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Economic Contribution of the Japanese Film and Television Industry

Report

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- Japan Commercial Broadcasters Association (JBA)
- Japan Association of Theatre Owners (JATO)
- Compact Disc & Video Rental Commerce Trade Association of Japan (CDV-J)

(Japanese alphabetical)



1. Executive Summary

This study intends to estimate the economic contribution of the Japanese film and television industry. In particular, direct/ indirect economic impacts were estimated, taking into account market trend analysis for each defined market. Taking the results into account, forecasts have been conducted based on market outlook over the next five years. Also, apart from these macro-economic approaches, this study covers case studies to give a practical illustration of the economic effects originating in films.

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 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 2011 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 5,436.4 billion Yen (\$68.0b) for the direct impact, and 11,664.2 billion Yen (\$145.9b) for the total contribution including indirect/ induced impact.
- The **total value added** to the Japanese economy in 2011 from film and television industry is approximately 2,491.2 billion Yen (\$31.2b) for the direct impact, and 5,770.1 billion Yen (\$72.2b) for the total contribution including indirect/induced impact.
- The **labor income** in Japan generated as a result of film and television industry is 1058.6 billion Yen (\$13.2b) for the direct impact, and 2,654.5 billion Yen (\$331.9b) for the total contribution including indirect/ induced impact.
- The **total value added** for the film and television industry accounts for 0.53% of GDP¹ for the direct impact, 1.23% for the total contribution. The former is larger than the automobile manufacturing industry (excl. auto-parts industry) which accounts for 0.49% of GDP in 2011.

¹ Nominal GDP for 2011 : 468.7 trillion Yen (Announced by the Cabinet Office)



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- The **total employment** created in Japan as a result of film and television industry is estimated to be 88,569 for the direct impact, and 264,707, for the total contribution including indirect/ induced impact, for full time equivalent (FTE) positions.

The 5 year market outlook (2011 to 2016) 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 industry is forecast to grow at CAGR 1.5% to reach 4835.8 billion Yen (\$60.5b) by 2016, compared to 4479.5 billion Yen (\$56.0b) in 2011.
- The Japanese economy as a whole experienced a reduction during 2011 due to the Great East Japan Earthquake Disaster in March 2011. However, the market is expected to resume its pace to an increase base toward 2016, 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 are creating a basis to widen consumer demand, through development in digitization, and new trends such as ODS (Other Digital Stuff/ Online Digital Source).
- In addition, diverse distribution channels in the broadcasting sector, which has been fully digitized and channel re-allocated, as well as the penetration of next generation fixed / mobile broadband network, should trigger revitalization in the audiovisual market as a whole.

1.3 Results from case studies

The findings through case studies, focusing on economic ripple effect of films, are as follows:

- Quantitatively assessing the market size attributed to movie content, in 2011, film exhibition revenue was 181.2 billion Yen (\$2.3b), and secondary distribution market (broadcasting, home video, online service) was 560.3 billion Yen (\$7.0b), a three-fold over film exhibition revenue in primary distribution market. It accounts for approximately 10% of the direct impact in gross output for the corresponding industry (4,479.5 billion Yen: \$56.0b).
- The number of film and home video viewers is growing. To add, we can see tremendous growth in number of online video viewers. This indicates the potential demand for audiovisual industry.
- It is essential for the industry to adapt to these structural changes, and to deliver diversity of products and services, so as to benefit not only to existing customers but also to new customers.
- According to the external studies, there are films that created an economic ripple effect, such as on tourism and transportation, in the local economy, which is almost the size of its film exhibition revenue (e.g. "Hula Girl").



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- For example, Disney maintains box-office hits every year, and related business which accounts for almost 500 billion Yen per year. It is assumed to have a large impact in terms of economic contribution.
- In 2011, Tokyo International Film Festival (TIFF) was responsible for the 0.95 billion Yen (\$11.9m) of direct economic effect. Also, external studies have found that winning an international film award has a major economic effect. For example, the economic impact of the Japanese film "Departure" doubled by winning the Academy Award for the Best Foreign Language Film.
- The results of the case studies imply that the film industry contributes to the overall economy as well as to the local economy, such as tourism, in various ways, and that it holds an important role from a social/economic perspective.



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 five 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.

2.1.2 Study items

This report covers the study items shown below.

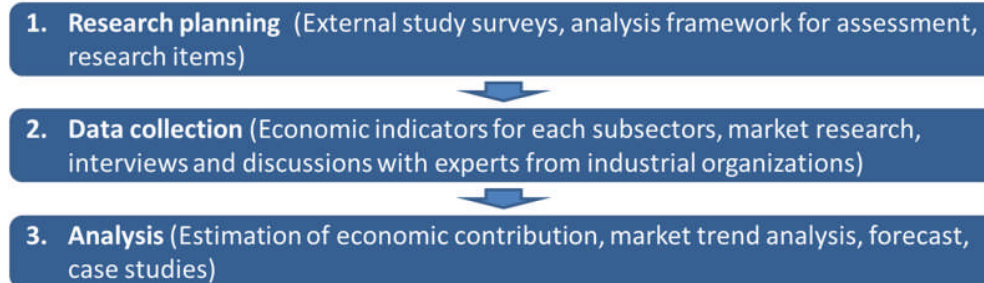
Table 2-1 Description of the study items

Study items	Description	Article
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 2011. This is the main purpose of the assignment.	3.1 –3.7
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.	
Industry Outlook (Market Forecast)	The results explains the industry outlook and estimates for market forecast for major subsectors taking into account the market trend analysis.	3.1.2
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
Case studies for economic contribution of films	The study intends to describe the “ripple effects” originated on films and international film festival based on case studies. The results include survey results of external studies and estimates of direct economic impact.	3.9



2.1.3 Study flow

This study was conducted based on the following steps:



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.
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.
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.



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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 impact: Gross Output, Value Added and Employment that arise based on capital and labor attributed to a specific industry, which in this study, film and television broadcasting industry. It represents the direct economic activities in the industry, which includes, for example, production and distribution of film and television broadcasting content as well as film exhibition.

Indirect impact: Gross Output, Value Added and Employment that arise as a consequence of changes in the level and value for suppliers of goods and services to that industry. It represents economic activities that are brought to other industries which provide goods and services to film and television broadcasting industry. For example, it includes revenue in industries which provide materials to location for film production.

Induced impact: Gross Output, Value Added and Employment 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 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 are 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.

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 them 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 content

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.



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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:

- 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.
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). Internet Protocol TV (IPTV) is included here and its market trend is explained within this subsector.



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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.

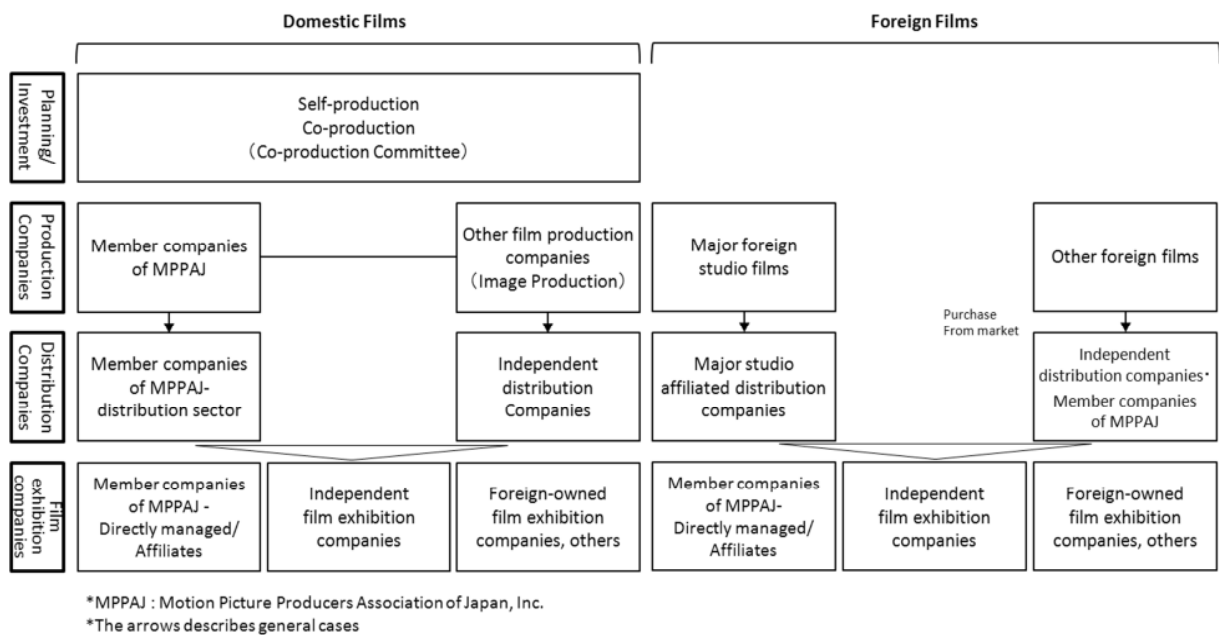
In the case of foreign films, there are mainly two ways to distribution. One way is when major foreign studios distribute through affiliated distribution agencies² and the other is for the Japanese distribution

² 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.



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.

Figure 2-1 Structure of domestic film industry



(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.



