

Economic Contribution of the Japanese Film and Television Industry

Report

October 2015

Mitsubishi Research Institute, Inc.

This report has been commissioned by The Motion Picture Association (MPA) in collaboration with Japan and International Motion Picture Copyright Association, Inc. (JIMCA). JIMCA represents the interests in Japan of major motion picture companies and the MPA.



JAPAN AND INTERNATIONAL
MOTION PICTURE COPYRIGHT ASSOCIATION, INC.

Affiliated With



Acknowledgements

This report required gathering data from number of sources, including publicly available data from domestic industrial organizations. We would like to thank the organizations below for their help in our understanding of the data, as well as their cooperation with our interviews and discussions.

- Japan Satellite Broadcasting Association (JSBA)
- Foreign Film Importer - Distributors Association of Japan (FFIDAJ)
- Motion Picture Producers Associations of Japan, Inc. (MPPAJ)
- Japan Video Software Association (JVA)
- Japan Cable and Telecommunication Association (JCTA)
- The Association of Japanese Animation (AJA)
- Japan Association of Theatre Owners (JATO)
- Compact Disc & Video Rental Commerce Trade Association of Japan (CDV-J)

(Japanese alphabetical)

Contents

1. Executive Summary	1
1.1 FRAMEWORK AND METHODOLOGY	1
1.2 RESULTS FOR ECONOMIC CONTRIBUTION AND MARKET OUTLOOK	1
2. Framework and Methodology	3
2.1 OUTLINE OF THE STUDY	3
2.1.1 Purpose of the study.....	3
2.1.2 Study items	3
2.1.3 Study flow	4
2.2 FRAMEWORK AND METHODOLOGY	4
2.2.1 Measures of economic contribution	4
2.2.2 Methodology and assumptions	5
2.3 DEFINITION OF INDUSTRY	7
2.3.1 Categorizing the subsector	7
2.3.2 Structure of the Japanese Film and Television Industry	9
2.3.3 Scope of industry and market.....	11
2.4 APPROXIMATIONS AND LIMITATIONS	12
2.4.1 Time frame.....	12
2.4.2 Estimated versus actual figures.....	12
2.4.3 Unit for Evaluation	13
3. Study results	14
3.1 FILM AND TELEVISION INDUSTRY (OVERALL)	14
3.1.1 Economic Contribution.....	14
3.1.2 Market outlook (2014- 2020).....	15
3.2 FILM PRODUCTION / DISTRIBUTION	18
3.2.1 Economic contribution	18
3.2.2 Market trend.....	18
3.3 FILM EXHIBITION	22
3.3.1 Economic contribution	22
3.3.2 Market trend.....	22
3.4 TV PROGRAM PRODUCTION / DISTRIBUTION	27
3.4.1 Economic contribution	27
3.4.2 Market trend.....	27
3.5 TELEVISION BROADCASTING	30
3.5.1 Economic contribution	30
3.5.2 Market trend.....	30
3.6 HOME VIDEO	33
3.6.1 Economic contribution	33

3.6.2 Market trend.....	33
3.7 ONLINE SERVICE.....	37
3.7.1 Economic contribution	37
3.7.2 Market trend.....	37
3.8 ESTIMATION OF MARKET SIZE ATTRIBUTED TO FILMS	40
3.9 REGIONAL ECONOMIC CONTRIBUTION	42
3.9.1 Contribution of local stakeholders in regional areas.....	42
3.9.2 Tourism impact.....	43
4. Appendix	45
4.1 METHODOLOGY AND SOURCES OF DATA	45
4.2 MAIN QUANTITATIVE DATA SOURCES	51
4.3 DETAILS FOR ESTIMATION OF MARKET SIZE ATTRIBUTED TO FILMS	52
4.4 ECONOMIC CONTRIBUTION EXCLUDING OTHER AUDIO-VISUAL CONTENTS	53
4.5 RESTRICTIONS.....	54

1. Executive Summary

The goal of this project is to quantify the economic contribution of the film and television industry in Japan. This study is basically an update to the study conducted in 2012, providing additional essence of recent industry trends as well as important aspects of government policy agendas such as content industry development strategy and regional revitalization.

This project was conducted in collaboration with local industry organizations, in addition to quantitative analysis based on sources from governmental statistical agencies, industry bodies, and other parties, to provide robust results illustrating the industry structure.

1.1 Framework and methodology

In order to assess the economic contribution of the Japanese film and television industry, this study estimates economic indicators such as gross output, value added, labor income, tax revenue, and employment. These economic indicators were estimated through direct impact which describes the economic activity within the defined industries, and indirect impact which describes the economic activity in other industries triggered by the direct impact, as well as induced impact which describes the further economic impact resulting from increase in income. These are added to derive the total economic contribution for each indicator.

1.2 Results for economic contribution and market outlook

The economic contribution in 2014 brought about by the film and television industry in Japan are as follows:

- The **total gross output** in Japan arising as a result of the film and television industry is approximately 5,301.5 billion Yen for the direct impact, and 11,352.5 billion Yen for the total contribution including indirect/ induced impact.
- The **total value added** to the Japanese economy in 2014 from film and television industry is approximately 2,369.0 billion Yen for the direct impact, and 5,577.8 billion Yen for the total contribution including indirect/induced impact.
- The **labor income** in Japan generated as a result of film and television industry is 1,004.6 billion Yen for the direct impact, and 2,571.5 billion Yen for the total contribution including indirect/ induced impact.
- The **tax revenue** in Japan generated as a result of film and television industry is 418.1 billion Yen for the direct impact, and 955.3 billion Yen for the total contribution including indirect/ induced impact.
- The **total value added** for the film and television industry accounts for 0.49% of GDP¹ for the direct impact, 1.15% for the total contribution.

¹ Nominal GDP for 2014 : 487.5 trillion Yen (Announced by the Cabinet Office)

- The **total employment** created in Japan as a result of film and television industry is estimated to be 122,041 for the direct impact, and 381,368 for the total contribution including indirect/ induced impact.

The market forecast (2014 to 2020) in Japan is as follows. This forecast covers the distribution (consumption) market, in particular, film exhibition, TV broadcasting, home video and online service market.

- In overall, the film and television broadcasting industry is forecast to grow at CAGR 1.0% to reach 4,566.2 billion Yen by 2020, compared to 4,390.1 billion Yen in 2014.
- Japanese economy as a whole had a reduction impact during 2011 due to the Great East Japan Earthquake Disaster in March 2011. However, the market is resuming its pace, mainly pulled by the broadcasting market which accounts for over half of the industry revenue.
- The key factors for growth in the Japanese film industry include further development in digitization, and new trends such as ODS (Other Digital Stuff/ Online Digital Source) for cinemas. In terms of television broadcasting, utilizing new technologies such as 4K/8K broadcasting, hybrid TVs and multi-screen is expected to create new value in viewing. It is essential that these factors will create demand to widen consumer basis in the overall industry.
- As regional vitalization is one of the important government agendas, business activities of content related companies in regional areas, distribution of regional content, ripple effects in tourism, and also overseas marketing of film and television program content by regional stakeholders are important aspects in terms of contribution to regional economy.

2. Framework and Methodology

2.1 Outline of the study

2.1.1 Purpose of the study

The aim of this report is to analyze the contribution of the Japanese film and television industry to the Japanese economy, quantitatively and qualitatively. In particular, this study measures the direct and indirect economic impact derived from production, distribution and exhibition/ consumption of film and television content. In addition, this study includes industry outlook with forecast over the next six years, considering the recent market trends in each subsector, which is defined in this report.

Also, apart from these macro-economic approaches, this study covers case studies to give a practical image of the economic effects originating in films and television broadcasting.

2.1.2 Study items

This report covers the study items shown in Table 2-1.

Table 2-1 Description of the study items

Study items	Description	Article
Market trend analysis	The results include the past and recent market trend for each subsector within the industry, by explaining time series of important statistics, and/or examples of major services.	3.1 –3.7
Estimation of economic contribution	The results describe the economic impact of film and television industry as a whole as well as for each subsector for the year 2014. This is the main purpose of the assignment.	
Market outlook	The results explains the industry outlook and estimates for market forecast for major subsectors taking into account the market trend analysis.	
Estimation of market size attributed to films	The study item intends to focus on the film content, and results include estimates of the market size (direct impact) attributed to it.	3.8
Regional economic contribution	Qualitative perspectives and examples are provided to Internal and external trend and examples will be provided to support the quantitative macro analysis in above study items, to illustrate practical cases of economic effects.	3.9

2.1.3 Study flow

This study was conducted based on the following steps:

1	Research planning	Existing study surveys, analysis framework and research items
2	Data collection	Market research, Economic indicators, interviews and discussions with industrial organizations
3	Analysis	Estimation of economic contribution, market trend and forecast

Note that this report should be read in conjunction with the Restrictions stated in Appendix.

2.2 Framework and methodology

2.2.1 Measures of economic contribution

This study estimates the economic contribution of the film and television broadcasting industry in four indices. Table 2-2 describes each index in details.

Table 2-2 Economic index measured in this study

Index	Definition
Gross Output	Total amount of production concerning value of goods and services based on labor and capital within the industry. This represents the total amount of revenue of all participants in the industry. Gross Output includes the intermediate inputs, which is the value of all goods and services used as inputs to generate that output.
Value Added	Value that was added by activities within the industry, which excludes the value of intermediate input from the Gross Output. It consists of production surplus, labor income and net indirect tax. Value Added is often described as the gross domestic product (GDP) contribution of an industry. It is the most commonly used measure of the value generated by an industry or by the economy as a whole, and can be used to compare with national GDP statistics.
Wages (Labor Income)	A subcomponent of Value Added which is distributed to the employer, who offered labor within the industry. It represents the value of output generated by the entity’s direct labor inputs, as measured by the income to labor.
Tax revenue	Taxes (net of subsidies) paid by the industry.
Employment	Total of number of employees in each industry. In this study, in principle, Full Time Equivalent (FTE) jobs are estimated, rather than total jobs which includes part-time.
Export value	Export revenue or overseas sales of film and television content (package, format, etc) and related products such as merchandizing.

Economic contribution estimated in this study represents the contribution of film and television

industry to the domestic economy. In particular, it is the total of direct, indirect, and induced impacts concerning economic index shown in Table 2-2. In this study, these are defined as follows:

Direct effect

Gross output, value-added, employment, and tax revenues that arise based on capital and labor attributed to film and television industry. This represents the direct economic activities in the industry, which includes, for example, production and distribution of film and television content as well as film exhibition.

Indirect effect

Gross output, value-added, employment, and tax revenues that arise as a consequence of changes in the level and value for suppliers of goods and services to that industry. This represents economic activities that are brought to other industries which provide goods and services to the film and television industry. For example, it includes revenue in industries which provide materials to location for film production.

Induced effect

Gross output, value-added, employment, and tax revenues that arise as a consequence of increase in the level and value of expenditure on goods and services due to the increased labor incomes, within the film and television industry and the industries that supply them.

The impact mentioned above are added together to present the total economic impact.

2.2.2 Methodology and assumptions

2.2.2.1 Estimation of direct impacts

We estimated the direct component of the film and television broadcasting industry’s economic impact in terms of its contribution to the four indices (Table 2-2). The estimation flow is as follows:

- First, we estimated the total revenue for each subsector, which we defined it as Gross Output. The figures our based on industrial statistics published from the government and industrial organizations. Also, we gathered the data for Employment (number of employees : FTEs) from these statistics, and conducted necessary estimation to meet the definition of each subsector.
- We selected an industry sector that best describes each subsector, from the national Input-Output transaction table. Input-Output transaction table is a format that describes the transaction between goods and services of economic activities during the year. This study used “Information and Communication Industry Input-Output transaction table” published by the Bureau of Statistics of Ministry of Internal Affairs and Communications. It categorizes industries that are relatively comparable to the industries defined in this study.
- We then used the Input-Output transaction table to estimate the ratios of Value Added to Gross Output, Gross Output to Employment, and Gross Output to Labor Income in the

selected industry sector, to derive the three indices from the Gross Output.

- For Tax revenue, estimation has been conducted for indirect tax, individual tax, and corporate tax. These components were estimated by multiplying effective tax rate to Value Added, Labor Income, and Operating Surplus.

2.2.2.2 Estimation of indirect and induced impacts

The indirect and induce impacts were estimated by basically multiplying certain multipliers to the direct impact. The multipliers were obtained from the “Inverse matrix table” contained in the Input-Output transaction table mentioned in the previous section. Inverse matrix table is a table which describes the value of economic activity required to meet the demand, when additional demand in a certain industry is assumed. The sum of inverse matrix coefficient (“Multiplier”) is the total volume of effect in all the industries within the economy, when there is 1 unit demand in a certain industry sector. Therefore, the multiplier describes the “pump-priming effect” (scale of impact on own industry as well as on other industries) and is represented in figure of 1 or more. For example, when a multiplier is “1.5”, “1” equals the value attributed to its own industry and “0.5” to the other industries.

The induced impacts were estimated by first obtaining the portion of the estimated labor income from the direct and indirect impact, attributed to consumption. This value is attributed to each industry based on average propensity of consumption, which is the average percentage income spent, and distribution ratio of private final consumption expenditure to every industry. Finally, the multiplier is multiplied to that expenditure and added up to derive the induced impact.

For the indirect and induced impact of Employment, this study focuses on employment based on FTEs. However, the “Information and Communication Industry I-O table” mentioned above, does not distinguish FTEs from the total number of employees. Therefore we combined the national Input-Output table “2005 Input-Output table” compiled by Statistics Bureau of Japan, which aggregates the FTEs for all industries. In particular, we derived the ratio for FTEs to total employees for each industry from the 2005 I-O table, and multiplied the ratio to the employment table contained in the “Information and Communication Industry I-O table”. Next, employment coefficients (ratio of FTEs to gross output) for each industry are derived in order to estimate the multiplier for indirect and induced impact for employment, taking into account the increase in gross output mentioned above. The multiplier is then multiplied to the direct impact (employment).

Details of the methodology are provided in the Appendix.

2.3 Definition of industry

2.3.1 Categorizing the subsector

In this study, we categorized individual subsectors within film and television broadcasting industry by the following two aspects:

- Types of output
- Stages in the value chain

Breaking the industry down in these aspects helps understanding the value added in different stages of the economic activity in the industry. This section explains the industry and subsectors covered in this report in terms of the two aspects.

2.3.1.1 Types of output

Types of output refer to the output of content in products or services within the industry. In this study, the following outputs are included:

- Films (Japanese and foreign)
- TV programs (domestic and foreign program distributed domestically, including commercials)
- Other audiovisual content²

The categorization of the above is adopted from statistics published from government organization, hence lowering the barriers in estimations. It currently represents the key output of the industry.

However, when economically evaluating the content industry, it is difficult to distinguish the value added within the flow from production to final consumption. Moreover, taking into account the recent trends in the market environment, its range of outputs is increasingly transformative. To give examples relating to film and television broadcasting industry; convergence among different types of content, merchandizing originated in film/ television programs, and increasing demand in multi-screen (TV/ PC/ mobile) provision over broadcast and communication network. The framework and industry categorization used in national statistics do not currently reflect these trends. Consequently, analysis of outputs based on traditional film screen and television screen will not reflect the whole industry. This is why we have covered market trend analysis for each subsector to assess in a wider view, given that the estimates are bound by available statistics.

2.3.1.2 Stages of Value Chain (subsectors)

The value chain of the type of outputs, described in the previous section, which are produced and provided to consumers, can be broken down into the following six subsectors:

² This report includes adult entertainment content

- Production
 - Distribution
 - Film Exhibition
 - Television Broadcasting (Terrestrial /satellite / CATV)
 - Home video (retail and rental)
 - Online service (Internet distribution to TV/PC/Mobile)
- } Distribution
(Consumption)

In this study, we analyze each subsector in terms of economic impact as well as market trend analysis. The definition for each subsector is explained in Table 2-3.

