual Report 2017, Telstra (2017)

Telstra Annual Report 2018, Telstra (2018)

Ten Annual Report 2016, Ten Network Holdings (2017)

We're telling stories that make a difference, *Annual Report 2016*, SBS (2016)

12. APPENDIX 3 – LIST OF TABLES