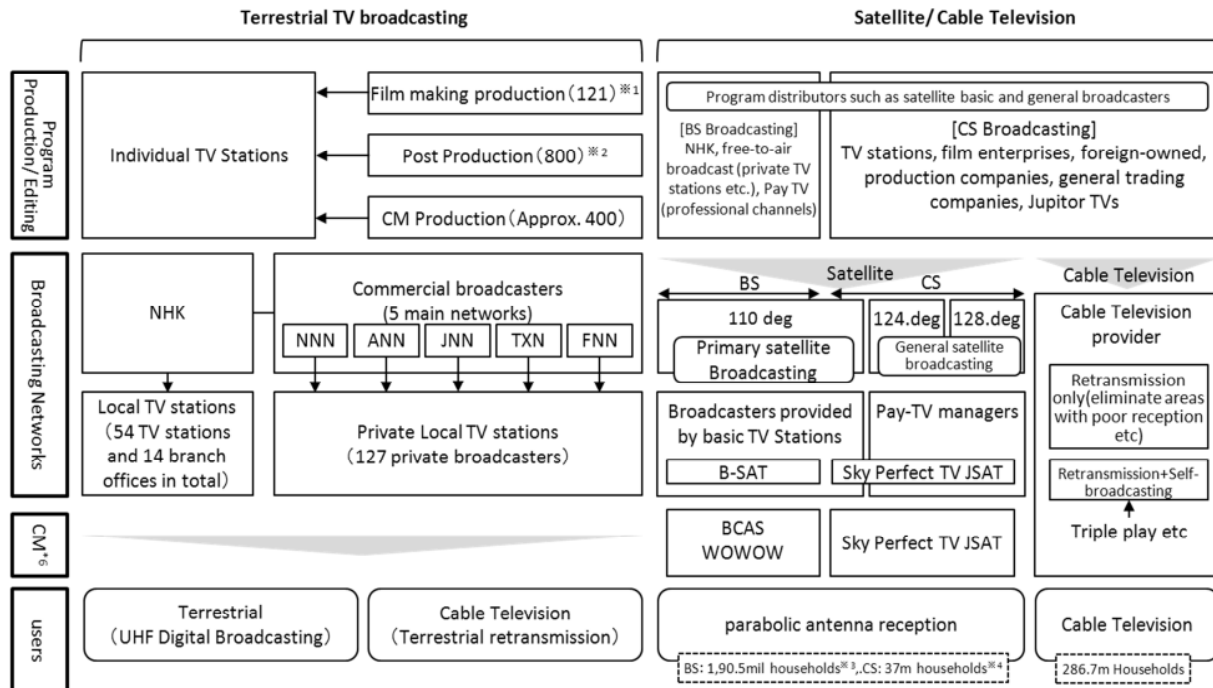
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The former has been developed as semi-quasi-media and the latter has developed as multi-channel specialized media. In 2002, CS broadcasting utilizing communication satellite, which is at the same orbit as BS broadcasting (110° East), has started. However, 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 April 2012, there are 229 terrestrial commercial broadcast operators (255 of them are operators that provide community broadcasting), 108 satellite commercial broadcasters, 556 CATV operators (operators that have wired electronic communication facilities that provide their own broadcasting) and 5 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(April 2012)
 *2: Japan Post Production Association.(JPPA) Number of member companies (April 2012)
 *3: Subscribers for NHK-BS and WOWOW (end of FY2011)
 *4: Subscribers for Sky perfect TV! E2 (end of FY2011)
 *5: Terrestrial Retransmission only households are excluded (end of FY2011)
 *6: Customer management

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

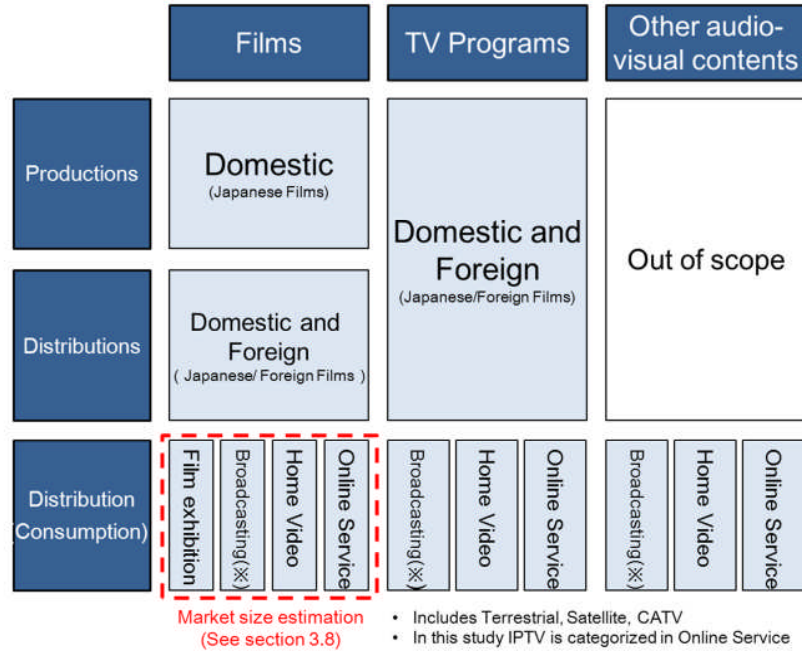
2.3.3 Scope of industry and market

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



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 2011. 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.

To add, as for the economic measures throughout the industry, although there are some differences among subsectors, the Great East Japan Earthquake of March 2011 should be considered as a reduction factor as a whole. The industry outlook which forecasts the next five years (2012 to 2016) is based on past trends taking into account this reduction factor.

2.4.2 Estimated versus actual figures

Numerical values of 2011 were based on the latest data available, by using the actual value of the corresponding year or estimated by taking into account the trend in the market and related measured index. Also, for some subsectors, the available statistics do not fully specify the component parts of the subsector defined in this report, therefore a number of assumptions were made in order to estimate the most approximate results. In particular, approximations from the similar or broader industry categorization have been used.



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The figures for Employment, we used the actual value for the year 2010 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 2011 concerning all the industries defined in this report, as well as five year industry outlook to 2016.

3.1.1 Economic Contribution

The economic contribution in 2011 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 5,436.4 billion Yen (\$68.0b) for the direct impact, and 11,664.2 billion Yen (\$145.9b) for the total contribution including indirect/ induced impact.
- The **total value added** to the Japanese economy in 2011 from film and television industry is approximately 2,491.2 billion Yen (\$31.2b) for the direct impact, and 5,770.1 billion Yen (\$72.2b) for the total contribution including indirect/induced impact.
- The **labor income** in Japan generated as a result of film and television industry is 1058.6 billion Yen (\$13.2b) for the direct impact, and 2,654.5 billion Yen (\$331.9b) for the total contribution including indirect/ induced impact.
- The **total value added** for the film and television industry accounts for 0.53% of GDP³ for the direct impact, 1.23% for the total contribution. The former is larger than the automobile manufacturing industry (excl. auto-parts industry) which accounts for 0.49% of GDP in 2011.
- The **total employment** created in Japan as a result of film and television industry is estimated to be 88,569 for the direct impact, and 264,707, for the total contribution including indirect/ induced impact, for full time equivalent (FTE) positions.

³ Nominal GDP for 2011 : 468.7 trillion Yen (Announced by the Cabinet Office)



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

Table 3-1 Estimated economic contribution (overall)

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Film Production	1,380	2,787	626	1,399	309	683	8,013	23,659
Film Distribution	1,398	2,823	634	1,417	313	691	1,535	4,531
TV Production	3,560	7,190	1,614	3,608	797	1,761	13,071	38,595
TV Distribution	3,230	6,524	1,464	3,274	724	1,598	2,503	7,391
Film Exhibition	1,812	3,835	666	1,785	356	891	15,379	31,352
TV Broadcasting	39,529	86,403	17,880	42,270	6,644	18,592	43,093	148,024
Home video	2,611	4,920	1,775	3,032	1,337	1,898	2,243	4,955
Online service	844	2,160	253	916	106	431	2,732	6,200
Total	54,364	116,642	24,912	57,701	10,586	26,545	88,569	264,707

Table 3-2 Comparison between film/ television industry and other industries

[Unit: 100 M Yen]	Film Industry and Television Industry		Automobile Manufacturing Industry *excluding auto-parts industry	
	Direct contribution	Total contribution	Direct contribution	Total contribution
Value added	24,911	57,701	23,192	125,032
GDP Contribution	0.53%	1.23%	0.49%	2.67%

* The figures for automobile industry (excluding auto-parts industry) is estimated based on data published by Japan Automobile Manufacturers Association, Inc (JAMA), and 2005 Industry Input-Output table

3.1.2 Market outlook (2011 - 2016)

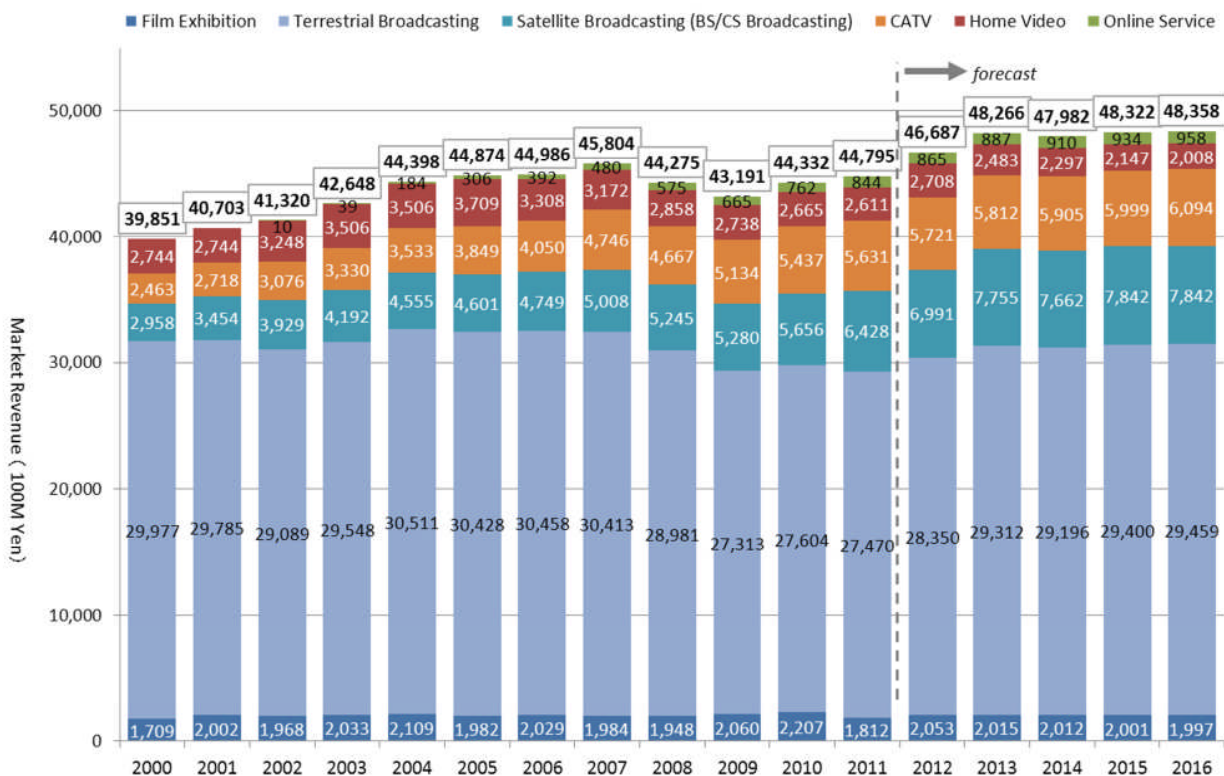
The 5 year market outlook (2011 to 2016) in Japan is as follows. This forecast covers the distribution (consumption) market, in particular, film exhibition, TV broadcasting, home video (retail, rental) and online service market.



- In overall, the film and television broadcasting industry is forecast to grow at CAGR 1.5% to reach 4835.8 billion Yen (\$60.5b) by 2016, compared to 4479.5 billion Yen (\$56.0b) in 2011.
- 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 expected to resume its pace to an increase base toward 2016, 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 is creating demand to widen consumer basis, through development in digitization, and new trends such as ODS (Other Digital Stuff/ Online Digital Source).
- To add, diverse distribution channels in broadcasting sector, which had been fully digitized and channel re-allocated, as well as penetration of next generation fixed / mobile broadband network, should trigger revitalization in the visual content market as a whole.