Table 2-3 Definition of the each subsector

Subsector	Definitions
Production	Production subsector refers to producing the type of output defined in this report (film, television program, and other visual/ video content), which includes development, photography and related technical process.
Distribution	Distribution subsector refers to distributing the produced or completed content. It does not include retail distribution.
Film Exhibition	Exhibition subsector refers to displaying the distributed films to the public, through location such as cinema and theatres. The revenue is generated from admission fees paid by the audience. Revenue from merchandising in theaters is not included.
Television Broadcasting	Broadcasting subsector refers to distributing of content through broadcast television media. In this study, terrestrial, satellite, and CATV is covered as these are the main television media in Japan. The revenue is generated from subscription fees and advertisement. Internet Protocol TV (IPTV) is included here and its market trend is explained within this subsector.
Home video	Home video subsector refers to selling or rental of content on physical format such as DVDs/Blu-ray discs. In this report, the figures used to derive the economic impact, are wholesale-based, which is the sale to retail shops or rental shops.
Online service	Online service subsector refers to distributing of content through internet media, viewed on multiple platforms (e.g. PC, TV, and Mobile).

Out of those listed above, film exhibition, broadcasting, home video and online service are generally referred to as “distribution” in a broad sense or “window”, which films or TV programs are delivered to consumers. Film and television broadcasting industry is one of the most advanced areas in the content industry in terms of multi-use / multi-window. Especially, film industry is remarkable in that trend. When a produced film is released, in general, revenue is generated from admission fees paid by the audience through exhibition in the cinemas and a portion of the

revenue is paid to film production / distribution companies. After a certain period, the same film is delivered to consumers through multiple windows, such as pay-tv, home video (retail and rental) and terrestrial television broadcasting. Hence, revenue is generated from retail sales or advertisements. In addition, in recent years, internet media and devices such as mobile phones / tablets are penetrating at an enormous rate, leading to diversity of windows. Business model tend to diversify also, as well as choice in pricing for consumers such as metered-rate (traditionally, Pay-Per-View) or flat-rate. This implies that the means to deliver film and television content to potential viewers is widening.

2.3.2 Structure of the Japanese Film and Television Industry

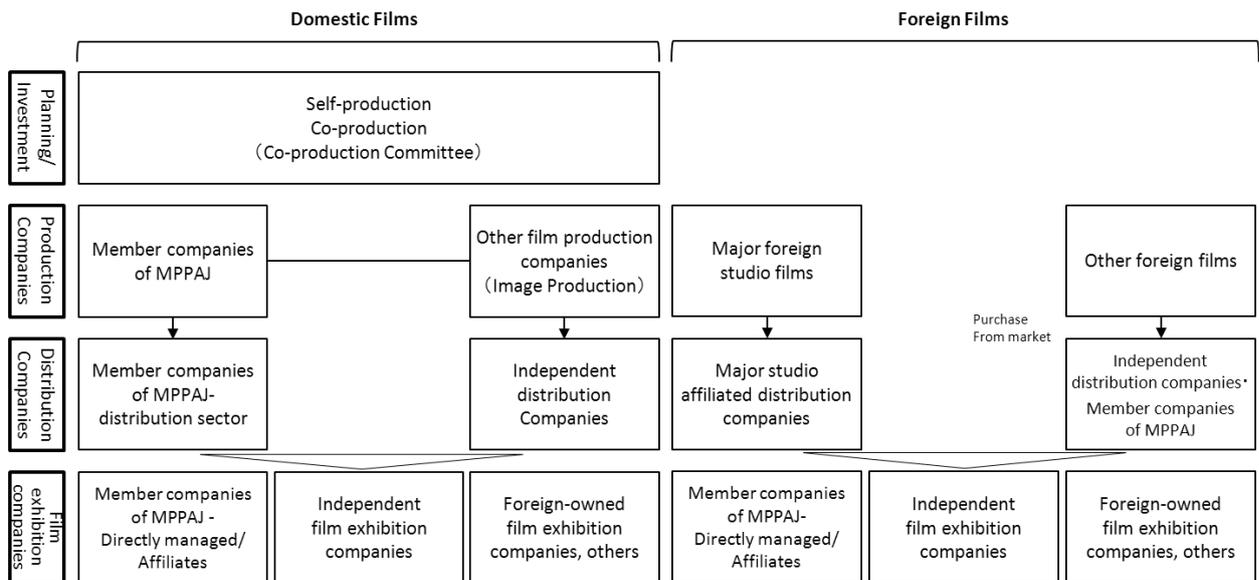
2.3.2.1 Japanese Film Industry

Industry structure of Japanese film is shown in Figure 2-1 In the case of Japanese films, production company, distribution company and exhibition company each play a large role. Production company produces film, and distribution company reserves screens in theaters and also rolls out sales promotion. Exhibition company basically operates and manage movie theaters. The major domestic film companies, which is the four member companies of the Motion Picture Producers Association of Japan, Inc. (Shochiku, Toho, Toei and Kadokawa), integrates production, distribution as well as exhibition. As for the exhibition companies, other players include independent companies as well as foreign-affiliated companies which mostly manage the cinema complex. Also, many of the Japanese films are now produced by the “co-production committee”. The committee consists of film companies, publishing companies, video retailing companies, advertising firms and broadcast operators. Co-production committee scheme raises the recognition (of the film) relatively in a short term and contributes to the increase in exhibition mobilization, since fund-raising, risk-avoidance and synergistic effect can be expected.

In the case of foreign films, there are mainly two ways to distribution. One way is when major foreign studios distribute through affiliated distribution agencies³ and the other is for the Japanese distribution agencies to purchase a film through foreign market. The member companies also purchase and distribute foreign films. Film exhibition does not depend on the players categories (major domestic companies, independent, foreign-affiliated), and are released in various movie theaters such as cinema complex.

³ Warner Entertainment Japan, Sony Pictures Entertainment Japan, Walt Disney Japan, Paramount Japan G.K., Twentieth Century Fox Film Corporation, and Universal Pictures (Toho-Towa is responsible for distribution). As for the other independent distributing agencies of foreign films, Toho-Towa, GAGA Corporation, Asmik Ace Entertainment Inc., and others can be listed.

Figure 2-1 Structure of domestic film industry



*MPPAJ : Motion Picture Producers Association of Japan, Inc.

*The arrows describes general cases

(Source : Mitsubishi Research Institute, Inc. based on multiple sources)

2.3.2.2 Television Broadcasting Industry

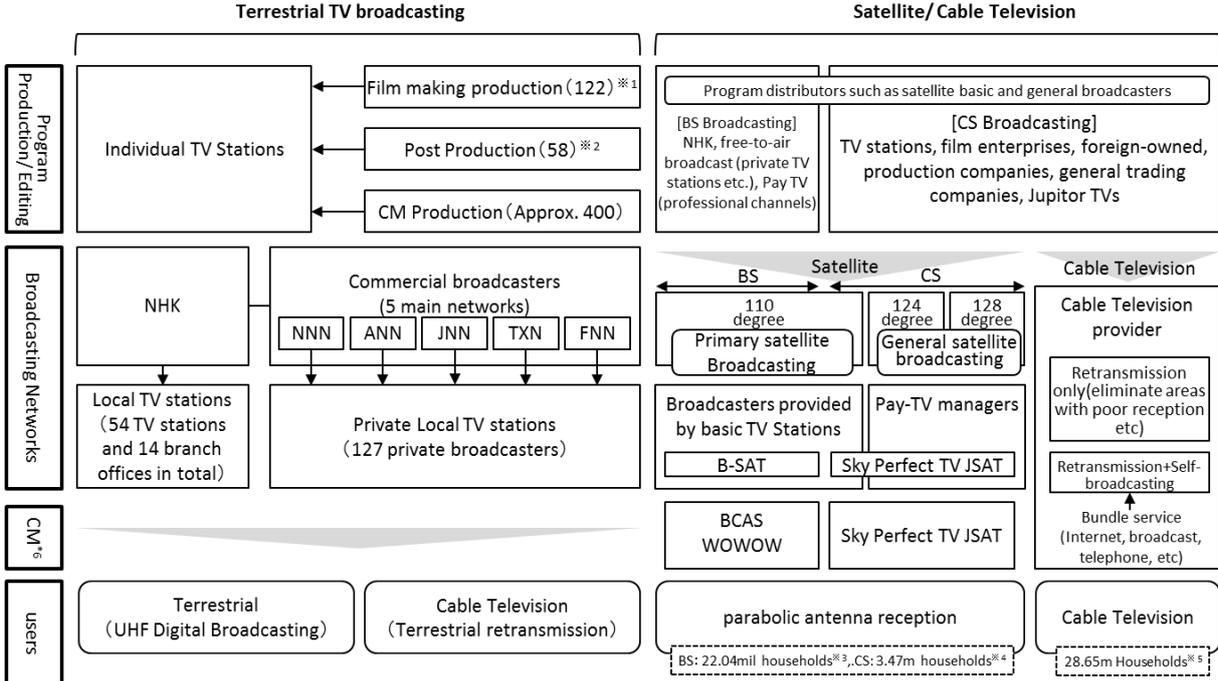
Figure 2-2 shows the structure of the Japanese television broadcasting industry. In Japan, television broadcasting is broadly divided into terrestrial broadcasting, satellite broadcasting and CATV. In recent years, IPTV (Internet Protocol TV) and 1 SEG broadcasting provided for mobile phones have penetrated to a certain level. The terrestrial broadcasting consists public broadcaster NHK and commercial broadcast operators. NHK collects subscription fee and commercial broadcast operators' business is basically based on advertising revenues. Commercial broadcast operators conclude "Network Agreement" to build cooperative relationships such as programming, news report, production and sales business among local stations. Currently, there are five commercial broadcast operators.

For satellite broadcasting, there are two categories; BS (Broadcast Satellite) broadcasting which utilizes broadcast satellite, and CS (Communication Satellite) which utilizes communication satellite. The former has been developed as semi-quasi-media and the latter has developed as multi-channel specialized media. In 2002, CS broadcasting utilizing communication satellite, which is at the same orbit as BS broadcasting (110° East), has started. However, due to a revision in the regulatory framework, BS broadcasting and CS broadcasting (110°East) are currently categorized as are categorized as "Primary Broadcasting", which is the same as terrestrial broadcasting, and are referred to as "Satellite Primary Broadcasting". Other satellite broadcasts are categorized as "General broadcasting", which is the same as CATV, and are referred to as "Satellite General Broadcasting". As for the CATV, there are two categories. One is which CATV provides retransmission of terrestrial television broadcasting programs. The other is which CATV provides

pay multi-channel packages that bundle retransmission of terrestrial and BS broadcasting with specialized channels. Moreover, some provide services with VOD services or internet connections and telephone services.

As of March 2013, there were 475 terrestrial commercial broadcast operators, 72 satellite commercial broadcasters, 539 CATV operators (operators that have wired electronic communication facilities that provide their own broadcasting) and 3 of them are IPTV operators (broadcasting by IP multi-cast scheme).

Figure 2-2 Structure of Domestic Television Broadcasting Industry



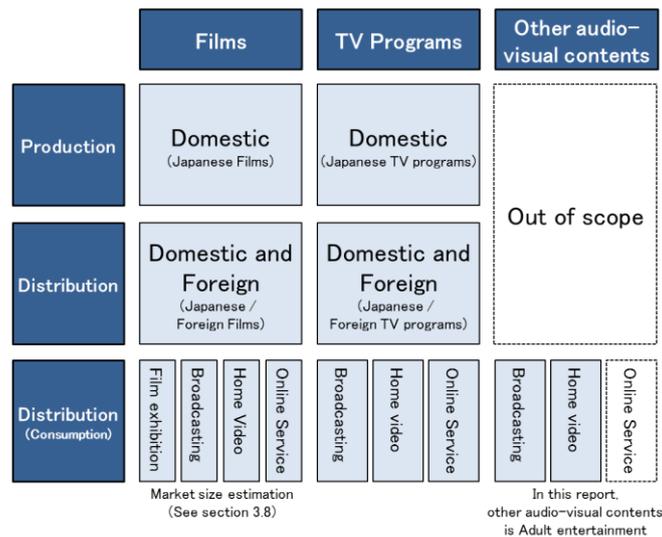
*1: Association of All Japan TV Program Production (ATP) Number of member companies (June 2015)
 *2: Japan Post Production Association (JPPA) Number of member companies (June 2015)
 *3: Subscribers for NHK-BS and WOWOW (May 2015)
 *4: Subscribers for Sky perfect TV! (May 2015)
 *5: Terrestrial Retransmission only households are excluded (March 2015)
 *6: Customer management

(Source : Mitsubishi Research Institute, Inc. based on multiple sources)

2.3.3 Scope of industry and market

Based on 2.3.1- 2.3.2 and the scope and categories of the available statistical data, we have set the target scope of this study as shown in Figure 2-3. The economic contribution of each window in distribution (consumption) includes all visual content other than film exhibitions, as sum in general, and as for the films, revenues related to the film content are described in section 3.8. For the market outlook, we have set distribution (consumption) market, as whole, for forecast.

Figure 2-3 Scope of the industry and market



(Source : Mitsubishi Research Institute, Inc.)

2.4 Approximations and limitations

2.4.1 Time frame

The economic contributions stated in this study are basically based on the economic activity of the year 2014. However, note that the size of economic activity of film and television broadcasting industry relatively tends to change year by year, similar to other content industries such as music/books, and that the cycle goes beyond one year and spans multiple years.

Forecast is based on past market trends and forecast of industrial organizations as well as discussions. The duration of past market trends taking into account, is for past 5 years (2008 to 2013, or 2009 to 2014). Note that this 5 year duration includes the highest record for film revenue (2010), and also the economic impact due to Great East Japan Earthquake of March 2011.

2.4.2 Estimated versus actual figures

Numerical values were based on the latest data available (2013 or 2014), by using the actual value of the corresponding year. The details are provided in the Appendix. Also, for some subsectors, the available statistics do not fully specify the component parts of the subsector defined in this report, therefore assumptions were made in order to estimate the most approximate results. In particular, approximations from the similar or broader industry categorization have been used. This is provided in the Appendix.

The figures for Employment, we used the actual value for the year 2014 or estimated taking into account the ratio of the number of employees to the gross output in the industry that best describes the subsector in focus. However, note that taking into account the labor-intensive employment structure often seen in the film industry, there is a limit in estimating the snapshot of the current employment status.

2.4.3 Unit for Evaluation

When considering the flow of added value along the value chain in the industry, there are important aspects such as to avoid double counting and to reflect the actual structure in each subsector. In particular, we need to define the unit of evaluation, whether it is based on production or demand (consumption), or other aspects such as usage scenes.

For example, when evaluating based on production, in general, there is an advantage of understanding the value added in the content (film or TV program) production stage. Therefore, it can be said that it is a valid evaluation unit in understanding the cross-window or value added within indirect economic effects to other industries, before the produced content is consumed. However, compared to the general consumer goods where value added can be understood from differences between production and retail sales, it is difficult to discriminate the value added, due to its intangible nature and mixed distribution channels such as broadcasting or internet. On the other hand, when evaluating based on demand (consumption), the value added includes all the value added in the distribution process. However, it is likely to double count the value added and be over-estimated, since it is difficult to distinguish between Business to Business and Business to Consumer relationship. Therefore there are limitations in understanding the value added flow from content production to consumption, with a single evaluation unit. Moreover, there are limitations in available data across every subsectors defined in this report.

3. Study results

3.1 Film and Television Industry (Overall)

In this section, we present the total estimated economic contribution for 2014 concerning all the industries defined in this report, as well as six year industry outlook to 2020.

3.1.1 Economic Contribution

The economic contribution in 2014 brought about by the film and television broadcasting industry in Japan are as follows.

- The **total gross output** in Japan arising as a result of the film and television industry is approximately 5,301.5 billion Yen for the direct impact, and 11,352.5 billion Yen for the total contribution including indirect/ induced impact.
- The **total value added** to the Japanese economy in 2014 from film and television industry is approximately 2,369.0 billion Yen for the direct impact, and 5,577.8 billion Yen for the total contribution including indirect/induced impact.
- The **labor income** in Japan generated as a result of film and television industry is 1,004.6 billion Yen for the direct impact, and 2,571.5 billion Yen for the total contribution including indirect/ induced impact.
- The **tax revenue** in Japan generated as a result of film and television industry is 418.1 billion Yen for the direct impact, and 955.3 billion Yen for the total contribution including indirect/ induced impact.
- The **total value added** for the film and television industry accounts for 0.49% of GDP⁴ for the direct impact, 1.15% for the total contribution.
- The **total employment** created in Japan as a result of film and television industry is estimated to be 122,041 for the direct impact, and 381,368 for the total contribution including indirect/ induced impact.

Table 3-1 shows the detailed estimated results for economic contribution and Table 3-2 shows the comparison results with other industries.

⁴ Nominal GDP for 2014 : 487.5 trillion Yen (Announced by the Cabinet Office)

Table 3-1 Estimated economic contribution (overall including other audio-visual contents)

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Film Production	113.5	229.8	51.4	115.8	25.4	56.6	7.5	18.4	8,852	21,661
Film Distribution	115.0	232.7	52.1	117.3	25.8	57.3	7.6	18.7	1,360	3,326
TV Production	390.1	789.5	176.8	398.0	87.4	194.4	25.9	63.3	14,270	34,913
TV Distribution	328.9	665.6	149.1	335.5	73.7	163.9	21.8	53.4		
Film Exhibition	207.0	441.7	77.0	205.9	41.2	102.7	13.0	34.2	12,904	25,686
TV Broadcasting	3,746.7	8,183.1	1,679.4	3,993.3	656.8	1,791.2	313.5	699.5	78,552	279,083
Home video	274.8	556.2	124.5	280.4	61.5	136.9	18.2	44.6	2,005	4,906
Online service	125.5	253.9	58.7	131.6	32.8	68.5	10.6	23.2	4,098	11,793
Total	5,301.5	11,352.5	2,369.0	5,577.8	1,004.6	2,571.5	418.1	955.3	122,041	381,368

(Source : Mitsubishi Research Institute, Inc.)

Table 3-2 GDP contribution of Film/ television industry

	Film Industry and Television Industry	
	Direct contribution	Total contribution
Value added	2,369.0 billion Yen	5,577.8 billion Yen
GDP Contribution	0.49%	1.15%

(Source : Mitsubishi Research Institute, Inc.)

3.1.2 Market outlook (2014- 2020)

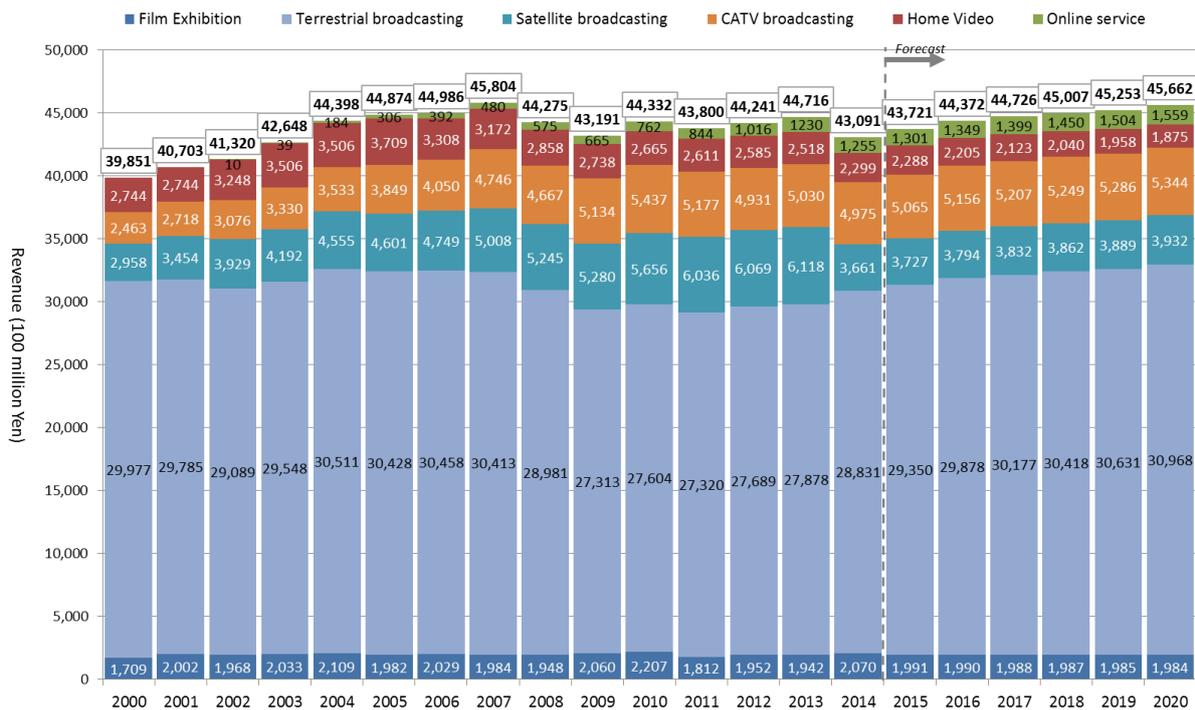
The market forecast (2014 to 2020) in Japan is as follows. This forecast covers the distribution (consumption) market, in particular, film exhibition, TV broadcasting, home video (retail, rental) and online service market.

- In overall, the film and television broadcasting industry is forecast to grow at CAGR 1.0% to reach 4,767.2 billion Yen by 2020, compared to 4,496.3 billion Yen in 2014.
- Japanese economy as a whole had a reduction impact during 2011 due to the Great East Japan Earthquake Disaster in March 2011. However, the market is resuming its pace, mainly pulled by the broadcasting market which accounts for over half of the industry revenue.
- The key factors for growth in the Japanese film industry include further development in digitization, and new trends such as ODS (Other Digital Stuff/ Online Digital Source) for cinemas. In terms of television broadcasting, utilizing new technologies such as 4K/8K broadcasting, hybrid TVs and multi-screen is expected to create new value in viewing. It is essential that these factors will create demand to widen consumer basis in the overall industry.

- As regional vitalization is one of the important government agendas, business activities of content related companies in regional areas, distribution of regional content, ripple effects in tourism, and also overseas marketing of film and television program content by regional stakeholders are important aspects in terms of contribution to regional economy.

Figure 3-1 shows the market forecast for film industry and Television broadcasting industry.

Figure 3-1 Market forecast (2014-2020)



(Source : Mitsubishi Research Institute, Inc.)

The basis of the forecast for each market is as follows.

- Film exhibition market: The market most recently marked the highest figure in its history, reaching 220.7 billion Yen in 2010. We assumed that the market trend observed in the recent years will continue for the next six years. In particular, adopting a trend forecast method for the total revenue (domestic and foreign films) during 2008 and 2014, we forecast the market to maintain 200 billion Yen as an average. Demand creation to widen consumer basis, through development in digitization, and new trends such as ODS (Other Digital Stuff / Online Digital Source, as well as international market development are essential for growth in this sector.
- Television broadcasting market: For terrestrial broadcasting markets, we adopted the mid-term forecast results published by the Japan Commercial Broadcasters Association (JBA)⁵, which

⁵ MINPO KEIEI SHIKIHO (Commercial Broadcasters Management quarterly), December 2014.

covers advertisement forecast toward 2020 based on the Japanese economy outlook and relationship among advertisement media. According to its results, during 2011 and 2014, television advertisement market will grow 1.1% average per year, and growth will continue beyond 2015. For satellite and CATV broadcasting, considering the strong growth in the number of viewers for multi-channel TVs, we forecast its growth toward 2020 at CAGR 1.2% which is derived from the growth rate for terrestrial broadcasting. The television broadcasting market is entering a new era, due to full digitization which was completed during 2012, and channel re-farming have been put forward including high definition channels. In mid-term, new technology trends such as 4K/8K and hybrid TVs (e.g. Hybridcast) will promote market growth and new experience for audiences.

- Home video (retail, rental) market: We assumed that the market trend observed in the past 5 years will continue for the mid-term. In particular, adopting a trend forecast method for the total revenue (sell and rental) during the past 5 years, we forecast the market to continue to reduce at CAGR 3.3%. The market is seeing increase in demand for Blu-ray discs, especially for certain genres (e.g. animation) which is already gaining concrete market share.
- Online service (TV/ PC/ Mobile) market: We forecast its growth toward 2020 at CAGR 3.7% which is derived from the growth rate of internet advertisement, based on the JBA forecasts mentioned above. This market is gaining momentum on the basis of consumer demand in visual content viewing over broadband internet, a highly penetrating infrastructure in Japan. In particular, multi-channel broadcasting, subscription-based Video-On-Demand (VOD) market is expected to continue to grow. To add, high-capacity/ high-speed mobile network and high-spec devices has realized long-length streaming such as movie in full package, therefore it is anticipated that advanced multi-screen would bring new style of visual content viewing for the consumers.

3.2 Film production / distribution

3.2.1 Economic contribution

The estimated result of the economic contribution of the film production/ distribution industry is outlined in Table 3-3. The film production industry has brought the economic effect of 229.8 billion Yen for gross output, 115.8 billion Yen for value added, 18.4 billion Yen for tax revenue, and 21,661 employees. Likewise, the film distribution industry has brought the economic contribution of 232.7 billion Yen for domestic production, 117.3 billion Yen for value added, 18.7 billion Yen for tax revenue, and 3,326 employees.

Especially, since the production industry mobilizes a large scale of the staff ranging from project planning to location, film shooting, editing and so on, it can be said this is a labor-intensive industry that creates much employment compared to the distribution industry.

Table 3-3 Economic contribution- Summary of results

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Film production	113.5	229.8	51.4	115.8	25.4	56.6	7.5	18.4	8,852	21,661
Film distribution	115.0	232.7	52.1	117.3	25.8	57.3	7.6	18.7	1,360	3,326
Total	228.5	462.5	103.5	233.1	51.2	113.9	15.1	37.1	10,212	24,987

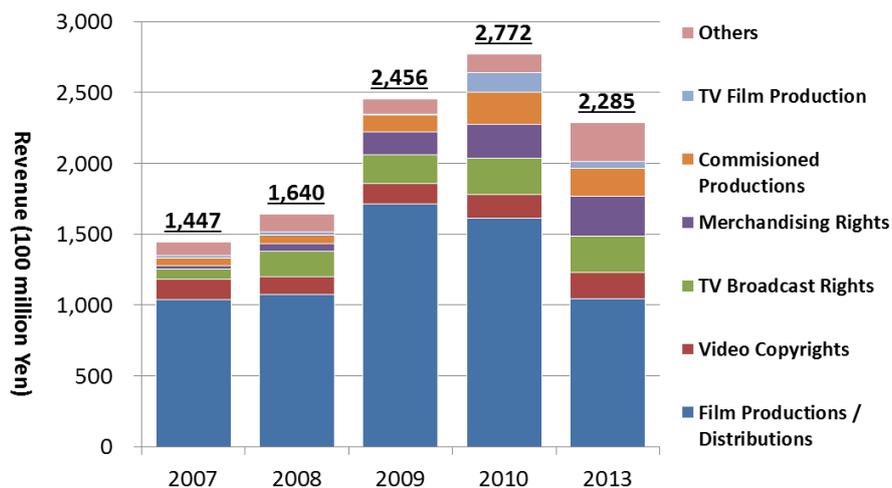
(Source : Mitsubishi Research Institute, Inc.)

3.2.2 Market trend

3.2.2.1 Revenue

The revenue from film production and distribution industries is shown in Figure 3-2. This industry tends to be influenced by a degree of prosperity of the produced works such as numerous box-office hits and so on. However, in recent trends, the revenue in domestic production and distribution industries tend to expand due to the popularity of the domestic films. As for the revenue, in addition to the revenue from the main production and distribution of films which accounted for 46% in FY2013, revenue from various rights management, including TV broadcasting rights, has increasingly accounted for the percentage. The revenue from production industry and that of the distribution industry cannot be separated in the current statistics. However, according to the statistics published by the Ministry of Economy, Trade and Industry in 2004, the annual revenue of the film production industry (including the rights revenue) was 122.9 billion Yen, and 124.4 billion Yen for the film distribution industry, therefore approximately equal to one to one.

Figure 3-2 Revenue from film production and distribution industries⁶



(Source: "Survey of Selected Service Industries", Ministry of Economy Trade and Industry)

3.2.2.2 Number of distributed films

The number of Japanese and foreign films released in Japan is shown in Figure 3-3. Reversal phenomenon in numbers of Japanese films and foreign films was seen twice, in 1987 and 2006. The number of films have significantly increased after 2011 for both Japanese and foreign films, surpassing 1000 films in 2013.

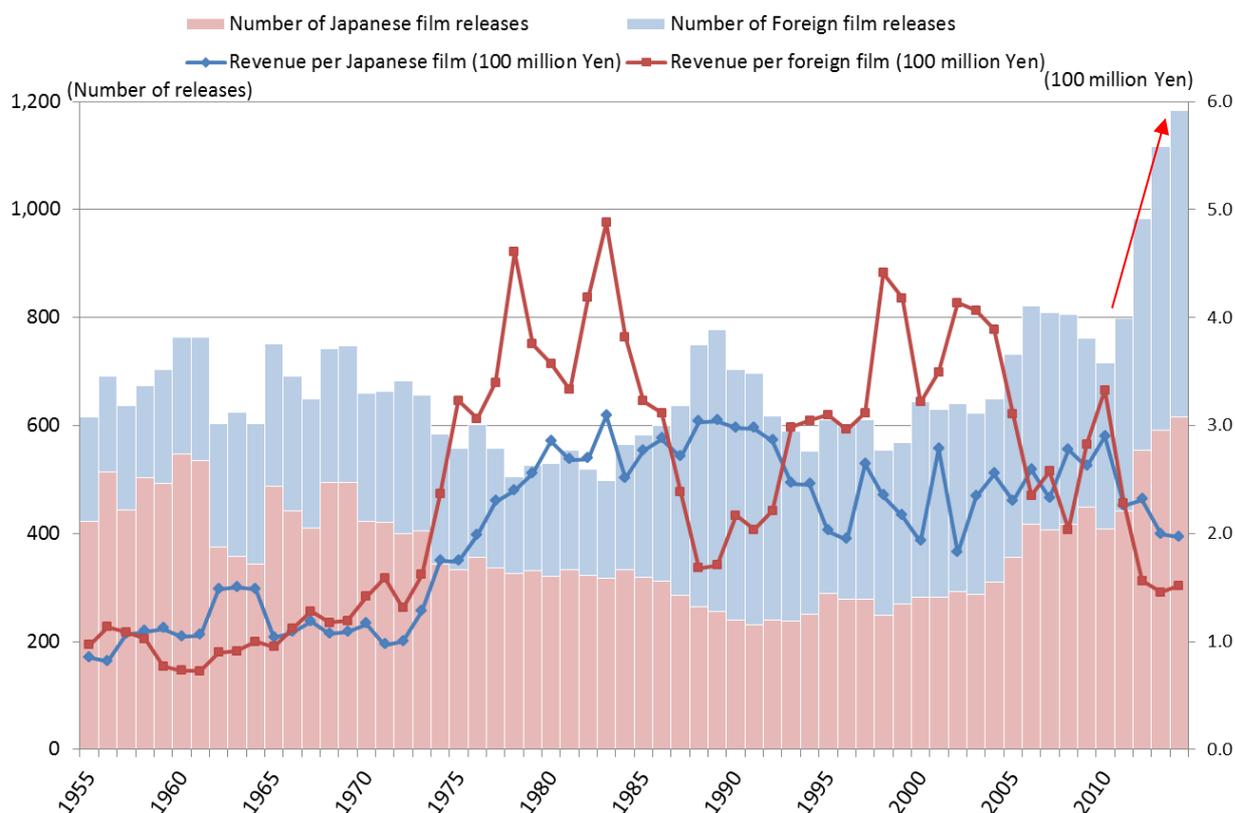
The background of these figures can be explained from several aspects. Firstly, digitization has dramatically improved the efficiency of film production environment. Some of the impacts of digitization include the improvement of efficiency in filming and editing, as well as reduction of production cost. This enables production under small number of staffs, and post production companies specialized in computer editing has attracted attention. The shift toward digital cinema and implementation of state-of-the-art equipment has all accelerated this trend.