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

Figure 3-1 Market forecast (2011-2016)



* The figure for broadcasting sector in 2011 is estimated.



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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 2000s will continue for the next five years. In particular, adopting a trend forecast method for the total revenue (domestic and foreign films) during 2000 and 2011, 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 are essential for growth in this sector.
- Television broadcasting market: For terrestrial and satellite broadcasting markets, we adopted the mid-term forecast results published by the Japan Commercial Broadcasters Association (JBA)⁴, which covers advertisement forecast toward 2020 based on the Japanese economy outlook⁵ and relationship among advertisement media. According to its results, during 2011 and 2015, television advertisement market will grow ranging from 0.4% to 3.4% per year, and growth will decelerate after 2016. Also, satellite media advertisement will see strong growth toward 2015, and also decelerate from late 2015. The CAGR for television and satellite media advertisement is 1.4%, 4.1%, respectively, which we have adopted in our forecast. For CATV, considering the past trend, we forecast its growth toward 2016 at CAGR 1.6% which is derived from the growth rate of the above two broadcasting media. 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, with strong growth in the number of viewers for multi-channel TVs such as satellite, advertisement revenue is also expected to expand.
- Home video (retail, rental) market: We assumed that the market trend observed in 2000s will continue for the mid-term. In particular, adopting a trend forecast method for the total revenue (sell and rental) during the past decade, we forecast the market to continue to reduce at CAGR 5.1%. However, the market anticipates demand increase resulting from distribution of Blu-ray discs, which is already gaining concrete market share. Note that the forecast for home video market is wholesale based figures.
- Online service (TV/ PC/ Mobile) market: We forecast its growth toward 2016 at CAGR 2.6% 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 next generation fixed and mobile network, a highly penetrating infrastructure in Japan.

⁴ MINPO KEIEI SHIKIHO (Commercial Broadcasters Management quarterly), June 2012.

⁵ JBA sets the Japanese economy's preconditions based on "The 38th mid-term economic forecast (interim report)", released on March 2, 2012 by the Japan Center for Economic Research (JCER). It considers economic average growth of 0.8% for 2011 to 2015, and 1.1% for 2016 to 2020.



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In particular, multi-channel broadcasting and Video-On-Demand (VOD) market will 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 278.7 billion Yen in total for the gross output, 139.9 billion Yen in total as the value added, and 23,659 employees. Likewise, the film distribution industry has brought the economic contribution of 282.3 billion Yen in total for the domestic production, 141.7 billion Yen in total as the value added, and 4,531 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. In particular, it is estimated that the revenue per capita is 1.72 million Yen per person, and 9.11 million Yen per person in the production industry and the distribution industry, respectively.

Table 3-3 Economic contribution- Summary of results

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Production	1,380	2,787	626	1,399	309	683	8,013	23,659
Distribution	1,398	2,823	634	1,417	313	691	1,535	4,531
Total	2,778	5,610	1,260	2,816	622	1,374	9,548	28,190

*The figures above show results for 2010, due to data availability.

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, revenue from various rights management, including TV broadcasting rights, has increasingly accounted for the percentage. It accounts for 24% of the entire revenue for FY 2010.

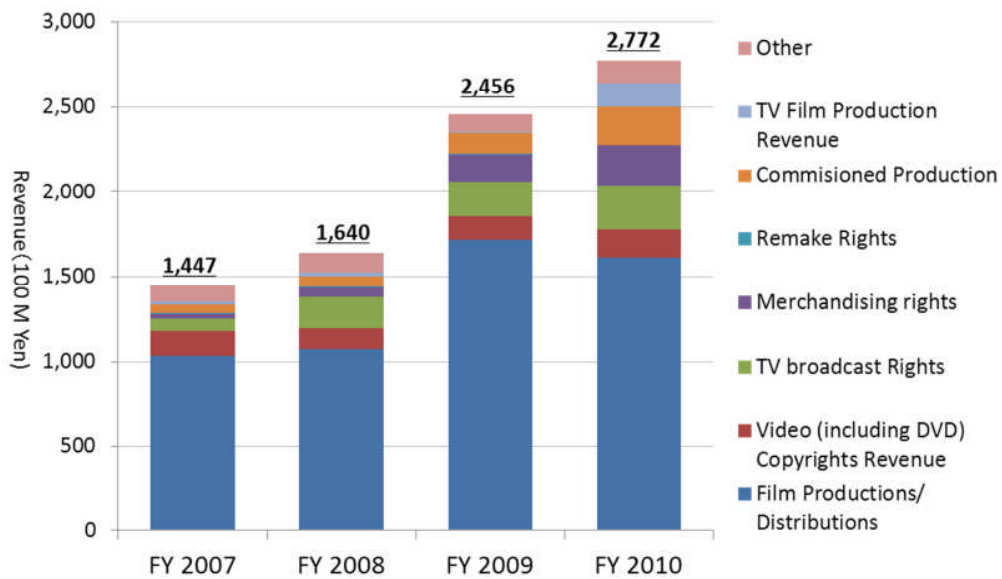
The revenue from production industry and that of the distribution industry cannot be separated in the



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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, which was 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)

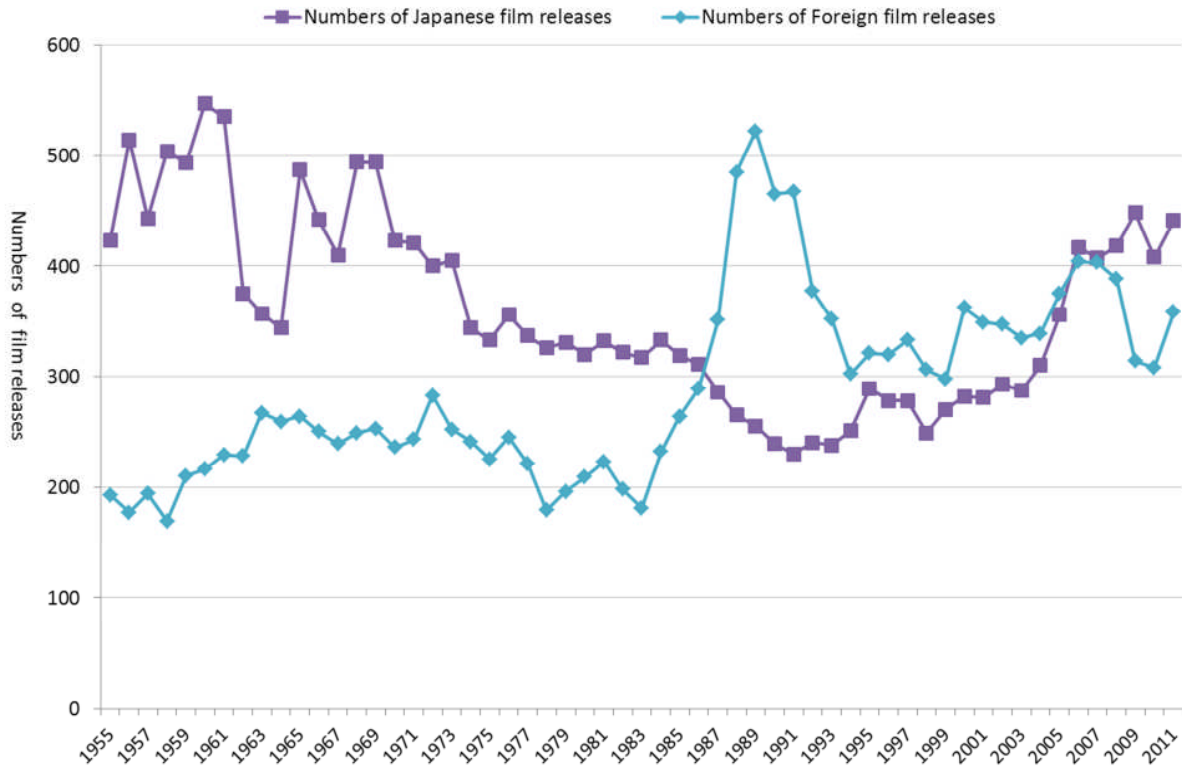
3.2.2.2 Number of distributed films

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. Currently, the number of released Japanese films tends to be larger than that of foreign films.

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)"



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



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

3.2.2.3 Television's role in the film industry

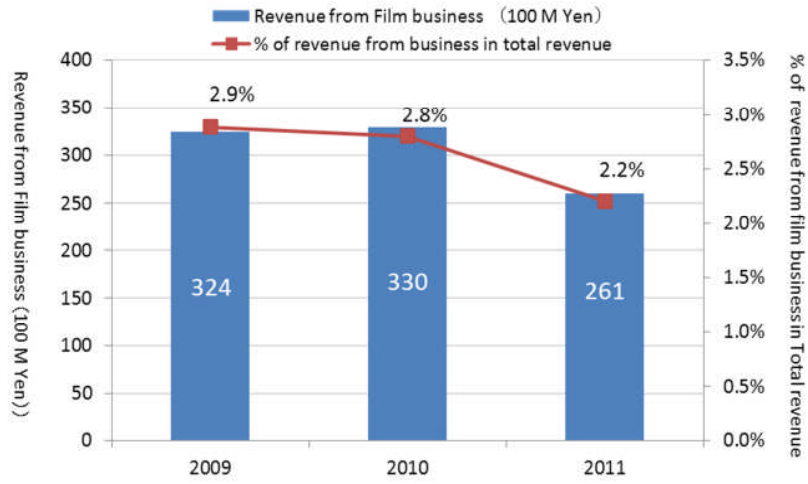
The film industry in Japan, especially for the Japanese films, leaped forward due to the extensive promotion (i.e. advertisement in a spot time and in television programs) of films led and produced by the commercial TV broadcasters in the 2000's. For example, in 2006, when the most recent reversal phenomenon between Japanese and foreign films was seen, 45 out of 404 Japanese films were mainly produced by the TV broadcasters. 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 commercial TV broadcast operators as well as its contribution to the overall revenue is shown in Figure 3-4. In 2011, it earned nearly 30 billion Yen, which was a large contribution, considering the fact that the Japanese film revenue is approximately 100 billion Yen per year. (However, it should be noted that the revenue includes film related business). TV broadcasters devote themselves to making entertainment films, and have become a driving force to create successful ones. It can be said this also contributes to the revitalization of local cinema complex where local affiliated stations have contributed.



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



*The total revenue of 5 broadcast operators: Nippon Television, Tokyo Broadcasting System, Inc., Fuji Television Network, Inc., and TV Asahi Corporation

(Source: Financial results from commercial broadcast operators)



3.3 TV program production / distribution

3.3.1 Economic contribution

The estimated result of the economic contribution of the TV program production/ distribution industry is shown in Table 3-4.