Secondly, due to diffusion of cinema complex, the structure of film distribution has changed, where film can potentially be released in theaters without via major distributors, which had led to increase in turnover of released films.

However, as number of films increases, some films are eventually screened, for example, only once per day, which can be considered as a decrease in opportunity for audiences who wishes to see that certain film. In terms of distribution, creating box office hits via traditional mass media marketing and leveraging social awareness of films is considered less effective compared to past trend. Practically, the revenue per film has been decreasing. During the 2000s, revenue per foreign films was higher than Japanese films, however it has reversed since 2011.

⁶ The index related to the film production and distribution business is extracted from the "Survey of Selected Service Industries (Production and distribution of video content)". Note that the survey was not conducted for 2011 and 2012.

Figure 3-3 Number of distributed films and revenue per film (Japanese and foreign)



(Source: Motion Picture Producers Association of Japan, Inc.)

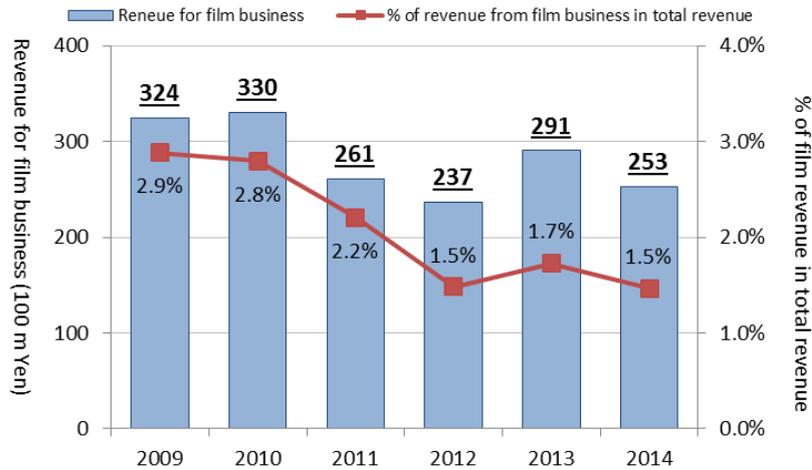
3.2.2.3 Television's role in the film industry

The film industry in Japan, especially for the Japanese films, leaped forward due to the extensive promotion (i.e. advertisement in a spot time and in television programs) of films led and produced by the commercial TV broadcasters in the 2000's. As previously stated, co-production committee scheme is the mainstream in Japan, and films produced mainly by the TV broadcasters are increasing as they had become one of the key players in the committee.

Revenue from film business of major 5 Tokyo commercial TV broadcast operators⁷ as well as its contribution to the overall revenue is shown in Figure 3-4. During the past 6 years, the total revenue of film business has ranged from 200 to 300 million Yen, which accounts to 1.5% to 2.9% of overall revenue. Broadcasters have the advantage of having strong media influence, capital strength, and also extensive knowledge and promotion strength through production of TV programs. Broadcasters have the ability to increase their non-broadcast revenue, by making the film version of popular TV drama or animation, DVD distribution, book publication, commoditizing related products, events, internet content distribution, overseas marketing of programs formats, etc. To add, participation of regional broadcasters can induce positive effect in terms of regional vitalization such as in regional cinemas.

⁷ Nippon Television, Tokyo Broadcasting System, Fuji Television, TV Asahi and TV Tokyo

Figure 3-4 Major five commercial broadcast operators' revenue from film business



(Source: Financial results from commercial broadcast operators)

3.2.2.4 International market development

The total revenue of Japanese film export has recorded 13.8 billion Yen in 2013⁸. In May 2015, in China, animation film of popular Japanese animation series, “Doraemon : Stand by me” has hit box office revenue of 424 million Yuan in just 10 days, exceeding the domestic revenue.

In terms of international market development, international co-production scheme is gaining interests from various stakeholders, other than selling / licensing completed films through subtitle editing and dubbing. International co-production is considered as a joint production of parties from two or more countries, in which collaborating together combining production resources from both sides while reflecting demand and preferences of both markets. In, particular, there are several approaches, such as co-investment and co-producing employing producers / staffs / casts from both sides, or gathering producers / staffs / casts from different countries to develop a film created in one of the countries. Although there are challenges in terms of developing scripts based on communication among members from different countries as well as sharing of responsibilities, there are advantages in business relationships, personal exchanges, and domestic industry promotion through knowledge sharing. In recent development, collaborations between staffs from rural prefectures in Japan and ASEAN countries have attracted attention. These activities are in line with current Government initiatives such as “Cool Japan” and “Visit Japan” strategies to promote international market development and cultural collaboration, and also regional vitalization where local production companies contribute to the local economy in regional districts.

⁸ Announced by Ministry of Internal Affairs and Communications

3.3 Film Exhibition

3.3.1 Economic contribution

The estimated result of the economic contribution of the film exhibition industry is shown in Table 3-4. The film exhibition industry has brought the economic contribution of 441.7 billion Yen for gross output, 205.9 billion Yen for value added, 34.2 billion Yen for tax revenue, and 25,686 employees.

Table 3-4 Economic contribution for Film Exhibition sector

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Film Exhibition	207.0	441.7	77.0	205.9	41.2	102.7	13.0	34.2	12,904	25,686

(Source : Mitsubishi Research Institute, Inc.)

3.3.2 Market trend

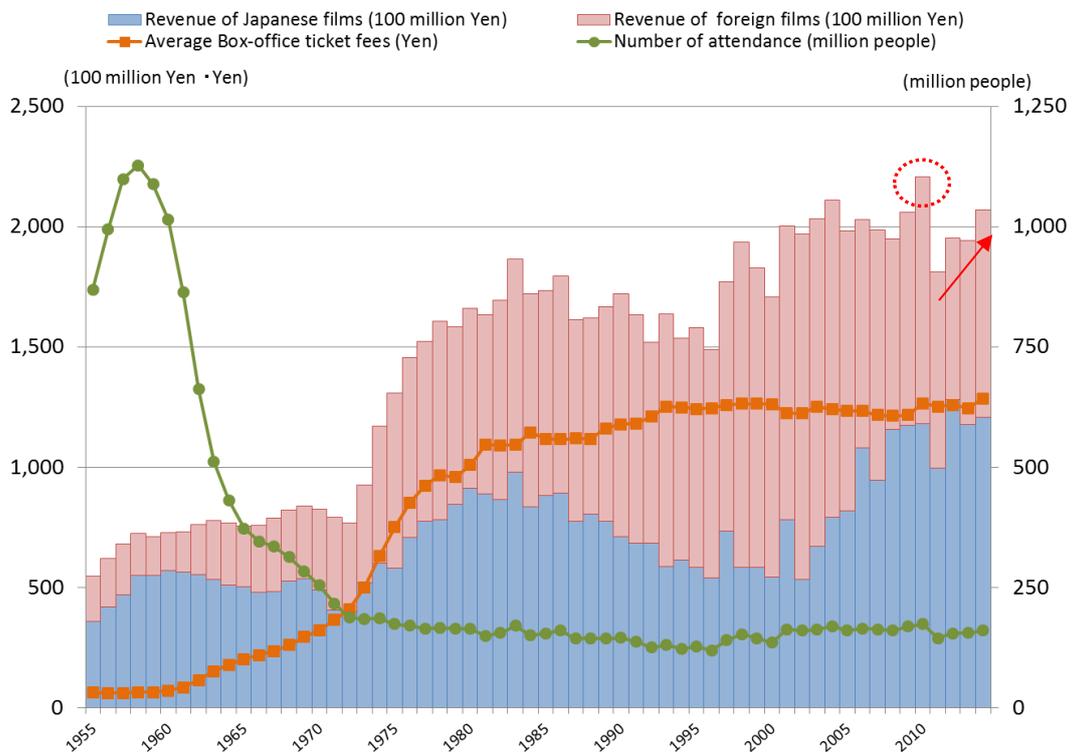
3.3.2.1 Revenue and Number of Attendance

Revenue from film exhibition, number of attendance, and average admission fees at the movie theaters is shown in Figure 3-5. In 1950s, the number of Japanese film productions has exceeded 500 (see Figure 3-3). Production and distribution were active and the revenue from Japanese films continued to increase. Movie attendance exceeded 1 billion annually from the late 1950s to the beginning of 1960s. Later, as television rapidly became popular and widespread due to Tokyo Olympics in 1964, inversely, film industry started to decline. 1 billion in attendance dropped to approximately one quarter by 1970s.

In 1970s, with the background of this sluggishness, average attendance fee rose and the expansion of the box-office revenue was seen. In 1970s, although the percentage of foreign film revenue increased, from the late 70s to the mid-80s, with the entry of KADOKAWA films, Japanese films, which were overpowered by the foreign films and television broadcasting, became thriving and the revenue from exhibition increased rapidly. In 1980s, although it turned into declining tendency again due to growth in rental market, the film exhibition market saw an increase tendency with the development of cinema complex and the rapid increase in screen numbers, after 1993. The number of attendance gradually recovered and film became once again gained its position. In 2000s, due to the contribution TV broadcast operators, Japanese film exhibition market maintained its condition and the revenue size of 200 billion Yen and 160 million attendances. It should be especially stated that the revenue from the film exhibition in 2010 marked the highest record in the Japanese film exhibition history. Although decrease has been seen in 2011 due to the Earthquake crisis, the market revenue is pitching up again. In this way, the film exhibition in Japan is comparatively stabilized now, in spite of a little up and down, and it has

established its position at a certain level in consumer market.

Figure 3-5 Revenue from the film exhibition and number of attendance



(Source: Motion Picture Producers Association of Japan, Inc.)

3.3.2.2 Number of screens

The number of screens in the Japanese movie theaters is shown in Figure 3-6. The number of movie theaters once was 7,457 in 1960, continued to decrease due to the penetration of television. The number of movie theaters in 1993 decreased to 1,734, around 20% compared to the peak. However, after 1995, the increasing tendency was consistently seen for the number of movie theaters.

This is supported by the development of the cinema complex that has two or more screens in one facility⁹. Since one preferable film can be selected within the same cinema complex from many others, the choice widened for the audience, resulting in the increase in number of the attendance. Moreover, it can be said that the cinema complex has boosted demand among residents in the suburb area, because the location of the cinema complex is usually within a shopping mall in the area. Cinema complexes attract various consumer segments to adjacent commercial facilities (e.g. shopping centers) and public events, which lead to additional consumption of goods and services. In 2010, 267 out of 527 movie theaters were complex facilities with shopping centers¹⁰. In addition,

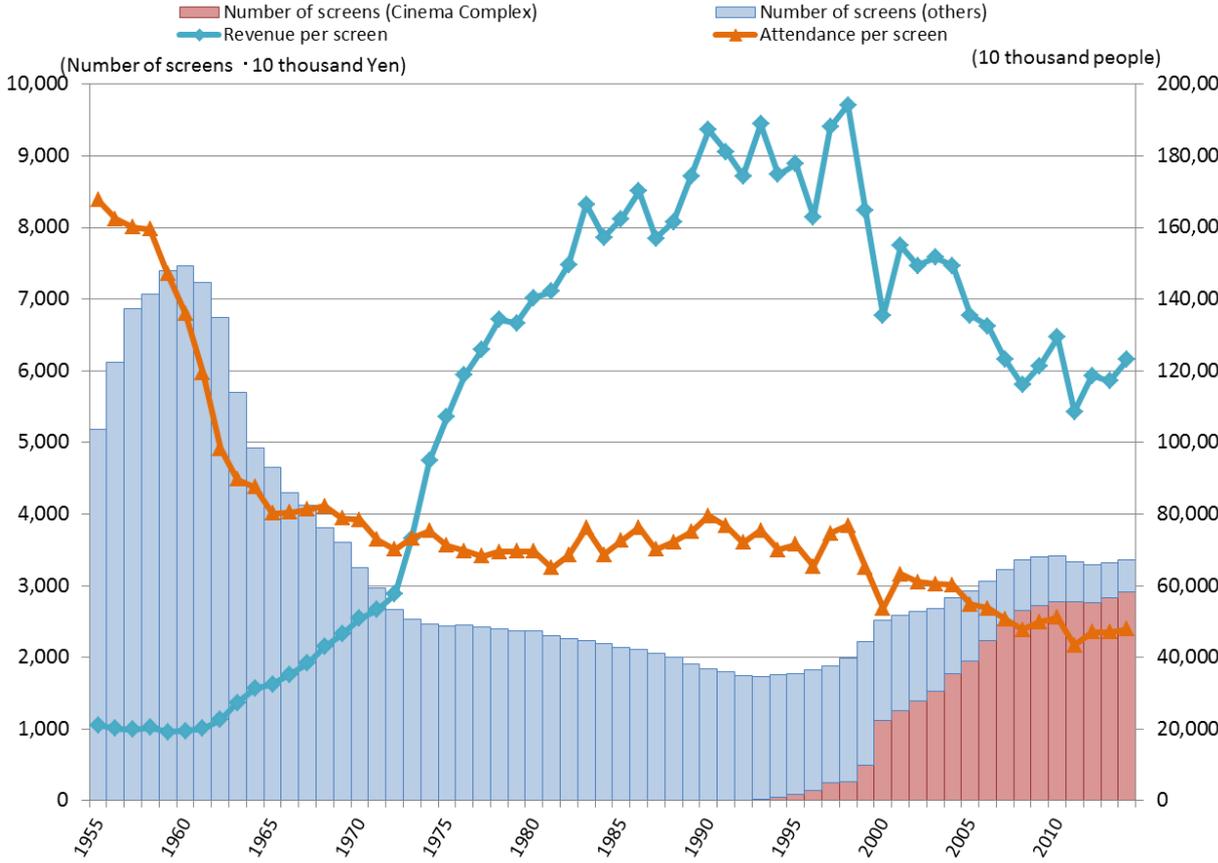
⁹ Motion Picture Producers Association of Japan defines cinema complex as “Theaters that hold more than 5 screens at one location, managed by the same organization under a uniform title (ex. 1,2,3...A,B,C..)”

¹⁰ Based on “Survey of Selected Service Industries (Cinemas)”, Ministry of Economy, Trade and

it can be assumed that the development of cinema complex brought change in film distribution structure, as it lowered the barrier of film releasing without the support of the major distribution companies. Therefore, the number of released films has increased, which had led to the increase in number of attendance. At present, more than 80% of the screens are occupied by the cinema complex.

On the other hand, on the contrary of the increase in number of screens, the revenue from film exhibition per screen has been declining since 2000, thus placing small-scale theaters to a severe market condition. In 2011, the number of screens has decreased for the first time since 1993, however it has seen an increase trend again from 2013.

Figure 3-6 Number of screens



(Source: Motion Picture Producers Association of Japan, Inc.)

3.3.2.3 Preference of movie fans

As mentioned above, the size of exhibition revenue and number of attendance has remained steady after 2000. Therefore it can be said that the exhibition market is currently supported by a portion of movie fans going to theaters one or few times annually. On the other hand, with the

diffusion of smartphones and tablets which provides easy access to video formats from various media, the market is seeing the decline of, especially, young-aged group within the audience. Moreover, nowadays big-screen TVs equipped with high quality features is becoming more and more affordable for homes to watch various audio-visual contents. Past customs, for people taking time to go to movie theaters, have changed, for example going to see a movie before or after shopping or having dinner was a casual case for many young adults. Although it is not an industry-specific issue, in the long term, aging of current movie fans would become a challenge for the exhibition industry, for example, it would be a burden for senior-aged group to go out to see a movie in theaters.

Moreover, due to the impact of the internet, marketing approaches and promotion activities based on traditional mass-media is considered as having lesser effect compared to the past, as to reach out to certain consumer segments and to forecast the impact on the audience.

With these backgrounds, nowadays publicity and promotion activities are more focused on the actual audiences that come to theaters. Also, campaign activities are seen using social media (e.g. Twitter) for spread the comment and impressions of the actual audiences, to reach out to young-aged groups that is familiar with these new medias.