The TV program production industry has brought the economic contribution of 7,190 billion Yen in total for the gross output, 360.8 billion Yen in total as the value added, and 38,595 employees. Likewise, the TV program distribution industry has brought the economic contribution of 652.4 billion Yen in total for the domestic production, 327.4 billion Yen in total as the value added, and 7,391 employees.

Table 3-4 Economic contribution- Summary of results

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Production	3,560	7,190	1,614	3,608	797	1,761	13,071	38,595
Distribution	3,230	6,524	1,464	3,274	724	1,598	2,503	7,391
Total	6,790	13,713	3,078	6,882	1,521	3,359	15,574	45,986

* For the direct contribution, 2011 figures are estimated based on trend analysis, 2010 actual result is used for employment.

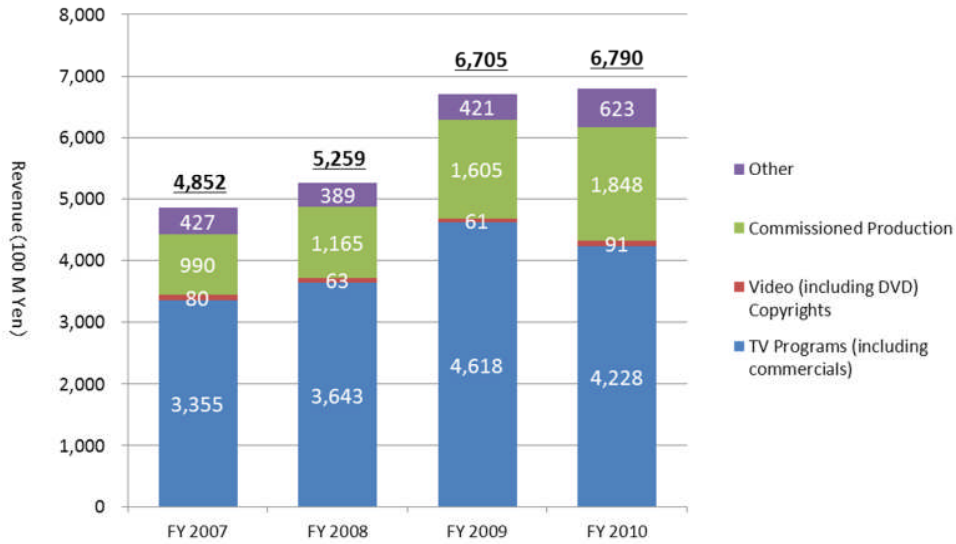
3.3.2 Market trend

3.3.2.1 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 3-5. 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 3-5 Revenue from the TV program production and distribution industry⁷



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

⁷ 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).



3.4 Film Exhibition

3.4.1 Economic contribution

The estimated result of the economic contribution of the film exhibition industry is shown in Table 3-5. The film exhibition industry has brought the economic contribution of 383.5 billion Yen in total for gross output, 178.5 billion Yen in total as the value added, and 31,352 employees.

Table 3-5 Economic contribution- Summary of results

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Film Exhibition	1,812	3,835	666	1,785	356	891	15,379	31,352

3.4.2 Market trend

3.4.2.1 Revenue and Number of Attendance

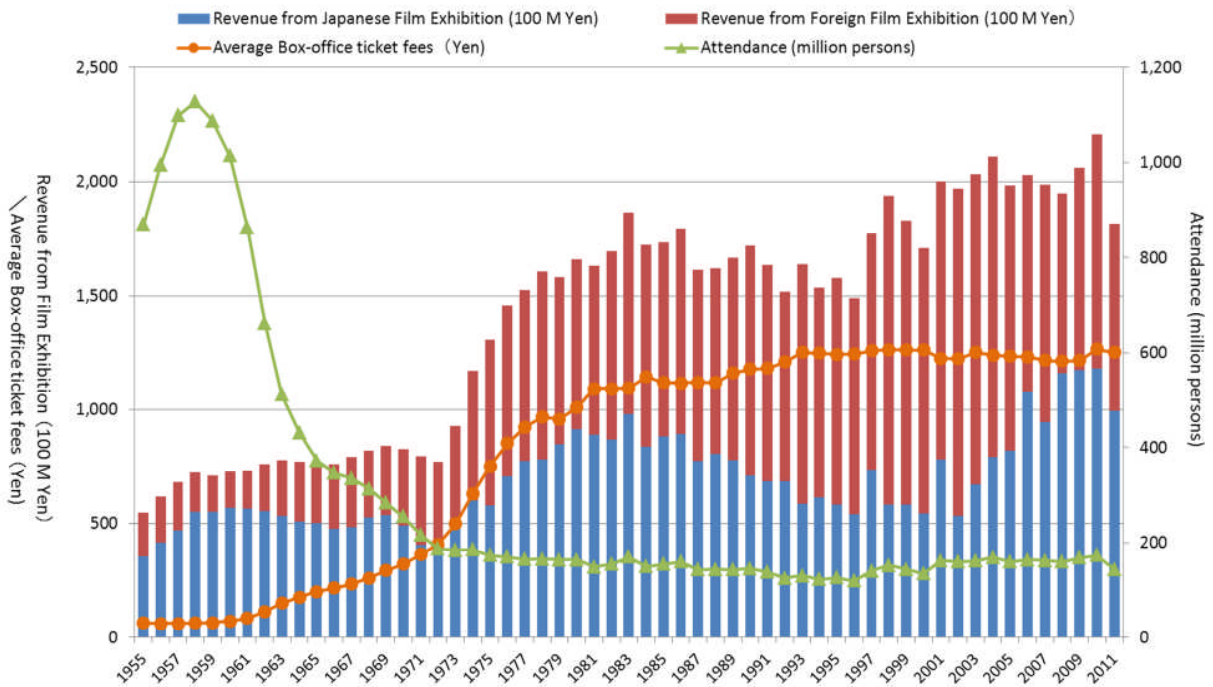
Revenue from film exhibition, number of attendance, and average admission fees at the movie theaters is shown in Figure 3-6. In 1950s, the number of Japanese film productions has exceeded 500 (see Figure 3-3). Production and distribution were active and the revenue from Japanese films continued to increase. 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 (see 3.4.2.2), 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. 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 3-6 Revenue from the film exhibition and number of attendance



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

3.4.2.2 Number of screens

The number of screens in the Japanese movie theaters is shown in Figure 3-7. 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 highest. 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 facility⁸. 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. In 2010, 267

⁸ 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..)”

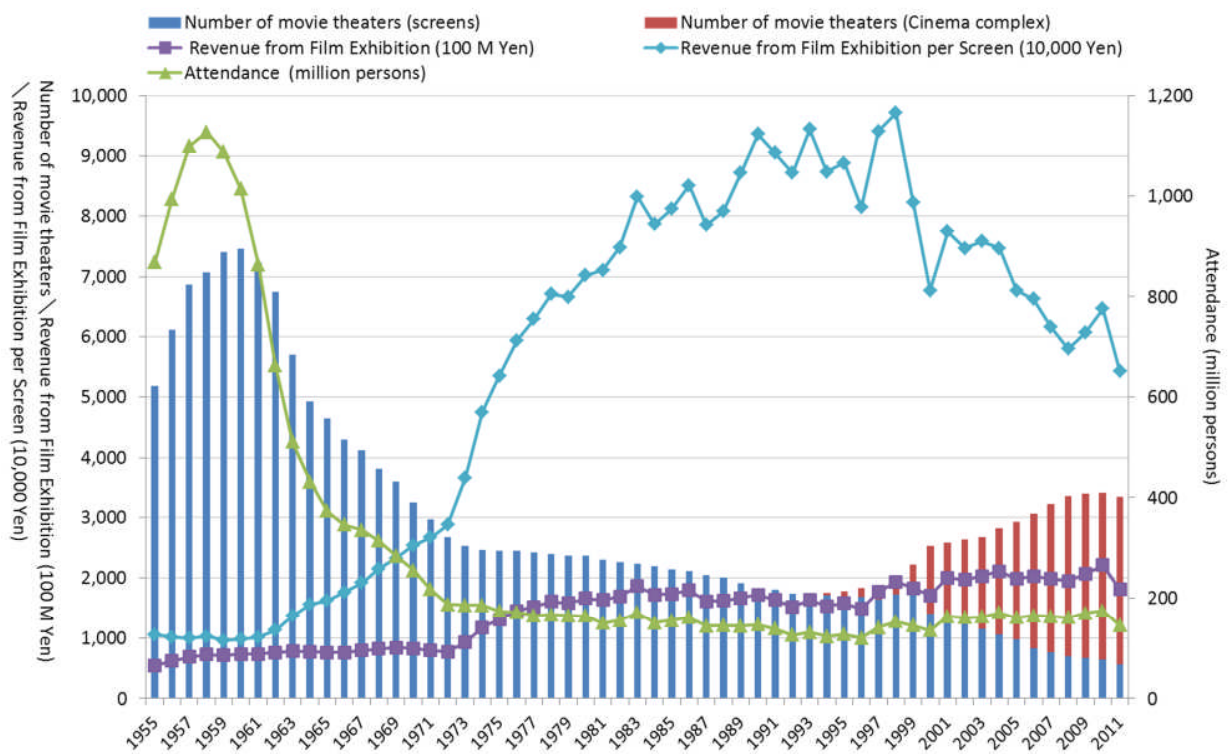


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out of 527 movie theaters were complex facilities with shopping centers⁹. In addition, it can be assumed that the development of cinema complex brought change in film distribution structure, as it lowered the barrier of film releasing without the support 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. Most recently, the number of screens has turned into decreasing for the first time since 1993, when the cinema complex was first opened in Japan, due to fierce competition.

Figure 3-7 Number of screens



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

⁹ Based on “Survey of Selected Service Industries (Cinemas)”, Ministry of Economy, Trade and Industry



3.4.2.3 Recent trends

At present, the audiences in Japanese film exhibition seem to consist of a certain segment of moviegoers, and the industry is supported by the fact that one person attends several times a year. Therefore, various measures have been taken such as "Senior" discount" intended for a person who is at the age of 60 or more, "50% discount for a married couple", and "Ladies' day discount", "Movie day discount", and "High school student friendship price". These measures had achieved a certain level of effect, however it had not led to an impact on overall demand. Also, there are views regarding the decrease of interest in watching films among young age group, therefore the market must solve these subjects as well as continue to create demand and attract new audiences.