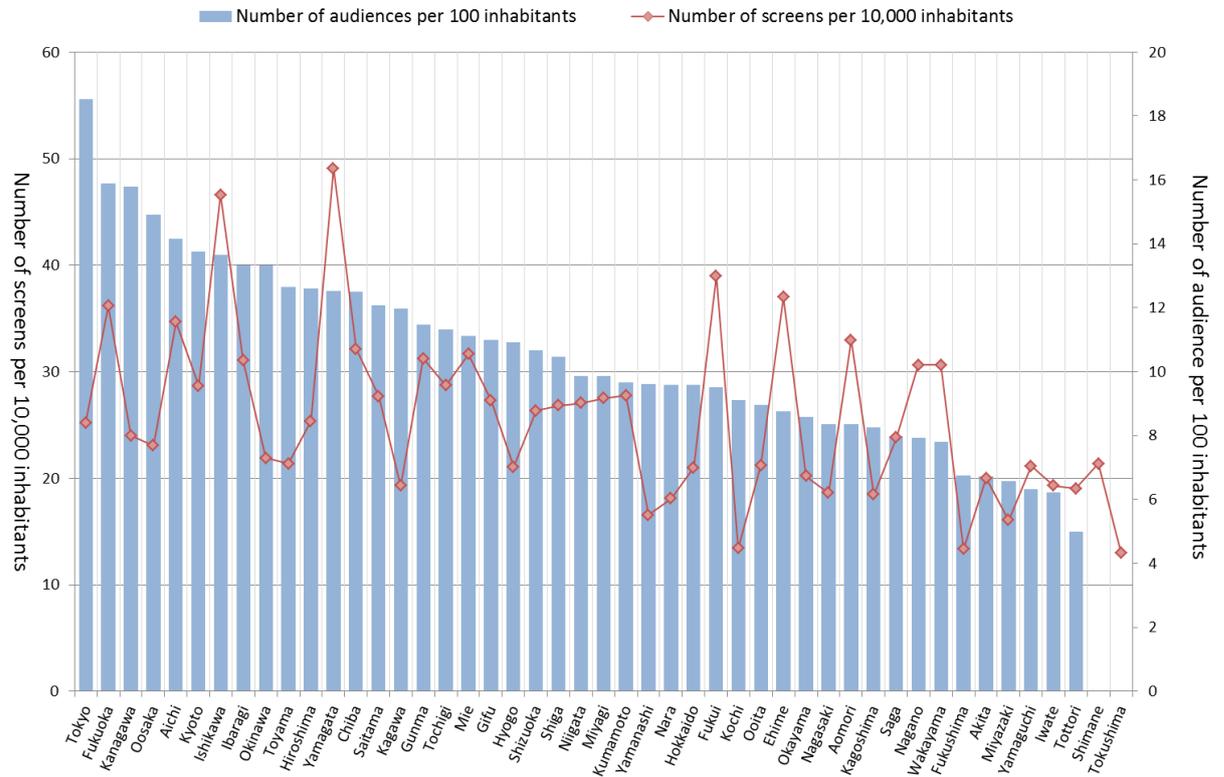
3.3.2.4 ODS / Public viewing

Theaters have progressively invested in digitizing its content delivery environment. This has accelerated the provision of ODS (Other Digital Stuff / Online Digital Source), where these screens can show public viewing of non-film contents, such as music live entertainment, sports and performance arts. Going to the theaters to see the live performance, instead of the actual event venue, is being recognized as one of means of enjoying live entertainment.

This trend is also expected to be one of means toward Tokyo Olympic Games in 2020. For example, local theaters can, not just to screen live footage of the games, but also feature certain athletes whose hometown is in or near that local area, so that the local supporters can participate remotely. These activities will add value to the current business of exhibition and theaters in terms of growing indifference of viewership in theaters, and also contribute to local economy and society in terms of local revitalization.

In relation to the trend above, Figure 3-7 describes the number of audiences and screens normalized in terms of population, for each prefecture in Japan. In terms of number of audiences, Tokyo has the highest figure, followed by Fukuoka, Kanagawa, Osaka, and Aichi prefectures which have major cities in the country. The difference is three to four folds between the highest (Tokyo) and the lowest (Tottori). On the other hand, number of screens, also normalized in terms of population, the trend is different where many regional prefectures, such as Ishikawa, Yamagata, Fukui and Ehime prefecture has higher figure than Tokyo. Although this difference is due to factors such as geographical concentration and/or population composition, it can be viewed that these prefectures have the infrastructure of the potential environment to attract audiences, thereby efforts and approaches can be taken to realize the potential.

Figure 3-7 Number of audiences and screens per population in each prefecture



(Source: Motion Picture Producers Association of Japan, Inc., Ministry of Economy, Trade and Industry)

3.4 TV program production / distribution

3.4.1 Economic contribution

The estimated result of the economic contribution of the TV program production/ distribution industry is shown in Table 3-5.

The TV program production industry has brought the economic contribution of 789.5 billion Yen for gross output, 398.0 billion Yen for value added, and 63.3 billion Yen for tax revenue. Likewise, the TV program distribution industry has brought the economic contribution of 665.6 billion Yen for gross output, 335.5 billion Yen for value added, and 53.4 billion Yen for tax revenue. In total, 1,455.1 billion Yen for gross output, 733.5 billion Yen for value added, 116.7 billion Yen for tax revenue, and 34,913 employees.

Table 3-5 Economic contribution for TV program production / distribution sector

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
TV Production	390.1	789.5	176.8	398.0	87.4	194.4	25.9	63.3	14,270	34,913
TV Distribution	328.9	665.6	149.1	335.5	73.7	163.9	21.8	53.4		
Total	719.0	1,455.1	325.9	733.5	161.1	358.3	47.7	116.7	14,270	34,913

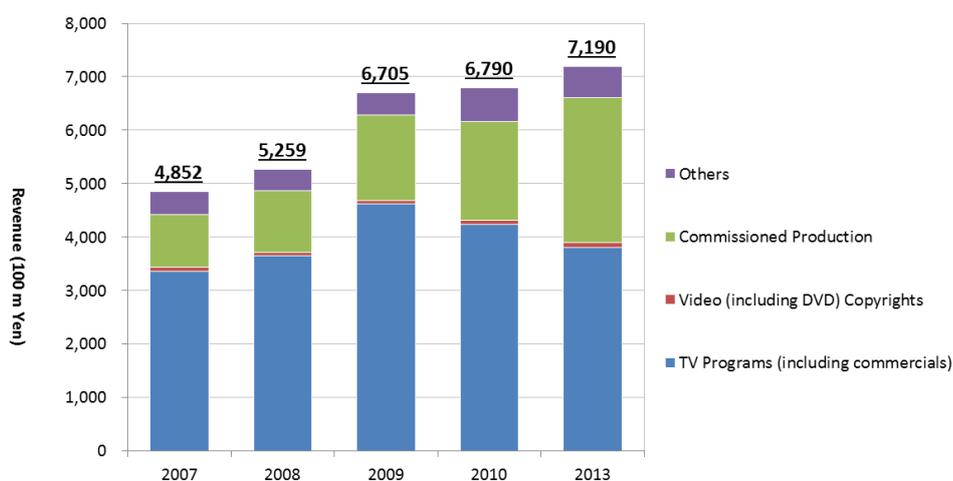
(Source : Mitsubishi Research Institute, Inc.)

3.4.2 Market trend

3.4.2.1 Revenue

Production and distribution of TV programs has the most highest share in terms of revenue within "Motion Picture and Video Production/ Distribution "(Industrial Classification) in Japan. Revenue from the TV program production and distribution industry is shown in Figure 3-8. Similar to the film production and distribution industry, the increasing tendency in revenue can be seen in this industry as well. As for the revenue breakdown, in addition to the revenue from the main business of the production and distribution of TV programs, the revenue from the commissioned production has increasingly accounted for the percentage in the breakdown.

Figure 3-8 Revenue from the TV program production and distribution industry¹¹



(Source: "Survey of Selected Service Industries", Ministry of Economy Trade and Industry)

3.4.2.2 International market development

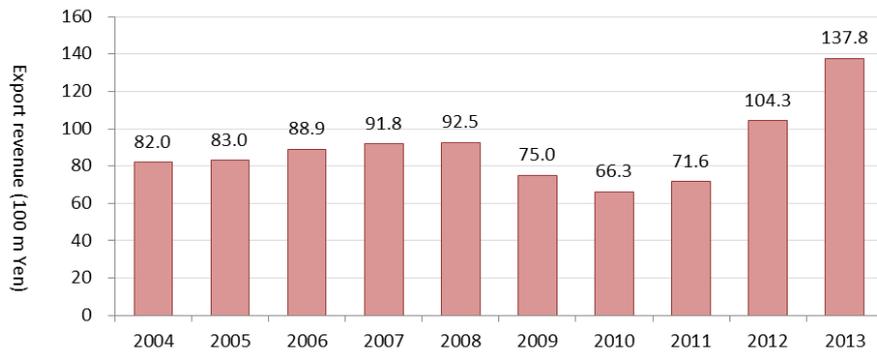
Similar trend to film production / distribution, international market development of TV broadcast contents is another area of considerable attention.

Figure 3-9 indicates the international revenue of Japanese TV broadcast content. It shows the increase trend, and 2013 saw the highest figure of 13.8 billion Yen. Figure 3-10 shows the breakdown of the latest revenue results. It indicates that over half of revenue is attributed to items other than broadcasting rights, which describes the variety of business models in international marketing. In terms of genres, the highest was for animation(62.2%), followed by dramas(15.6%) and variety(13.3%), therefore animation content can be considered as possessing strong international competence.

Under the Japanese Government's "Japan Revitalization Strategy", promotion of "Cool Japan" a strategic initiative to promote Japan's appeal, and to develop domestic industry and market creation. One of the goals of the strategy is to increase of current international revenue of broadcasting content by three-fold, by 2018. In reaction to this initiative, in September 2013, Broadcasting Export Association of Japan (BEAJ) has been established consisting of broadcasters, advertisement companies, trading companies and other various organizations, to promote collaboration domestically and internationally. These activities would bring positive impact in terms of revenue stream and domestic industry development.

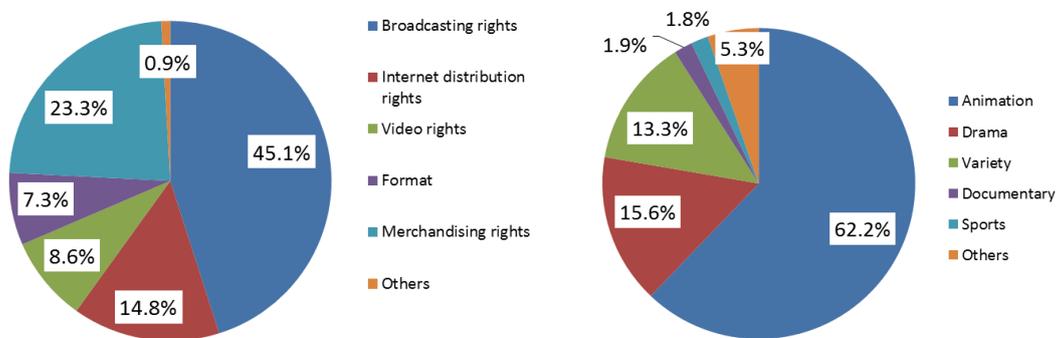
¹¹ The index related to TV program production and distribution is extracted from the "Motion Picture and Video Production/ Distribution" section in *Survey of Selected Service Industries* (Ministry of Economy, Trade and Industry).

Figure 3-9 International revenue of Japanese TV broadcast content



(Source: IICP)

Figure 3-10 Revenue breakdown of international revenue for 2013



(Source: IICP)

3.5 Television broadcasting

3.5.1 Economic contribution

The estimated result of the economic contribution of the television broadcasting industry is shown in Table 3-6. The television broadcasting industry has brought the economic contribution of 8,183.1 billion Yen for gross output, 3,993.3 billion Yen for value added, 699.5 billion Yen for tax revenue, and 279,083 employees.

Table 3-6 Economic contribution for Television broadcasting sector

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Public broadcasting	674.8	1341.6	380.6	743.5	169.5	352.4	61.8	122.1	11,794	46,047
Private broadcasting	2208.3	5092.8	837.4	2325.1	347.7	1070.8	160	408.6	46,918	173,177
CATV broadcasting	497.5	960	297.3	541.9	120.1	241.6	47.2	88.4	18,215	39,400
Satellite broadcasting	366.1	788.7	164.1	382.8	19.5	126.4	44.5	80.4	1,625	20,459
Total	3746.7	8183.1	1679.4	3,993.3	656.8	1791.2	313.5	699.5	78,552	279,083

(Source : Mitsubishi Research Institute, Inc.)

3.5.2 Market trend

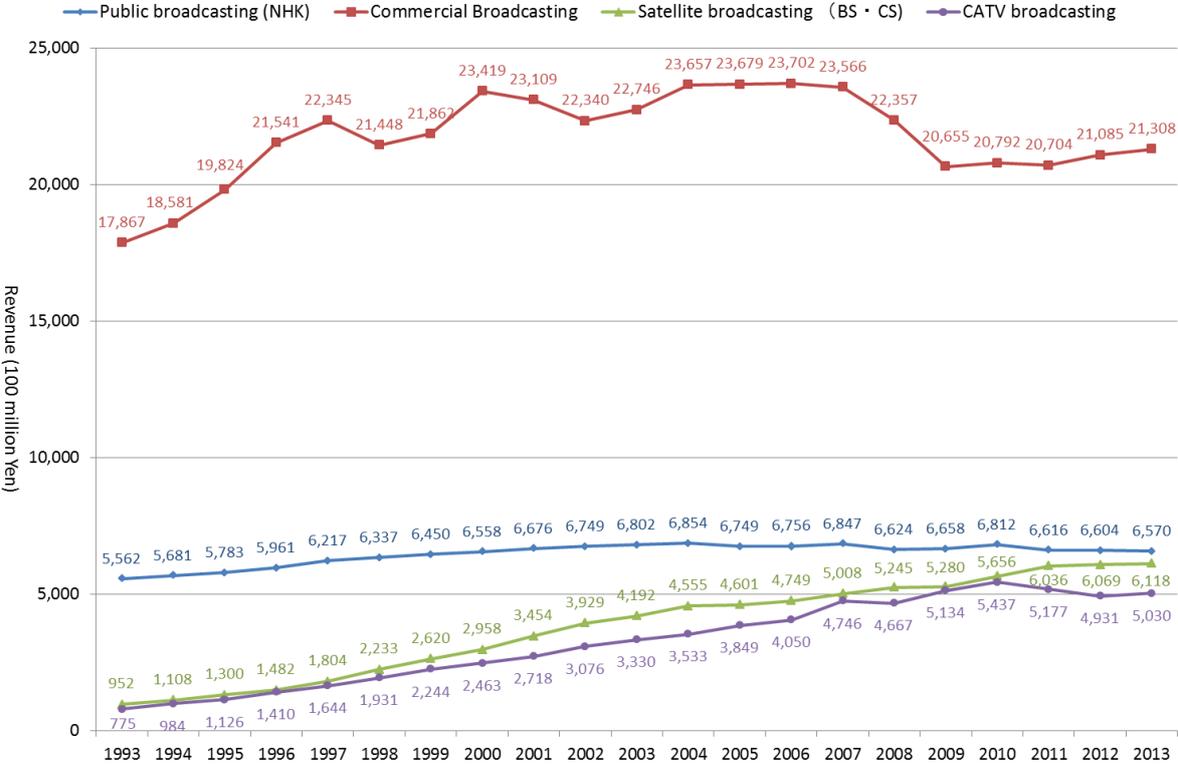
3.5.2.1 Revenue

Total revenue of the major broadcasting media is shown in Figure 3-11. The operating revenue of the terrestrial broadcasting has been sluggish in accordance with the declining tendency in the advertising expenditure. However, it is forecasted that it will turn to increase trend after FY 2012¹². On the other hand, revenue is steadily increasing for satellite broadcasting and CATV. One reason for this is due to increase in households upgrading a TV set and tuners to receive terrestrial digital broadcasting. As for BS broadcasting, number of subscribers continues to increase by providing program menu to different market segment compared to free-to-air terrestrial broadcasting and thus contributing to the overall advertising market. As for CATV, the shift to HD (High Definition), expansion of channel lineups, bundled service offers (with internet and/or telephone services), resulted in increase in subscription leading to revenue growth. It is now common that CATV broadcasters offer 30 to 50 channels for basic packages including various channels such as films, sports, news, animations, documentaries, and additional option channels. As shown in Figure 3-11, especially satellite broadcasting and CATV's subscribers are steadily increasing. Due to the transition to terrestrial digital broadcasting, the market has seen the penetration in BS/ CS 110° E broadcast hybrid antennas and multi-band receivers, subscribers to CS 110°E are increasing as

¹² Based on the simulation result by the Japan Commercial Broadcasters Association (JBA) (the former NAB).

well. Therefore it can be said that the replacement of receivers for terrestrial broadcasting has also made the BS/ CS 110°E to penetrate widely.