Demand boost can be expected in respect to new trends as follows:

(1) Development of digitization

Progress in the digitization of films is one of the recent major trends. Digitization means that films are supplied digitally (DCP: Digital Cinema Package) without using prints. To realize digitization, movie theaters need to add digital projectors and the implementation proceeded since 2010, which is said to be the first 3D year with the big hit of the film *Avatar*. To implement digital facilities is a cost of about 7 to 10 million Yen for movie theaters, while distributors experience a print cost reduction. Thus, the *VPF (Virtual Print Fee)* mechanism has been introduced, where the distributor pays a virtual print fee towards the theaters facility investment cost. In 2011, out of 3,393 screens, digital screens were 1,911 which amounts up to 60 % and 951 screens are 3D ready.

(2) Deployment of ODS

ODS (Other Digital Stuff/ Online Digital Source) which is screening content in theaters other than films, such as live music, live sports, theater arts and storytellers is worth noting. As digitization proceeds, development occurs to take advantage of a movie theater's unique features such as the powerful impact of the big screen and live viewing. Through screening content related to each field, theaters can expect to attract various audience segments. In addition, they can promote movies to these various segment of audiences who don't usually go to the theaters by screening the preview of the movie. On the other hand, as host of the ODS events, they can deliver services to the fans or customers who couldn't get the tickets or to people in distant areas as well as expanding their customer base. Although the ODS provision is still limited, we can expect that the role of movie theaters would change in terms of flexibly in distributing contents as the range of entertainment widens and one can also expect that the number and audience segment would expand in the future.



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 8,640.3 billion Yen in total for gross output, 4,227 billion Yen in total as the value added, and 148,024 employees.

Table 3-6 Economic contribution- Summary of results

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Terrestrial	27,470	61,691	11,633	29,412	4,941	13,634	24,317	107,010
Satellite	6,580	13,010	3,711	7,210	1,652	3,419	4,097	8,950
CATV	20,890	48,681	7,921	22,202	3,289	10,215	14,679	32,064
Total	39,529	86,403	17,880	42,270	6,644	18,592	43,093	148,024

3.5.2 Market trend

3.5.2.1 Revenue

Total revenue of the major broadcasting media is shown in Figure 3-8. 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 2012.¹⁰ 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 3-9, especially satellite broadcasting and CATV's subscribers are steadily increasing. Due to the transition to terrestrial digital broadcasting, the market

¹⁰ Based on the simulation result by the Japan Commercial Broadcasters Association (JBA) (the former NAB).

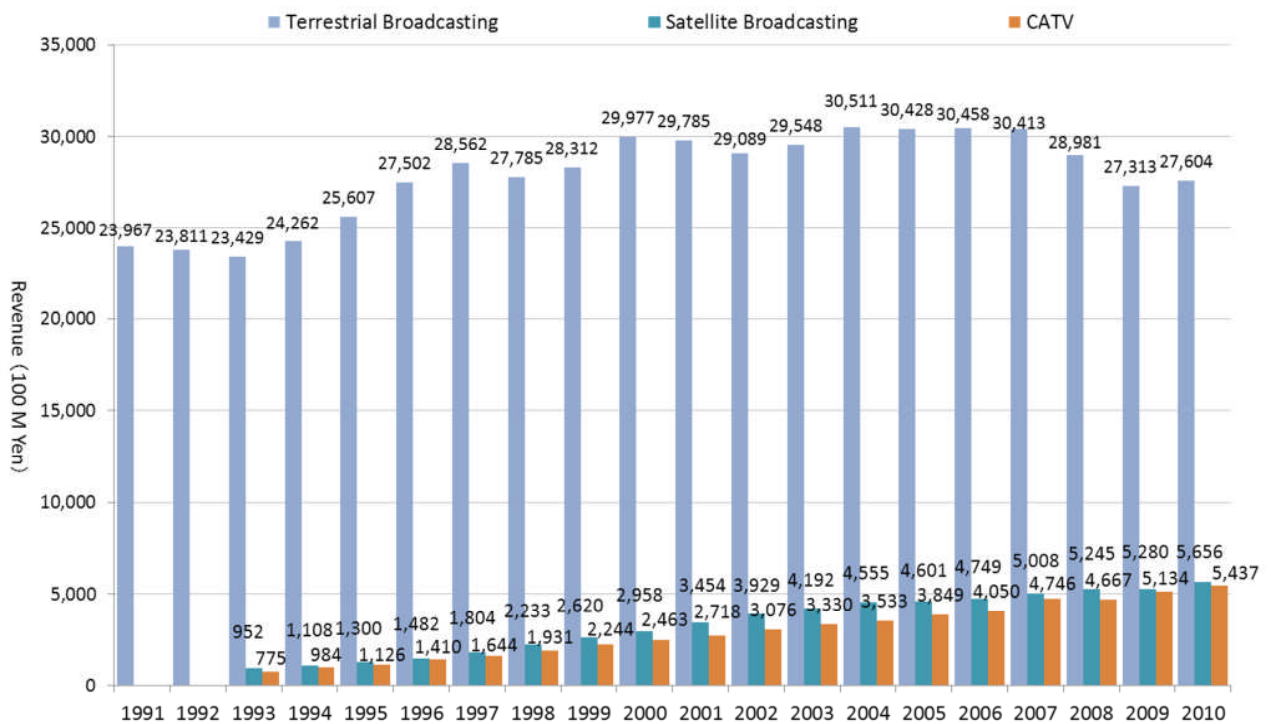


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has seen the penetration in BS/ CS 110° E broadcast hybrid antennas and multi-band receivers, subscribers to CS 110°E (Sky PerfectTV! e2) are increasing as well. Therefore it can be said that the replacement of receivers for terrestrial broadcasting has also made the BS/ CS 110°E to penetrate widely.

According to the Japan Cable and Telecommunications Association, the number of households that subscribe multi-channel service was 7,652,000 (as of FY 2010).

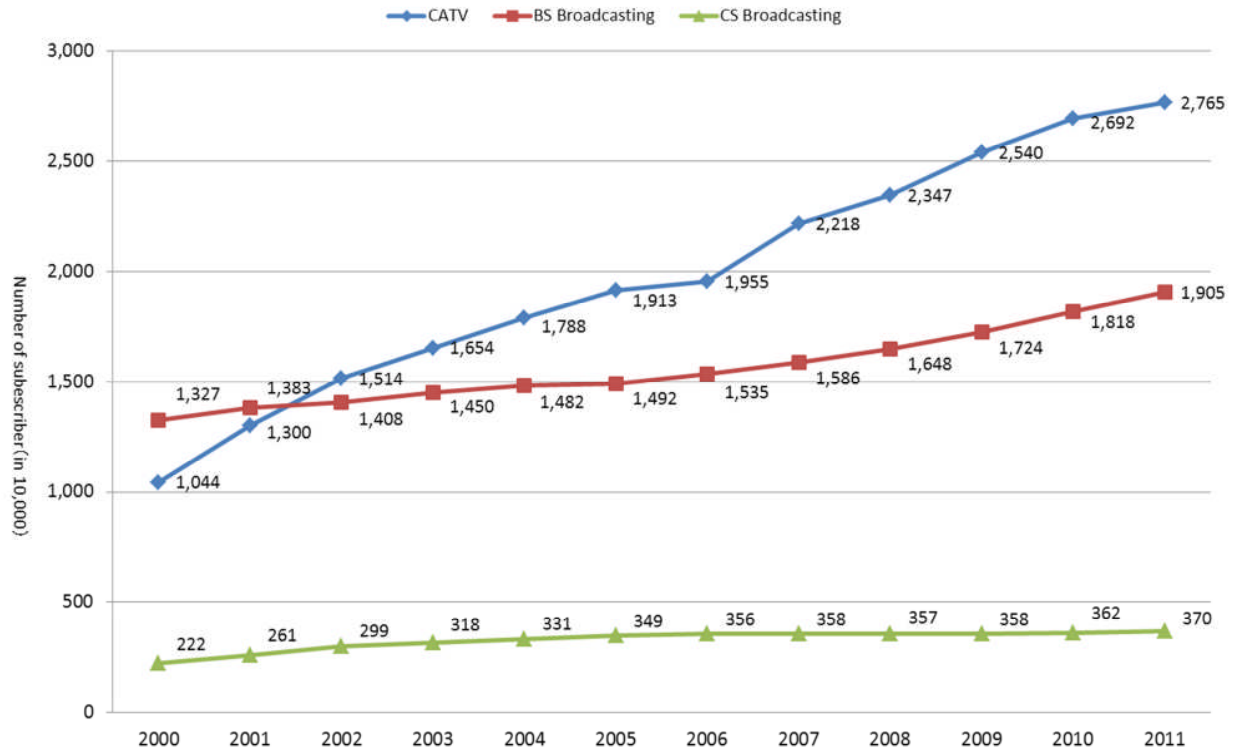
Figure 3-8 Revenue from terrestrial broadcasting, satellite broadcasting, and CATV



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



Figure 3-9 Number of subscribers (CATV / Satellite Broadcasting)



3.5.2.2 Development on digitization

In Japan, 44 prefectures (excluding Iwate, Miyagi and Fukushima Prefectures which suffered a great deal of damage from the Great East Japan Earthquake) completed transition to the terrestrial digital broadcasting in July 2011. In 2012, the remaining three prefectures completed its transitions. By this, following the CS digital broadcasting which started in 1996, digitization of television broadcasting was completed with the transitions to BS and terrestrial digital broadcasting.

Especially, the satellite broadcasting is entering into a new era as a broadcasting platform. Followed by the termination of BS analog broadcasting, new channels have been allocated and transition from the conventional standard definition (SD) broadcasting to high definition (HD) broadcasting have accelerated. BS formerly provided programs under general programming, however from October 2011, full roll out of Pay TV (partly specialized channels) has been developed. At present, as the Table 3-7 shows, multi-channel broadcasting through high definition (and 3D broadcasting) are being provided over BS broadcasting and CS (Long. 110°E) and the number of subscribers for HD services is steadily increasing.



Table 3-7 Number of Satellite Television Programs (as of April 2012)

Satellite	HD broadcasting	SD broadcasting	Total
BS broadcasting (Long. 110°E)	28 Programs *	1 Program	29 Programs
CS broadcasting (Long. 110°E)	19 Programs	34 Programs	53 Programs
CS broadcasting (Long. 124°E/ 128°)	89 Programs	156 Programs	245 Programs

* Including public broadcaster (NHK), pay TV, free-to-air

3.5.2.3 Recent trends

Through digitization, broadcasting services on mobile phones and devices (“1 SEG” service) was launched in April 2006 and mobile phone users now enjoy terrestrial digital TV broadcasting outside their homes. Also, under the enforcement of the revised Broadcasting Act in April 2008, obligations of simultaneous broadcasting has been withdrawn, therefore 1 SEG original broadcasting program has started¹¹. In addition, multi-media broadcasting (V-High) for mobile devices utilizing the reallocated band for terrestrial analog television broadcasting has drawn significant attention, and the first country-wide commercial service “NOTTV” (provided by mmbi, Inc.) was launched in April 2012. The features of this service is that it has higher resolution than 1 SEG, and in addition to (1) real-time broadcasting, it provides (2) storage type broadcasting, (3) convergence between communication and broadcasting which was not realized in conventional broadcasting. For (2) and (3), time-shift viewing as well as various types of content such as music, newspapers/ journals, e-books and games are expected to be distributed. Also, recent trend in watching videos on smart phones with large screen has motivated its promotion in “Mobile/ Smart TV”. Moreover, to take in the new scheme of programming other than that of the conventional broadcasting, the following things are considered to widen business opportunities: utilizing internet content production method and professionals, cooperation with other media such as TV broadcast operators and publishing companies, mechanism to generate synergistic effect as well as provision of billing system for premium content. With the development of these new broadcasting platforms, distribution channels that deliver more content to consumers are diversifying.

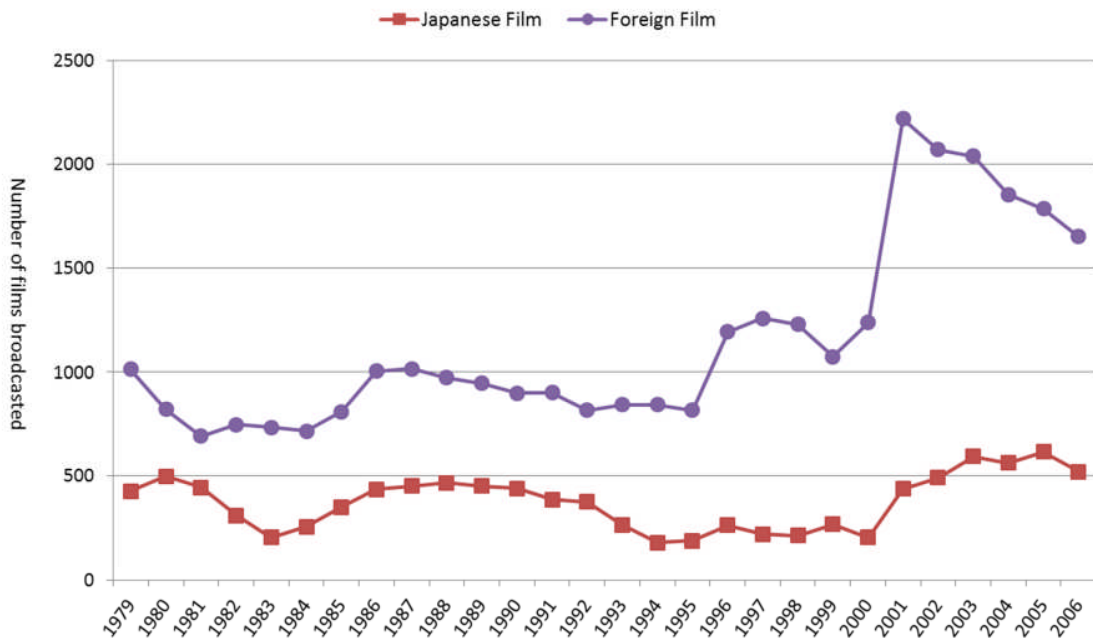
¹¹ Simultaneous broadcasting is broadcasting of programs or events across more than one medium, or more than one service on the same medium, at the same time



3.5.2.4 Films broadcasted on air

The number of films broadcasted by the major terrestrial and satellite broadcasting channels is shown in Figure 3-10. Especially the number of broadcast of foreign films has increased since 2000. Most recently, the number of movie programs in terrestrial channels tends to decrease, but the average audience rate at households (approximately 5.5% per day) has remained unchanged since 2001. Figure 3.10 shows the breakdown of each genre related to airing time of BS channel WOWOW's digital broadcasting as of 2011. Out of annual broadcasting time (total 11,561 hours and 1 minute), films is the highest with 47.2% followed by dramas and sports.

Figure 3-10 Number of films broadcasted (terrestrial and satellite)



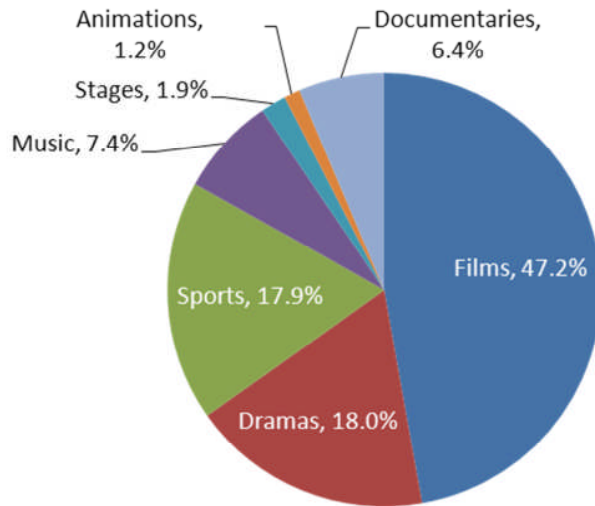
*Count of major terrestrial channels + WOWOW (Satellite channel)

(Source: "Statistics for TV broadcasted movies ", Federation of Japanese Films Industry, Inc.)



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Figure 3-11 Breakdown of genres over aired time (WOWOW)



(Source: "2012 Information Media White Paper", Dentsu Communication Institute Inc.)



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 492.0 billion Yen in total for gross output, 303.2 billion Yen in total as the value added, and 4,955 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 Industry

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Home video	2,611	4,920	1,775	3,032	1,337	1,898	2,243	4,955

3.6.2 Market trend

3.6.2.1 Revenue (wholesale-based)

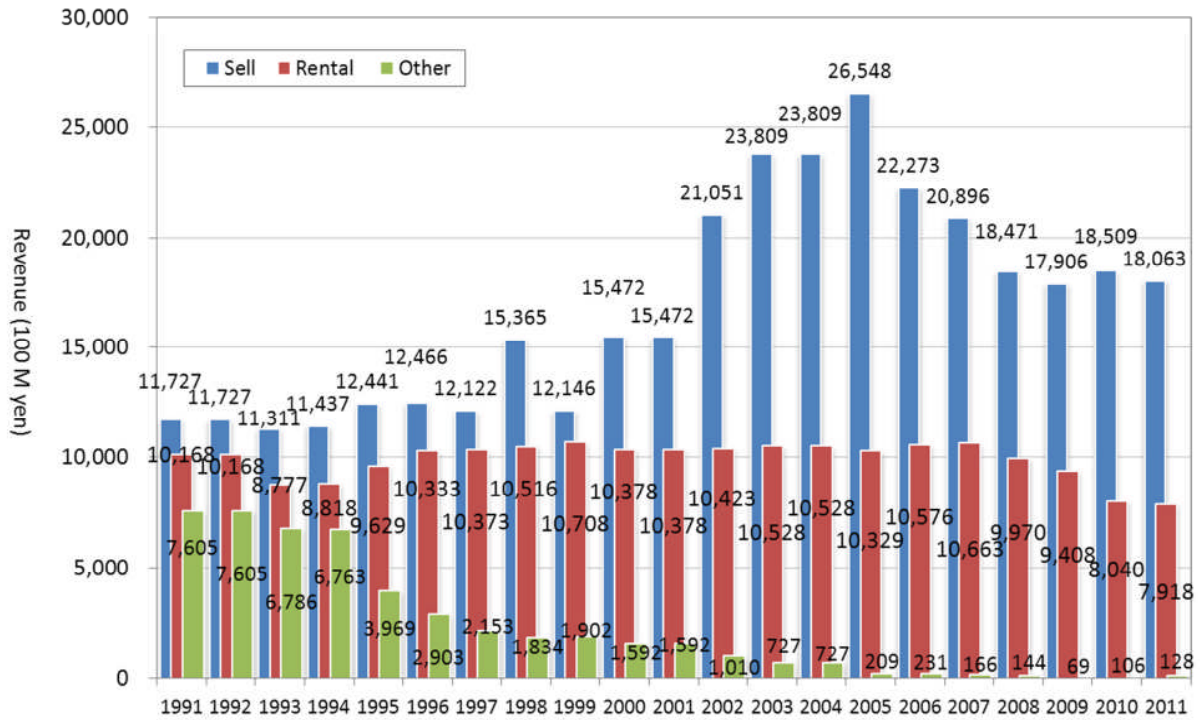
Revenue from home video sales is shown in Figure 3-12. Note that this figure is based on wholesale-based, which covers the revenue from shipment to video retail stores and video rental stores, and is the basis of our estimate on economic contribution.

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 a sloping downtrend was seen since. Most recently, the revenue surpassed that of the previous year in 2010, but in 2011, it remained at the same level (180.6 billion Yen) as of 2009.

On the other hand, the revenue from rental market (shipment to rental stores) has constantly maintained the size of around 100 billion Yen for nearly 15 years, and a stable market has been formed in this field. However, a little later than the sell market, it began to turn into a declining tendency around 2008. The declining tendency found in the sell market is not seen in this field, because the inventory is fortified due to the price reduction caused by the fierce competition in the rental market.



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



(Source: Japan Video Software Association)

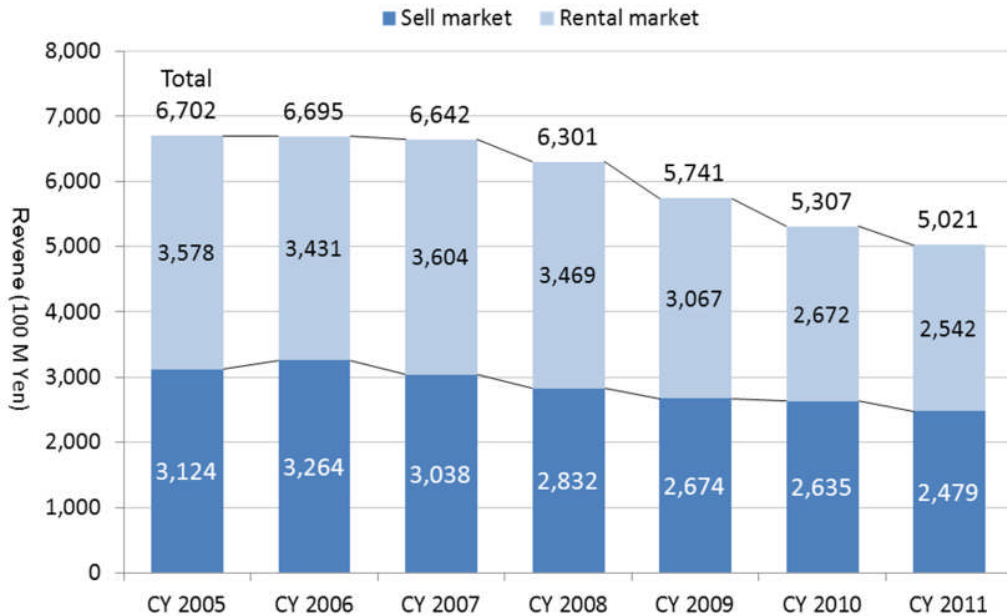
3.6.2.2 Revenue (retail-based)

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. In 2011, sell market was 247.9 billion Yen and rental market was 254.2 billion Yen amounting up to 502.1 billion Yen. According to Japan Video Software Association, in recent sell market, the decline of purchase amount (volume, unit cost) by the so-called heavy users, who supports the market in terms of revenue, has had an impact to the substantive decline as a whole. On the other hand, the change in the purchase by light users cannot be seen and therefore the consumer basis is at a stable stage. Also, as for the means of purchase for home videos (DVDs as well as BDs), according to the JVA's consumer survey, 60.1 % of consumers purchase from online shops, followed by 14.6% from electronics retail store and 12.1 % from CD shops.