Figure 3-11 Revenue from terrestrial broadcasting, satellite broadcasting, and CATV



(Source: "Revenue and expenditure of general broadcasters and cable TV broadcasters", Ministry of Internal Affairs and Communications)

3.5.2.2 Promotion of 4K / 8K broadcast

In Japan, all the prefectures have completed transition to the terrestrial digital broadcasting. In March 2015, Digital-Analog conversion service provided by CATV platform has concluded due to full transition. Satellite broadcasting has been allocated with new channels transition from the conventional standard definition (SD) broadcasting to high definition (HD) broadcasting is in progress. Multi-channel broadcasting through high definition (and 3D broadcasting) are being provided over BS broadcasting and CS (Long. 110°E) .

In terms of further development, implementation of 4K / 8K in broadcasting is currently of the hottest topic among stakeholders in Japan. The roadmap initiated by the government, will promote trial broadcasting for CS and BS by 2016, followed by actual transmission of 8K super hi-vision by 2018. In addition, in the development toward 2020, the year of Tokyo Olympic Games, the government goal is to promote 4K / 8K based broadcasting, and diffusion of 4K / 8K TV sets.

Table 3-7 Roadmap for 4K / 8K service

Year	Goal
2015	<ul style="list-style-type: none"> ● Launch of 4K service over CS broadcasting (March) ● Launch of 4K service over CATV and IPTV
2016	<ul style="list-style-type: none"> ● Launch of 4K trial service (maximum 3 Ch.) and 8K trial service (1 Ch.) ● Launch of 8K service over CATV and IPTV
2018	<ul style="list-style-type: none"> ● Launch of 4K and 8K service over BS broadcasting (launch as early as possible)

(Source: Ministry of Internal Affairs and Communications)

3.5.2.3 Convergence of broadcast and communication

Transition to full digitization, penetration of broadband internet access and terminals (smartphones, tablets, digital TVs, etc.), and development of internet technology such as HTML 5, is expected to bring new era in converge of broadcasting and communication. In Japan, Hybridcast, a technology standard to implement hybrid TV services developed by NHK, has been attracting attention and trials have been conducted to enhance current broadcast platform by utilizing internet access and second screen terminals (smartphones, tablets). It provides high-quality visuals and intensive information on TV screens, as well as interactive functions over social and personal services, and collaboration with multi-screens. Future challenges rely on penetration of Hybridcast compatible TVs, increase in internet access for TVs, production of Hybridcast compatible broadcast contents, however the new platform will provide new interface for broadcasting and possibility for new business models.

3.6 Home video

3.6.1 Economic contribution

The estimated result of the economic contribution of the home video industry is shown in Table 3-8. The home video industry has brought the economic contribution of 556.2 billion Yen for gross output, 280.4 billion Yen for value added, 490.6 billion Yen for tax revenue, and 10,027 employees. Note that due to limitation in available data, the figures are wholesale (shipment) based where it covers the distribution between video distributor and retail and rental shops. For instance, number of employees that work at retail and rental shops is excluded.

Table 3-8 Economic contribution of Home Video sector

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Home Video	274.8	556.2	124.5	280.4	61.5	136.9	18.2	44.6	2,005	4,906

* Other audio-visual contents is included

(Source : Mitsubishi Research Institute, Inc.)

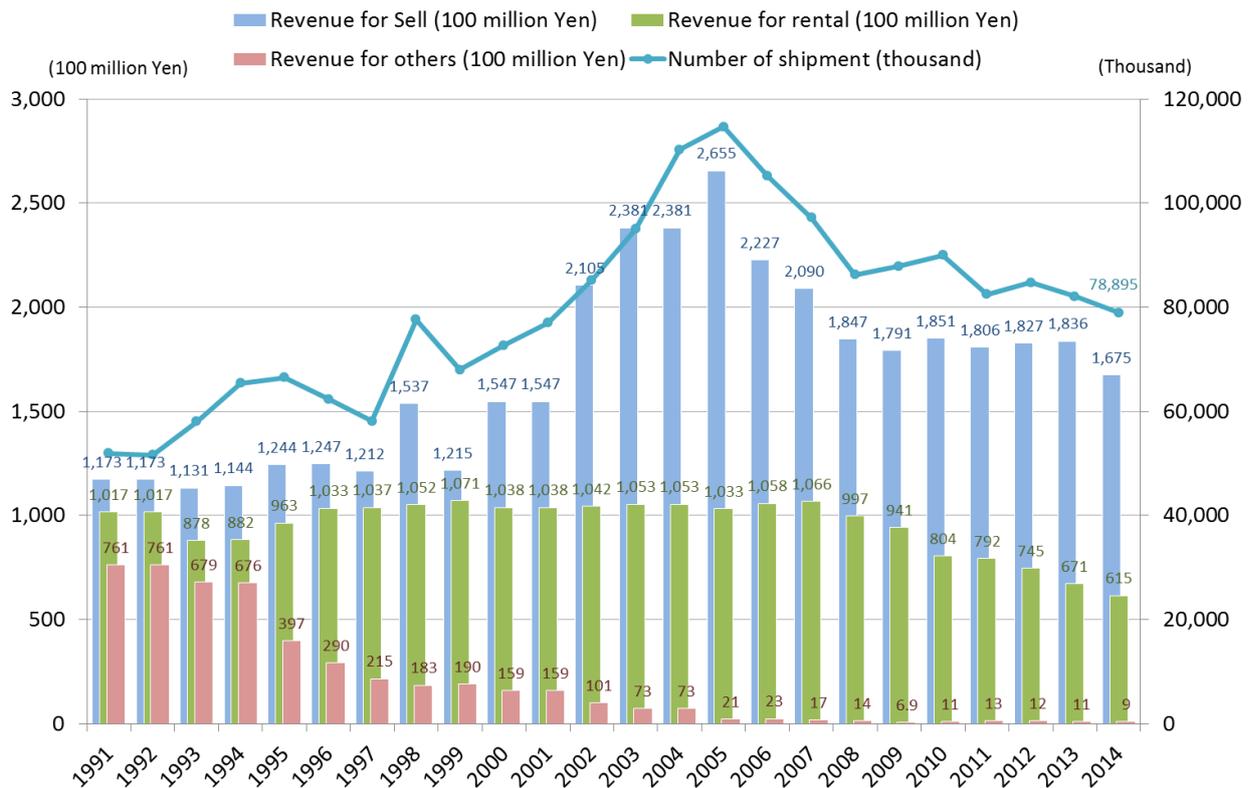
3.6.2 Market trend

3.6.2.1 Revenue (wholesale-based)

Revenue from home video sales is shown in Figure 3-12. Revenue from sell market (shipment to video retail stores) expanded steadily after 2000 as DVD penetration accelerated. However, it turned into a decrease in 2005, and the market has seen downtrend trend since.

The revenue from rental market (shipment to video rental stores) has constantly maintained the market size, and a stable market has been formed. However, a little later than the sell market, it began to turn into a declining tendency around 2008, although the declining tendency is not as seen in the sell market due to inventory management of rental video stores.

Figure 3-12 Revenue from home video sales (wholesale to retail and rental shops)

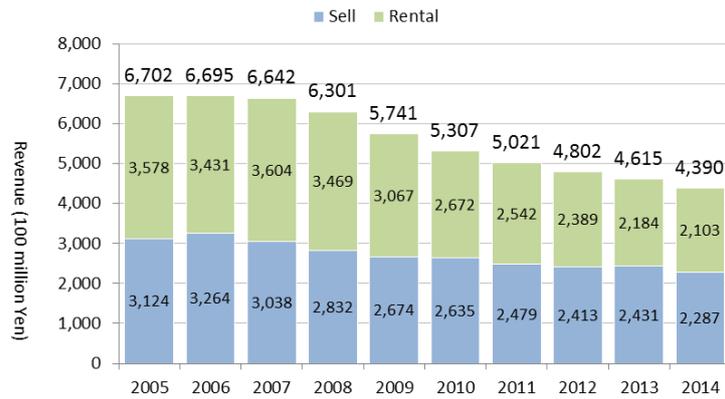


(Source: Japan Video Software Association)

3.6.2.2 Revenue (retail-based)

Revenue from home video sales from final consumer market (retail-based) is shown in Figure 3-13. The ratio has been generally maintained between sell (retail) and rental market, however the decreasing tendency is seen as a whole. The rental market has seen declining tendency recently, due to decrease in demand for foreign films and foreign TV dramas (see 3.6.2.3). In 2014, sell market was 228.7 billion Yen and rental market was 210.3 billion Yen amounting up to 439.0 billion Yen.

Figure 3-13 Revenue from home video market (final consumption)

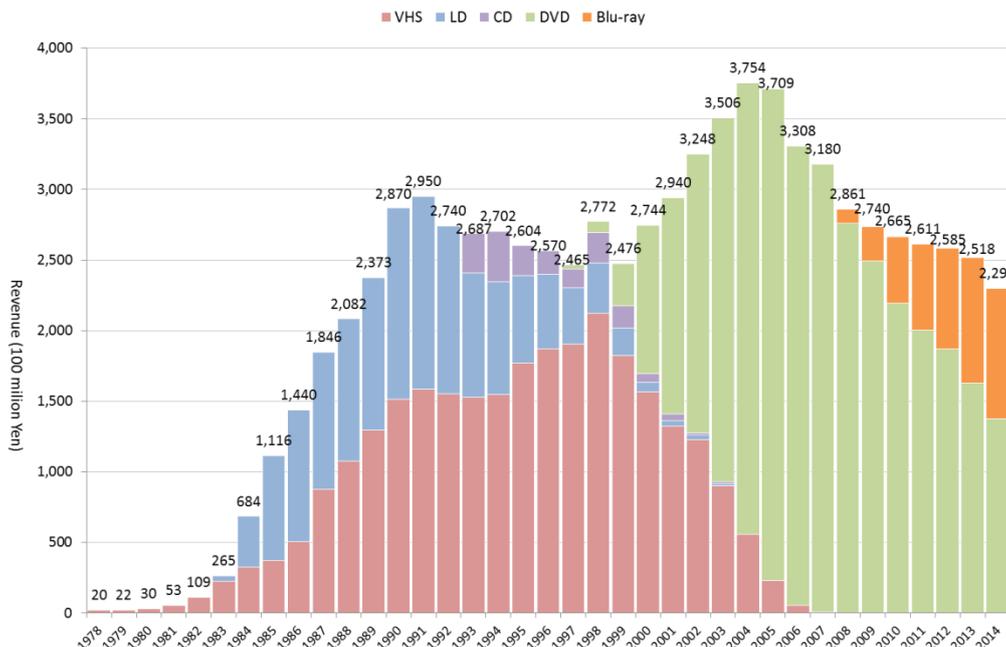


(Source: Consumer survey conducted by Japan Video Software Association)

3.6.2.3 Revenue by media and genre

Revenue for each home video media is shown in Figure 3-14. DVD has substituted former major media rapidly after 2000, however its revenue has been in decreasing tendency since 2005, after the substitution reached the completion stage. However, BDs, which shipment started around 2008, has expanded its share steadily. Its result in 2014, accounted for about 40% of the total home video revenue, a rise compared to 23% in 2011. The shift to BDs depends on genres, in which animation videos have robust demand for high definition media. With this background, it is expected that BD will contribute to minimize the declining tendency in sales.

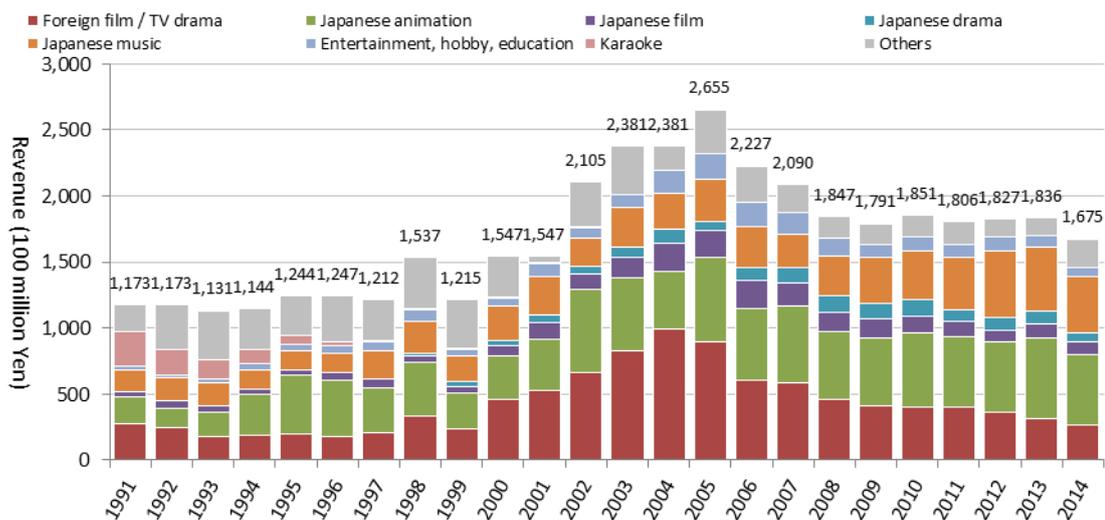
Figure 3-14 Revenue by home video media



(Source: Japan Video Software Association)

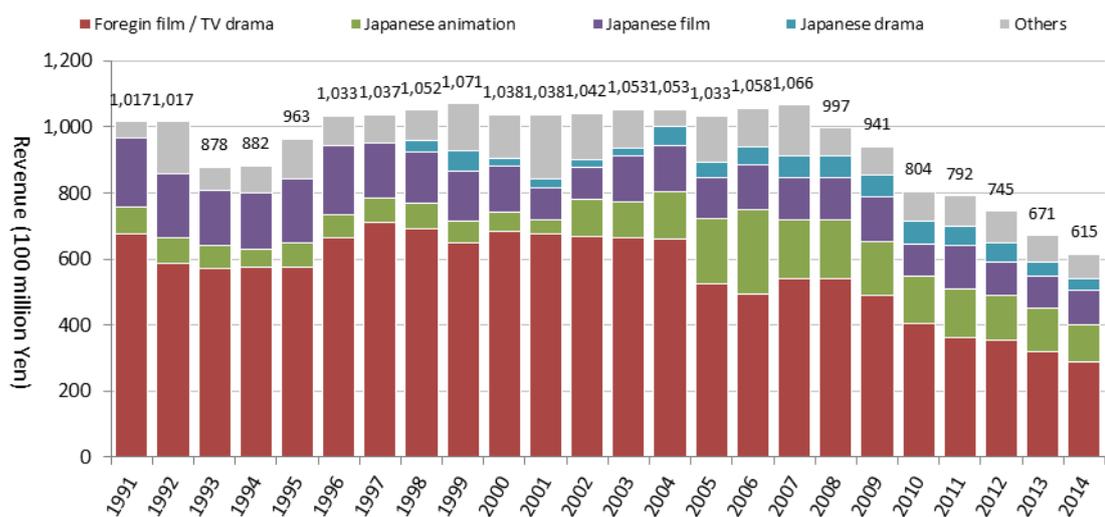
Revenue share by genres is shown in Figure 3-15 and Figure 3-16, for sell and rental, respectively. For sell market, foreign film / TV drama has been declining since 2004, currently the market is supported by domestic animation and music video products, which fans have a high willingness to pay for packaged products. These fans have potential demand for high quality products, therefore increase in sales for Blu-ray disc products has been seen particularly in this market. For rental market, foreign film / TV drama is still the base of the market mostly provided under revenue-share scheme, however the market is seen decline trend in the long term.