As for the rental market, there have been declining tendency in terms of annual usage percentages and annual average rental expenditure, however the total amount of volume has increased compared to the previous year. To add, the average purchase and rental of BDs are in the rising trend and it may become a driving force for market growth.



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



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

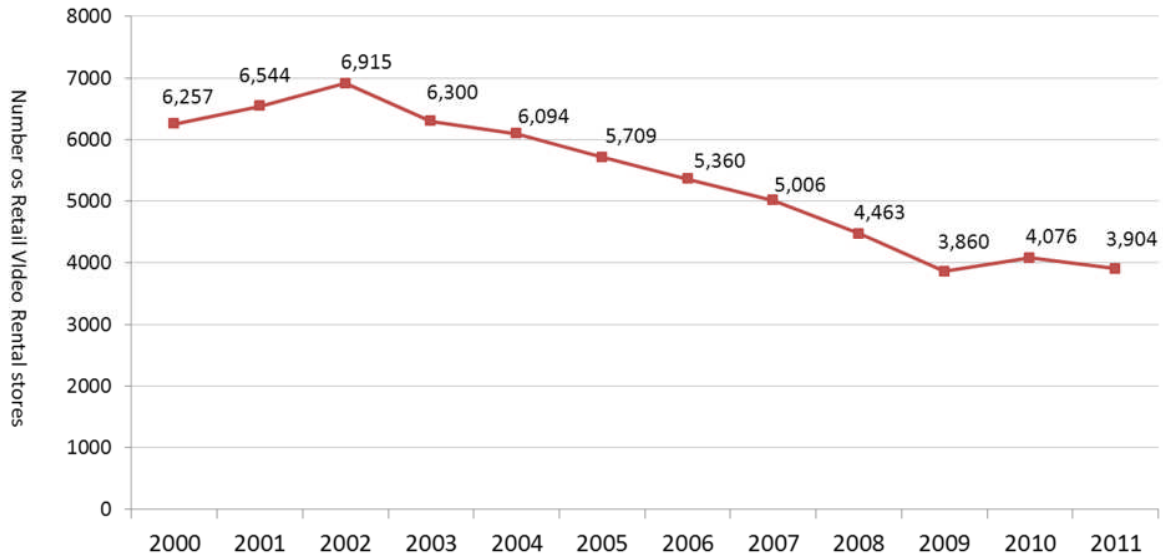
3.6.2.3 Number of rental shops

As one can understand from the fact that approximately the half of revenue in the home video market is occupied by the rental market (retail based), Japan is one of the very few countries where shop-based rental market is flourishing. However, most recently, as shown in Figure 3-14, the number of shops is in downtrend since 2002, when it reached the peak, due to the increasingly intensified competition. Especially, as major rental-shop management companies have shifted to price reduction strategy, the idea of small profit and quick return tend to accelerate. For this purpose, major companies are strengthening their inventories, hence small and medium-sized companies is difficult to correspond due to limited space in shops. Therefore the structure of market revenue by sales volume has shifted, and the market revenue is largely occupied by shops with medium-volume sales.

Moreover, one of the trends in this sector is that the major retail and retail chain now accommodate a wide range of products, where not only video and music, but also other products such as games and books, in order to attract more customers. Other efforts to increase the number of customers have been seen through various measures targeting a particular segment, such as discount campaign for elderly users.



Figure 3-14 Number of rental shops



*Since this is a number of JVA rental system joining shops, it is different from an actual number of video rental shops.

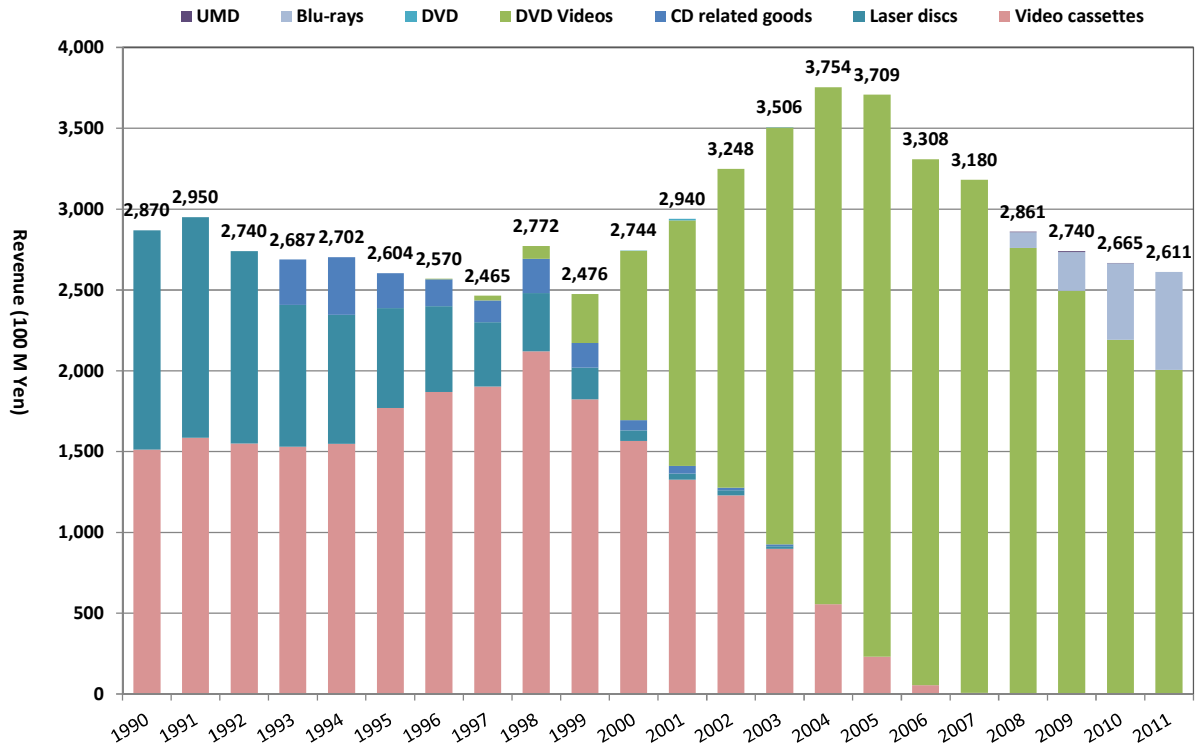
(Source: Japan Video Software Association)

3.6.2.4 Transition in home video media

Revenue for each home video media is shown in Figure 3-15. DVD has substituted former major media rapidly after 2000, however its revenue has been in decreasing tendency from around 2005, after the substitution reached the completion stage. However, the Blu-ray disc (BD), which shipment started around 2006, has expanded its share steadily (though the pace is slower compared to the trend seen for DVDs). Its result in 2011 accounted for about 23% of the revenue (Note that its unit price is higher than that of the DVD). It is expected that BD will contribute to minimize the declining tendency in sales.



Figure 3-15 Revenue by home video media



(Source: Japan Video Software Association)

3.6.2.5 Market share by genres

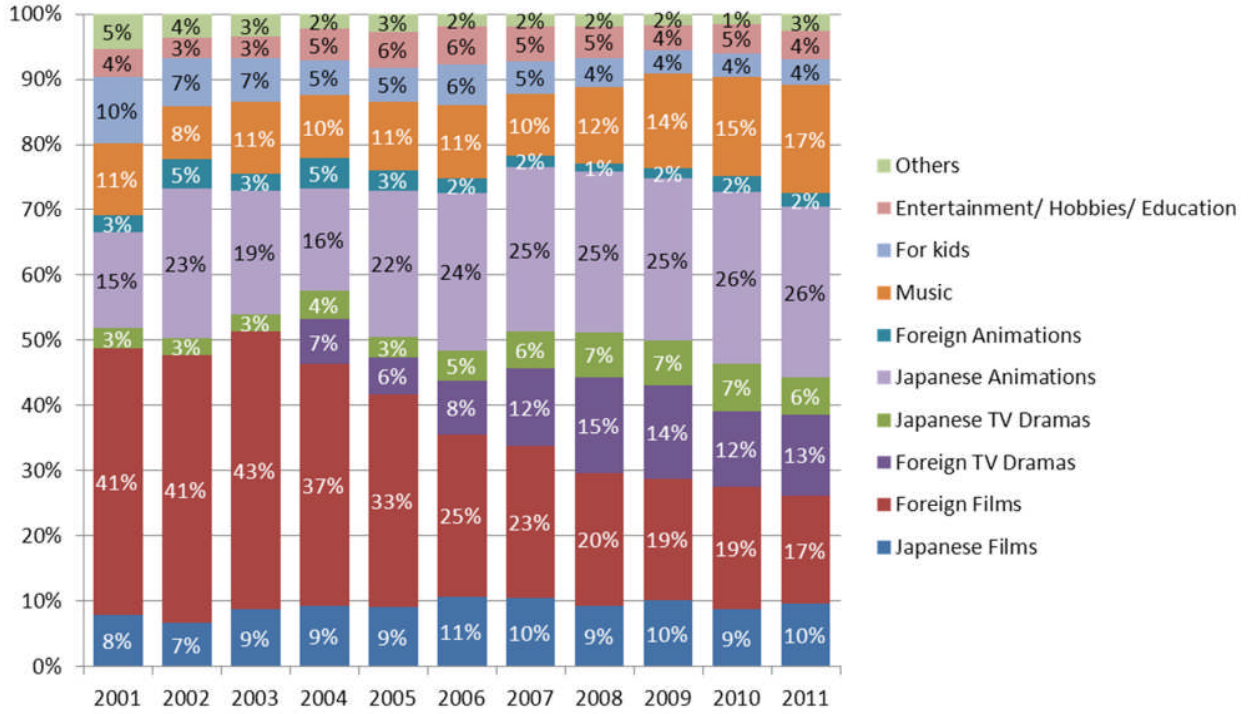
Revenue share by genres is shown in Figure 3-16. Film (Japanese and foreign) accounted for the half of the market revenue by 2003. However, since 2004, it has been pushed downward by other genres such as TV dramas, animation and music. The latest figure shows that it is below 30%.