Figure 3-15 Revenue share by genres (Sell)



(Source: Japan Video Software Association)

Figure 3-16 Revenue share by genres (Rental)



(Source: Japan Video Software Association)

3.7 Online service

3.7.1 Economic contribution

The estimated result of the economic contribution of the film/ video distribution through online service (internet) is shown in Table 3-9. Online service industry contributes 253.9 billion Yen for gross output, 131.6 billion Yen for value added, 23.2 billion Yen for tax revenue, and 11,793 employees.

Table 3-9 Economic contribution- Summary of results

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Online service	125.5	253.9	58.7	131.6	32.8	68.5	10.6	23.2	4,098	11,793

(Source : Mitsubishi Research Institute, Inc.)

3.7.2 Market trend

3.7.2.1 Revenue

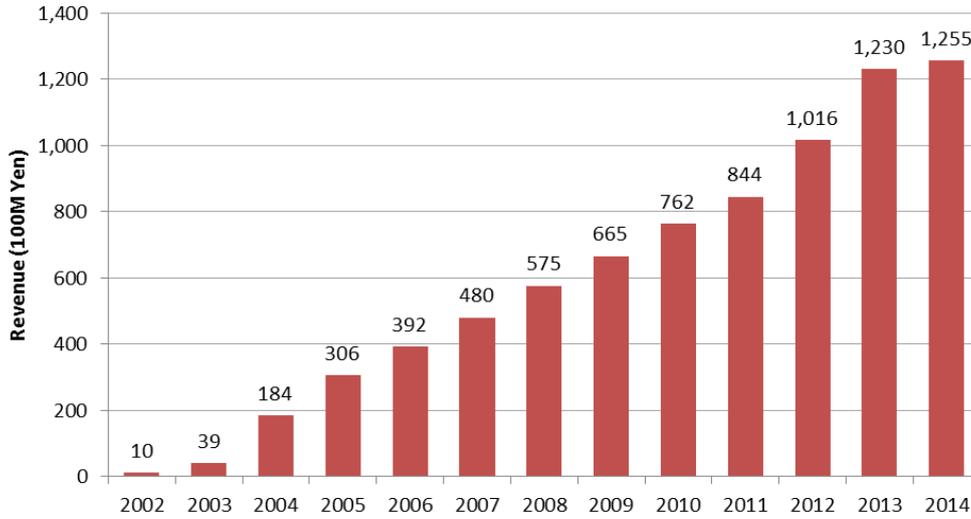
The online service market described in this section is mainly the VOD (Video On Demand) market. VOD market in Japan is typically provided over the internet, including managed services through CATV or IPTV, and so called OTT (over the top) services which viewers can access to audio-visual contents as long as they have internet connection. Also, in terms of business models, various services is currently provided based on free-access service (typically, advertisement model), and premium service (charged model).

The revenue for online service for film / video contents market is growing remarkably reaching 125.5 billion Yen in 2014 and it is expected to pass 200 billion Yen by 2020¹³. The percentage of VOD service usage was 16.7% (7.8% for active users) out of 20 – 69 age group¹⁴. Also, the market is seeing gradual shift to VOD service over mobile, where currently 36.3% of VOD users mostly use either smartphone or tablet to access VOD content.

¹³ Forecast provided by Digital Content Association of Japan

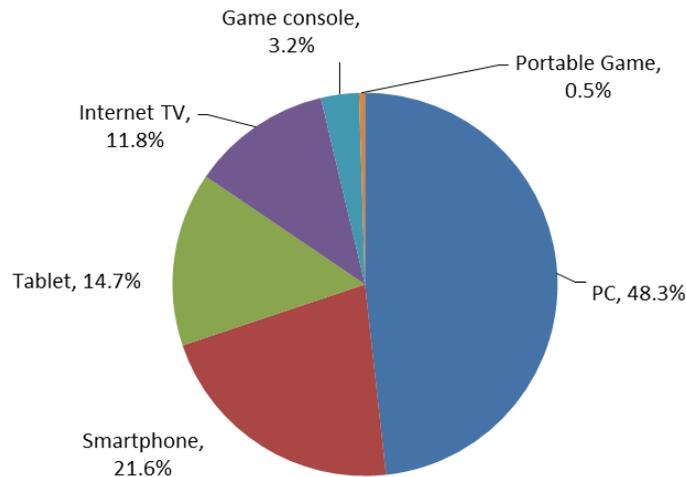
¹⁴ Research conducted by Japan Satellite Broadcasting Association (JSBA) in September 2014 over web-survey (20,000 sample)

Figure 3-17 Market revenue trend for VOD services



(Source : Digital Content Association of Japan)

Figure 3-18 Mostly used devices to access VOD content



(Source : Japan Satellite Broadcasting Association)

3.7.2.2 Rise of SVOD services

VOD (Subscription Video on Demand) services have been in the market for a few years, with various providers such as major broadcasters and mobile operators entering the market. However, in the early phase of VOD market, there were major challenges in internet distribution of video contents, such as TV programs, due to lack of framework for rights management and business. Also healthy distribution market for home videos (especially rental) has also been seen as a hurdle for VOD market.

Overcoming these challenges, currently most major broadcasters have launched their own VOD platform providing catch-up services of their TV programs. Recently the market has recently seen

high growth in mobile VOD services. NTT Docomo, the largest mobile operator, has gained 4.4 million subscribers by January 2015 for its mobile VOD “d Video”, compared to 0.7 million in March 2010. The background of success in mobile VODs have been supported by, high demand in mobile content consumption, high penetration of broadband mobile internet access, reasonable pricing at 500 Yen per month, as well as exclusive content for mobile VOD platforms.

The market has continuously attracted attention, for example, in which Hulu’s Japan business (launched in September 2011) was acquired by one of private broadcasters, Nippon Television Network Corporation in February 2014. Another global SVOD platform service, Netflix is also planning its launch during 2015, which will bring impact into to both audio visual production and distribution market. According to analysis conducted by JSBA, although currently VOD services and traditional multi-channel services (CATV/satellite broadcasting discussed in section 3.5) are mutually substitute rather than alternative, the relationship will shift to latter in the long term.

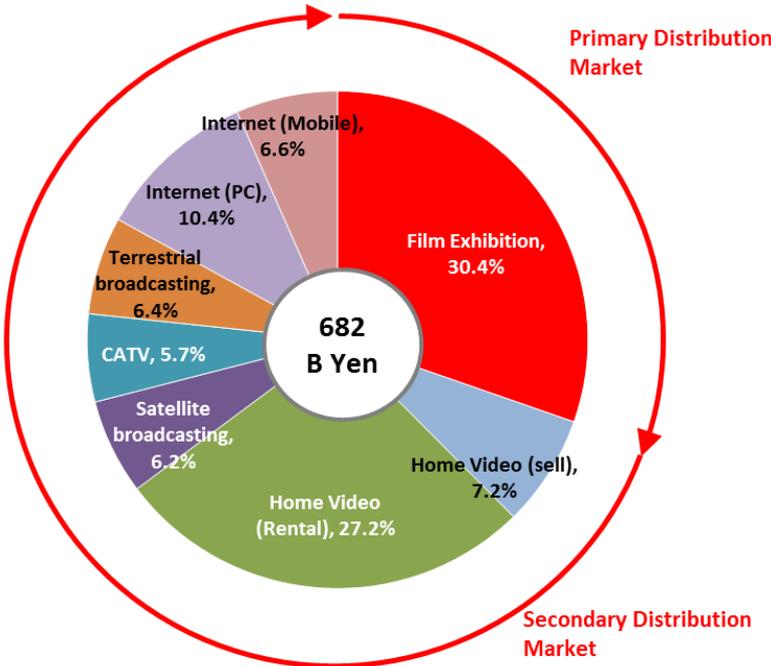
3.8 Estimation of market size attributed to films

In this section, taking account the analysis in the previous sections, we estimated the market value focusing on films, for each distribution window. The results are derived from studies conducted by Institute for Information and Communications Policy (IICP).

In general, film is first distributed through exhibition, which we define in this section, as primary distribution market. It is then distributed through home video (retail, rental), pay TV, terrestrial broadcasting, TV/ PC online and mobile, which we defined as secondary distribution market.

Figure 3-19 shows the market revenue attributed to films, and the share for each distribution window. The figures are estimated by multiplying certain ratio to overall revenue (The details are noted in the appendix). Note that the home video market (sell, rental) accounts for the retail market revenue, which covers the final consumption. The total revenue accounts for 682 billion Yen for 2014. Primary distribution market, or film exhibition, consists of approximately 30.4%, and secondary distribution market accounts for 69.6%. This indicates that the overall market attributed to films is more than three times as large as the film exhibition market. Within the latter market, home video (rental) market has the most shares at 27.2%, which is larger than the size of the primary distribution market¹⁵.

Figure 3-19 Market revenue and share attributed to films (2014)

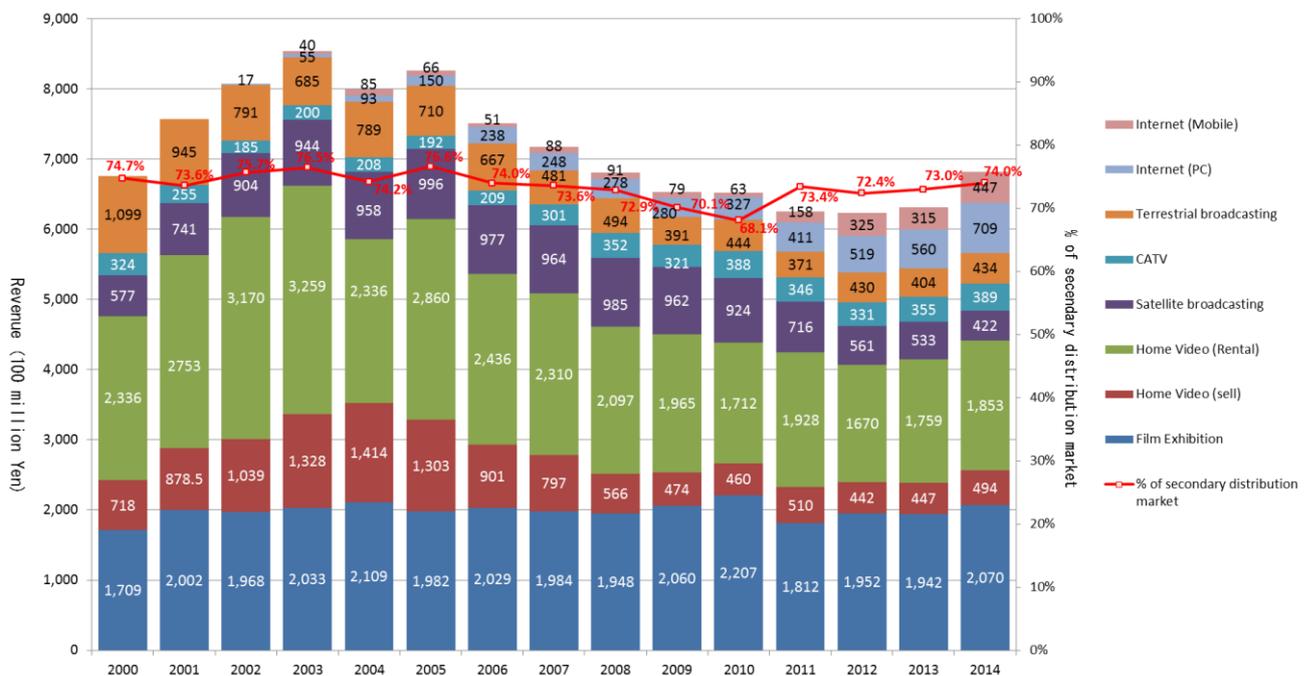


(Source: IICP report, Mitsubishi Research Institute estimates)

¹⁵ Note that the home video market stated in this section is retail based (see 3.6.2.2)

Figure 3-20 shows the change in market revenue after 2000. We can see that the primary distribution market (film exhibition) has maintained its size of approximately 200 billion Yen. Secondary distribution market has been declining since 2003, however its size have accounted for 68% to 76% in the total revenue during the past decade. The increase after 2000 was mainly due to home video market resulting from DVDs gained momentum. Considering the growth in subscription TV services (satellite and cable TVs) as well as TV/ PC online and mobile video services, there are aspects that could bring an opportunity for film attributed market to expand. For example, development in technological as well as regulatory basis in broadcasting and internet/broadband industry, and also the provision of media devices with high capacity /quality such as Blu-ray discs, suggests the importance of the secondary distribution market.

Figure 3-20 Market revenue attributed to films (2000-2014)



(Source: IICP report, Mitsubishi Research Institute estimates)

3.9 Regional economic contribution

Content industry plays its role in various means in terms of regional economic contribution. As local / regional revitalization is one of the main pillars of recent government agendas, this section focuses on economic contribution of film and television industry in terms of regional economic activity from both supply (industry) and demand (consumer) side.

3.9.1 Contribution of local stakeholders in regional areas

Digitization has dramatically changed the value chain of production and distribution, where small – medium sized enterprises can build their business outside of central cities and areas such as Tokyo. For example, production houses with digital editing specialties can communicate and deliver their works from any regional areas in the country to even oversea partners.

For example, in animation sector, although historically most companies are based in central Tokyo¹⁶, recent trend is seen where companies locate their business based in regional prefectures outside of central Tokyo, promoting and collaborating with local partners, including the local government. These companies play an important role in contributing to the local economy, such as employment, and anticipated social effects. Table 3-10 shows examples of these animation companies.

Table 3-10 Examples of animation companies setting their business outside of central Tokyo

Company	Description
Gainax	Gainax, the anime studio behind such projects as Wings of Honneamise, Neon Genesis Evangelion and Gurren Lagann, opened its animation studio for the purpose of global strategy, and also an anime museum, in rural Miharu, Fukushima Prefecture, in January 2015. Gainax president Yoshinori Asao, originally from Fukushima, decided to open themuseum to help the prefecture in its recovering efforts from 2011’s earthquake. It is built in a former junior high school, which closed due to a lack of students.
Graphinica	Graphinica, the anime studio famous for its CG/VFX specialties and also for successfully digitizing its animation works, has opened its remote studio in Sapporo,Hokkaido Prefecture.
Ufotable	Ufotable opened its animation studio in Tokushima Prefecture in 2009, also focusing on collaboration with the local government such as capacity building events for encouraging young students to learn digital content creation.

¹⁶ According to Association of Japanese Animation, out of 419 animation companies 365 were based in Tokyo as of 2011.

Also, regional promotion utilizing locally-produced content, based on collaboration among local governments, broadcasters, content creation companies, and sponsors, is another form of regional revitalization, locally-produced content is favored by many local audiences. Moreover, recent trend is seen where these activities are driven to build relationships with overseas partners and to promote these content to overseas market, such as ASEAN and other Asian countries. Various international co-production schemes are taken for stakeholders to fulfill their demand. Local film-commission activities are also focusing on attracting foreign production companies and broadcasters.

3.9.2 Tourism impact

Content industry has various “ripple effects” to other industrial sectors which are not, in general, directly associated with the original industry. Tourism impact is one of the typical ripple effects of film and television programming. This includes, in particular, tourist’s consumption in transportation, lodging, meals, souvenir purchases and rise in popularity of film and television program locations induced by the location tourism. Also, in Japan, content induced tourism for animated content is nowadays referred to as “pilgrimage to scared places” a term used to mean visiting the location of scenes in animation, considering these places as equivalent to holy places for fans. As such tourism impact is expected, many local governments, local commercial associations and local sponsors perform aggressive invitation activities of filming location as well as promotion activities for the purpose local economy revitalization ; none the less the scale of the effect varies according to the scale of the films producing, film director and the cast. Table 3-11 shows examples of ripple effects related to tourism impact.

Table 3-11 Examples of Ripple Effects (Tourism impact) to the Local Area

Category	Title [year]	Economic effects	Description of the effect	
Film	Nobouno Shiro ("The floating castle") [2012] *box-office revenue: 2.84b Yen	3.791b Yen (within Saitama Prefecture)	Direct effect	1.09b Yen (consumption of audience including box office within Saitama prefecture) 1.42b Yen (consumption of tourists) *500 thousand tourists visited after release to Ikuta-City where the it was filmed (Its average annual number of tourist is 1.1 million)
			Indirect effect	0.843b Yen
			Induced effect	0.438b Yen
	Bizan [2007] *box-office revenue: 1.21b Yen	2.39b Yen	Direct effect	1.80b Yen (consumption of tourists)
			Indirect effect	0.509b Yen
			Induced effect	0.07b Yen
Television Drama/ series	Ama-Chan [2013]	3.284b Yen (within Iwate Prefecture)	Direct effect	2.096b Yen (consumption of tourists) * 688 thousand tourists visited after on-air (doubling annual records)
			Indirect effect	0.707b Yen
			Induced effect	0.482b Yen
	Yae-no-Sakura [2011]	11.3b Yen (within Fukushima Prefecture)	Direct effect	7.0b Yen (consumption of tourists)
			Indirect effect	2.9b Yen
			Induced effect	1.3b Yen
Ryoma-Den [2010]	53.5b Yen (within Kochi Prefecture)	Direct effect	34.2b Yen (consumption of tourists) * 920 thousand tourist visited to local events (compared to 260 thousand of past records of related events)	
		Indirect and induced effect	19.3b Yen	

(Source) Bugin Economic Research Institute, Shikoku Bureau of Economy Trade and Industry, Iwate Economic Research Institute, Bank of Japan Fukushima Branch, Bank of Japan Kochi Branch

Table 3-12 Examples of "pilgrimage to scared places" of animated contents

Title[Year]	Location
Hanasaku-Iroha [2011]	Yuwaku-Onsen of Ishikawa Prefecture
Keion! [2009]	Sagimiya-Town and Satte City of Saitama Prefecture
True Tears [2008]	Toyama Prefecture
Raki Suta [2007]	Toyosato-Town of Shiga Prefecture

4. Appendix

4.1 Methodology and Sources of data

The estimation for economic contribution (gross output, value added, labor income, tax revenue, and employment for each sector) was based on different data sources and assumptions, mostly underlying on the basis of comparable industry within the national statistics. Here we describe the data sources and methodology in details.

Film production / distribution

Item		Details
Direct Impact	gross output	Based on the “2013 Survey of Selected Service Industries (Production and distribution of video content)” published by the Ministry of Economy Trade and Industry. The actual value that includes both production and distribution for 2013 are used, however the figures are not separated between the two, since 2005 statistics. Therefore, the ratio of production revenue to distribution revenue from past statistics (2004), were applied to the total (production + distribution) revenue. Based on interviews, the ratio structure has not changed significantly, therefore the ratio still applies.
	value added / labor income	Based on the ratio of Value Added/ Labor Income to Gross Output for the “Motion Picture and Video Production/ Distribution” in the “2012 Information and Communication Industry Input-Output transaction table” published by the Bureau of Statistics of Ministry of Internal Affairs and Communications.
	tax revenue	Estimation has been conducted for indirect tax, individual tax, and corporate tax. These components were estimated by multiplying effective tax rate, in particular, effective indirect tax rate, effective direct individual tax rate and effective direct corporate tax rate, to Value Added, Labor Income, and Operating Surplus, respectively. Tax rates were derived from 2013 statistics from Ministry of Finance and Ministry of Internal Affairs and Communications.
	employment	Based on the “Survey of Selected Service Industries (Production and distribution of video content) “. FTEs were estimated by applying the ratio of FTEs to total number of employees (both provided in the statistics), to the total number of employees attributed to film production / distribution activity.
Indirect /Induced	gross output	Indirect impact is estimated by applying multipliers for “Motion Picture and Video Production/ Distribution” contained in the I-O table to the

Impact		Gross Output (direct impact) after considering self-sufficiency ratio. Induced impact is estimated by applying average percentage income consumed (0.745) and composition ratio of private final consumption expenditure to every industry (derived from the I-O table), to the direct / indirect labor income.
	value added / labor income /	Based on multiplying the ratios of Value Added/ Labor Income to the Gross Output.
	tax revenue	Based on multiplying effective tax rate, in particular, effective indirect tax rate, effective direct individual tax rate and effective direct corporate tax rate, to Value Added, Labor Income, and Operating Surplus for indirect and induced impact, respectively.
	employment	Indirect / induced employment are derived from employment coefficient and indirect / induced gross output, then multiplied the its impact ratio to direct impact for employment.

Television production / distribution

Item		Details
Direct Impact	gross output	Based on both “The 2014 Survey of Information and Communication Industry (Television program production)” published by the Ministry of Internal Affairs and Communications and “Survey of Selected Service Industries (Production and distribution of video content)”. The latter includes both the production and distribution of television programs, therefore revenues from the former statistics were subtracted. The actual value for 2013 is used.
	value added / labor income	Based on the ratios of Value Added/ Labor Income to Gross Output for the “Motion Picture and Video Production/ Distribution” in the I-O table.
	tax revenue	The methodology is the same as in the previous table.
	employment	Based on FTEs for TV production in the “The 2014 Survey of Information and Communication Industry (Television program production)”. As for FTEs in TV distribution, there are no specific statistics, therefore the ratio of Film production FTEs to Film distribution FTEs was multiplied to TV production FTEs, assuming that both ratio are relative.
Indirect /Induced Impact	gross output	Indirect impact is estimated by applying multipliers for “Motion Picture and Video Production/ Distribution” contained in the I-O table. Rest of the methodology is the same as in the previous table.

	value added / labor income / tax revenue / employment	The methodology is the same as in the previous table.
--	--	---

Film Exhibition

Item		Details
Direct Impact	gross output	Based on the exhibition revenue statistics published by the Motion Picture Producers Association of Japan, Inc. The actual value for 2014 is used.
	value added / labor income	Based on the ratios of Value Added/ Labor Income to Gross Output in the "Movie theaters/ Performing theaters/ Event halls" in the I-O table.
	tax revenue	The methodology is the same as in the previous table.
	employment	Based on FTEs for Cinemas, provided in the "The 2013 Survey of Selected Service Industries (Cinemas)" published by the Ministry of Economy Trade and Industry.
Indirect /Induced Impact	gross output	Indirect impact is estimated by applying multipliers for "Movie theaters/ Performing theaters/ Event halls" contained in the I-O table. Rest of the methodology is as the same in the previous table.
	value added / labor income / tax revenue / employment	The methodology is the same as in the previous table.

Television Broadcasting

Item		Details
Direct Impact	gross output	Based on the revenue statistics of each broadcasting platform (Public, free-to-air, CATV, satellite) from revenue statistics for NHK, and "Income statistics of commercial broadcasters for FY2014" published by the Ministry of Internal Affairs and Communications. The actual figure for 2014 is used.
	value added / labor income	Based on the ratios of Value Added/ Labor Income to Gross Output in the "Public Broadcasting", "Commercial Television Broadcasting", "Commercial Satellite Broadcasting", "Cable Television Broadcasting" contained in the I-O table.
	tax revenue	The methodology is the same as in the previous table.
	employment	Based on the employment statistics for television broadcasting from the "The 2014 Survey on Information and Communication Industry".

Indirect /Induced Impact	gross output	Indirect impact is estimated by applying multipliers for each industry selected as above, contained in the I-O table. Rest of the methodology is the same as in the previous table.
	value added / labor income / tax revenue / employment	The methodology is the same as in the previous table.

Home Video

Item		Details
Direct Impact	gross output	Based on the revenue statistics published by the Japan Video Software Association. Note that the figures represent revenue on wholesale basis (sales to retail and rental stores), and is not converted to retail basis due to limited information. The actual figure for 2014 is used.
	value added / labor income	Based on the ratios of Value Added/ Labor Income to Gross Output in the “Motion Picture and Video Production/ Distribution” contained in the I-O table.
	tax revenue	The methodology is the same as in the previous table.
	employment	Based on the “The 2004 Survey of Selected Service Industries (Production and distribution of video content) “. Ratio for employment to revenue (video sales), from past statistics (2004) were applied to the Gross Output, as current statistics does not distinguish the figures.
Indirect /Induced Impact	gross output	Indirect impact is estimated by applying multipliers for “Motion Picture and Video Production/ Distribution”” contained in the I-O table. Rest of the methodology is the same as in the previous table.
	value added / labor income / tax revenue / employment	The methodology is the same as in the previous table.

Online Service

Item		Details
Direct Impact	gross output	Based on the revenue statistics published by the Digital Contents Association of Japan (DCAJ). This includes revenue for internet video streaming (ex. VODs) to platforms such as TV/ PC/ Mobile. The actual figure for 2014 is used.

	value added / labor income	Based on the ratios of Value Added/ Labor Income to Gross Output in the “Internet based services” contained in the I-O table. Note that the statistics attributed to this category covers IPTV services.
	tax revenue	The methodology is the same as in the previous table.
	employment	Based on the number of employees provided in the “Survey on Information and Communication Industry (Internet based services)”. FTEs were estimated by applying the ratio of total FTEs to the total revenue, to the Gross Output.
Indirect /Induced Impact	gross output	Indirect impact is estimated by applying multipliers for “Internet based services” contained in the I-O table. Rest of the methodology is the same as in the previous tables.
	tax revenue	
	value added / labor income / employment	The methodology is the same as in the previous table.

The ratio and multipliers derived is provided in the tables below. Figures used, attributed to the same sector in the I-O table, are provided in the same table.

Film production / distribution, Television production / distribution, Home video

	Ratio or multiplier	Value
Direct impact	Ratio of value added to gross output	0.45
	Ratio of labor income to gross output	0.22
Indirect impact	Multiplier for gross output	1.78
	Multiplier for value added	1.94
Induced impact	Multiplier for gross output	1.25
	Multiplier for value added	1.32

Film Exhibition

	Ratio or multiplier	Value
Direct impact	Ratio of value added to gross output	0.37
	Ratio of labor income to gross output	0.20
Indirect impact	Multiplier for gross output	1.89
	Multiplier for value added	2.29
Induced impact	Multiplier for gross output	1.24
	Multiplier for value added	1.37

Television Broadcasting

	Ratio or multiplier	Value
Direct impact	Ratio of value added to gross output	0.45
	Ratio of labor income to gross output	0.18
Indirect impact	Multiplier for gross output	1.94
	Multiplier for value added	2.07
Induced impact	Multiplier for gross output	1.24
	Multiplier for value added	1.30

Online

	Ratio or multiplier	Value
Direct impact	Ratio of value added to gross output	0.47
	Ratio of labor income to gross output	0.26
Indirect impact	Multiplier for gross output	1.75
	Multiplier for value added	1.91
Induced impact	Multiplier for gross output	1.27
	Multiplier for value added	1.34

The parameters for estimating tax revenue are as below.

Parameters	Value (b Yen, %)	Year	Source
Indirect Tax revenue	25,266	2013	Ministry of Finance
Nominal GDP	483,075	2013	Cabinet Office (SNA statistics)
Effective indirect tax rate	5.2%	2013	Ratio of above two parameters
Individual direct tax revenue	35,427	2013	Ministry of Internal Affairs and Communications
Compensation of Employees	248,168	2013	Statistics office
Effective direct individual tax rate	14.3%	2013	Ratio of above two parameters
Corporate direct tax revenue	25,897	2013	Ministry of Internal Affairs and Communications
Operating Surplus / Mixed Income	95,934	2013	Statistics office
Effective direct corporate tax rate	27.0%	2013	Ratio of above two parameters

4.2 Main quantitative data sources

- Income statistics of commercial broadcasters for FY2014, published by the Ministry of Internal Affairs and Communications, September 2015.
- The 2013 Survey of Selected Service Industries (The survey includes separate statistics for “Production and distribution of video content” and “Cinemas”), published by the Ministry of Economy Trade and Industry, October 2014.
- The 2014 Survey of Information and Communication Industry (Television program production)” published by the Ministry of Internal Affairs and Communications, March 2015.
- The 2012 Information and Communication Industry Input-Output transaction table, published by the Bureau of Statistics of Ministry of Internal Affairs and Communications, March 2014.
- Revenue statistics, published by the Motion Picture Producers Association of Japan, Inc., updated annually.
- Revenue statistics, published by the Japan Video Software Association, updated every half year.
- Digital Content White Paper, published by the Digital Content Association of Japan, September 2014
- The 2014 VOD Market report, published by the Digital Content Association of Japan, April 2015
- National account, published by Ministry of Finance, Ministry of Internal Affairs and Communications ,Statistics office

4.3 Details for estimation of market size attributed to films

Market		Framework	Methodology	Source
Primary Distribution Market	Film Exhibition	Revenue from exhibition of films produced for theatrical release	Film exhibition revenue	Movie Almanac
Secondary Distribution Market	Terrestrial Broadcast	Operators' revenue (subscription, advertising) from broadcasting films	Broadcast operators' revenue * percentage of film broadcasted	Commercial Broadcasting Almanac, NHK Radio & television year book
	Satellite Broadcast, CATV	Operators' revenue from broadcasting films	Satellite broadcast operator and CATVs' revenue * percentage of film broadcasting	NHK Radio & television year book, MIC materials
	Home Video	Revenue from film video	Wholesale Revenue * (retail margin ratio)+ total rent video * wholesale market share of film videos * average rental price	JVA materials
	Online	(PC Internet, Mobile) Online Video (film) revenue	User average expenditure * number of internet users / mobile internet users	IICP survey

*MIC : Ministry of Internal affairs and Communications

*JVA : Japan Video software Association

(Source: "Report on production and distribution of media soft ", IICP)

4.4 Economic contribution excluding other audio-visual contents

Table below shows the economic contribution of the film and TV industry excluding other audio-visual contents, which in this report is defined as adult-entertainment. The figures are taken into account in the home video sector.

Table 4-1 Estimated economic contribution (overall, excluding other audio-visual contents)

[Unit: billion Yen, person]

Sector	Gross output		Value added		Labor income		Tax revenue		Employment	
	Direct	Total	Direct	Total	Direct	Total	Direct	Total	Direct	Total
Film Production	113.5	229.8	51.4	115.8	25.4	56.6	7.5	18.4	8,852	21,661
Film Distribution	115.0	232.7	52.1	117.3	25.8	57.3	7.6	18.7	1,360	3,326
TV Production	390.1	789.5	176.8	398.0	87.4	194.4	25.9	63.3	14,270	34,913
TV Distribution	328.9	665.6	149.1	335.5	73.7	163.9	21.8	53.4		
Film Exhibition	207.0	441.7	77.0	205.9	41.2	102.7	13.0	34.2	12,904	25,686
TV Broadcasting	3,746.7	8,183.1	1,679.4	3,993.3	656.8	1,791.2	313.5	699.5	78,552	279,083
Home video	229.9	465.2	104.2	234.5	51.5	114.6	15.3	37.3	1,975	4,833
Online service	161.4	326.6	75.4	169.2	42.2	88.1	13.6	29.8	4,098	11,793
Total	5,292.5	11,334.2	2,365.4	5,569.5	1,004.0	2,568.8	418.2	954.6	122,011	381,295

4.5 Restrictions

This report has been commissioned by the Motion Picture Associations which has been prepared solely for the purposes herein. Mitsubishi Research Institute, Inc. accepts no liability of any kind to any third party and disclaims all responsibility for the consequences of any third party acting or refraining to act in reliance on the information provided in this report.

All the data collected for the preparation of this report is publicly available; hence we have not conducted an audit in respect to various government departments or other organizations that have provided the information necessary to undertake this assignment. The statements and opinions written in this report are given in good faith, based on information available at the date of this report, and on the basis that all information relied upon is true and accurate in all material respects, and not misleading by reason of omission or otherwise. The views expressed in this report represent our independent consideration and assessment.

We reserve the right, but are under no obligation, to revise or amend our report if any additional information which exists at the date of our report, but was not drawn to our attention during its preparation, subsequently comes to light.