On the contrary, Japanese animation, or "Anime", has gradually expanded its market share, and has the most highest since 2007. Its sales grew during the market shift to DVD, and it still holds its market position while many other genres saw decline in their sales. Also, currently the animation market is supported by many "Anime" fans that have potential demand for high quality products, therefore increase in sales for Blu-ray disc products has been seen particularly in this market¹².

¹² "Report on Animation Industry 2012", The Association of Japanese Animations



Figure 3-16 Revenue share by genres



(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 216 billion Yen in total for gross output, 91.6 billion Yen in total as the value added, and 6,200 employees.

Table 3-9 Economic contribution- Summary of results

[Unit: 100M Yen, person]

Industry	Gross output		Value added		Labor income		Employment	
	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution	Direct contribution	Total contribution
Online service	844	2,160	253	916	106	431	2,732	6,200

3.7.2 Market trend

3.7.2.1 Revenue

The revenue for online service for film / video contents is shown in Figure 3-17. The market is growing remarkably by two digits every year as a whole, reaching 84.4 billion Yen in 2011. Especially with the background of capacity enlargement and enhancement of functionality in mobile communications, mobile online service is expanding steadily from 2004. According to the statistics released by the Ministry of Internal Affairs and Communications compiling figures for internet based services, revenue from “web content distribution industry”¹³ is 186.5 billion Yen (as of 2010). Within that revenue, IPTV (Internet Protocol TV)¹⁴ revenue accounts for 4.8 billion Yen.

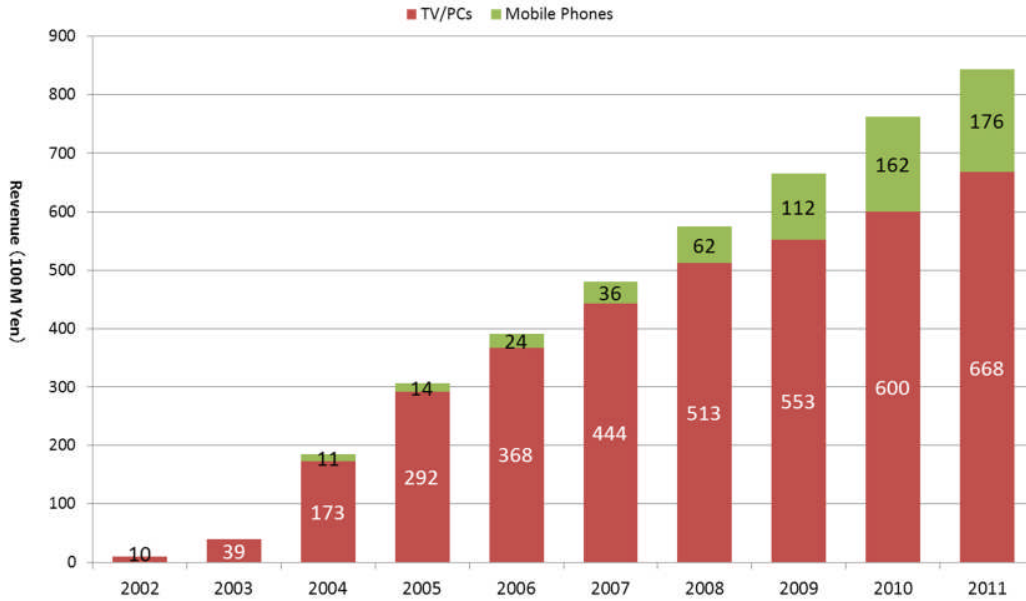
Also, in terms of revenue share of distribution window for multi-channel (subscription TV) services, as shown in Figure 3-18, revenue from satellite broadcasting and CATV together is approximately 75%, and IPTV, VOD, PC online, mobile distribution remains low which currently make up 7% of the whole.

¹³ Mainly services that distribute music and pictures through internet, including mobile distribution.

¹⁴ Revenue from IPTV service means revenue from picture distribution service that uses internet such as video on demand, downloading and IP multi-cast method.

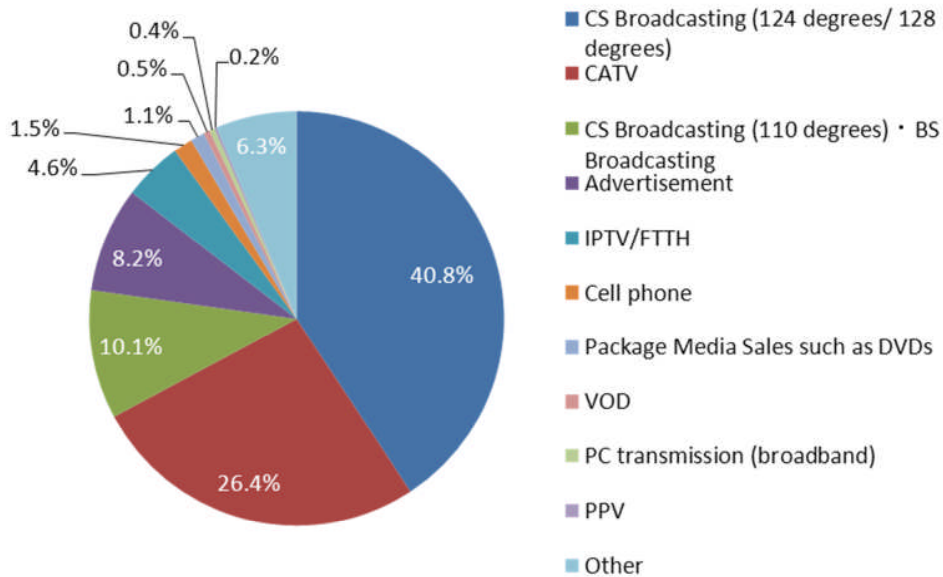


Figure 3-17 Online video service revenue



(Source: Digital Contents Association of Japan)

Figure 3-18 Revenue breakdown for Multi-channel distribution (2011)



(Source: "2011 Survey on Multi-channel broadcasting", Multi-channel Broadcasting Research Institute¹⁵)

¹⁵ The report covers current market situation of multi-channel services through survey results from



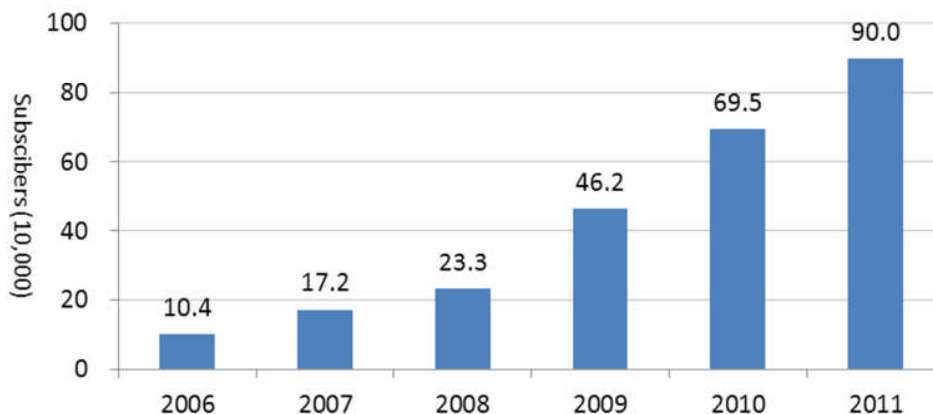
3.7.2.2 Recent services

Internet is an emerging media for broadcasting following satellite and CATV. In Japan, ultra-fast broadband network has penetrated rapidly, and rich services such as online video distribution has become one of the key applications. It can be broadly categorized in the following two services.

(1) IPTV (IP multi-cast)

IPTV is a service provided over a designated network carrier. In Japan, it is defined as IP multi-cast service provided through set-top-box (STB). In particular, television services (CS multi-channel broadcasting) and Video-On-Demand (VOD) are available through broadband such as FTTH (Fiber-to-the-home). NTT Group's "Hikari TV", KDDI's "au Hikari TV Service", Softbank's "BBTV" can be listed as the main examples. For multi-channel broadcasting, including movie channels, there is an advantage for IPTV, for potential customers satellite and CATV cannot reach. Figure 3-19 shows the number of IPTV subscribers.

Figure 3-19 Number of IPTV subscribers¹⁶



(Source: Ministry of Internal affairs and Communications)

(2) Internet TV, PC/mobile online video services

This type of service can be used over internet regardless of the customer's subscription to certain ISP's. Although it is not provided over IP multi-cast, it includes services which provide video distribution to TVs through STB and to PCs through internet website. The "acTVila" launched in 2007 by group of major consumer-electronics manufacturers is one example. "acTVila" is an online video service which customers can view video content without STBs as long as they have an compatible

satellite operators (members of Japan Satellite Broadcasting Association)

¹⁶ For IPTV (IP multi-cast) service providers



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digital TV and broadband subscription. According to acTVila, the number of connected TVs¹⁷ reached beyond 4 million in March 2012. Another example is “GyaO!” (now subordinate of Yahoo!), one of Japan’s largest online video service launched in 2005. The service became popular that its subscribers exceeded 10 million in just a year and 2 months. In general, free or paid services of online videos to TVs or PCs, are in the increase trend and most of them include a variety of genres including films. Joint provision between online distribution providers and film companies has been seen.

TV broadcast operators which play an important role in the Japanese films, has also entered this market. In July 2005, starting with the Fuji TV’s “Fuji TV On Demand” service, NHK and other commercial broadcasters now provide online video services. For example, VOD service for certain television programs, and catch-up / subscription services can be watched on PCs. A new VOD service called *Motto TV*, or “More TV”, has been jointly launched by major commercial broadcasters and advertisement companies on April 2012.

Online video service over mobile phones has been increasing gradually since the beginning of 2000. In May 2009, joint venture of NTT DOCOMO and media company AVEX has launched an online video service to mobile phones called “BeeTV”. In November 2011, they have enhanced it into a new service called “VIDEO Store powered by BeeTV” which is basically compatible with smart phones. It is a subscription type service through streaming and downloading of various type of video content. Compared to the conventional services which focused on rather original short-length videos, the new service has a special feature that customer can fully watch 2 hours of film or an hour of foreign dramas on their mobile phone. The service aims to provide customers a new acquaintance to films and it plans to fulfill the service by realizing search menus across genres and choice from different video quality.

Considering these market trends, it is expected to vitalize related market including films as a whole, through a wide range of distribution over the internet to TV / PC / mobiles, multi-device provision including smart phones and tablets, and unique value-added services.

¹⁷ The number of TVs which has been connected to acTVila’s top web page at least once.

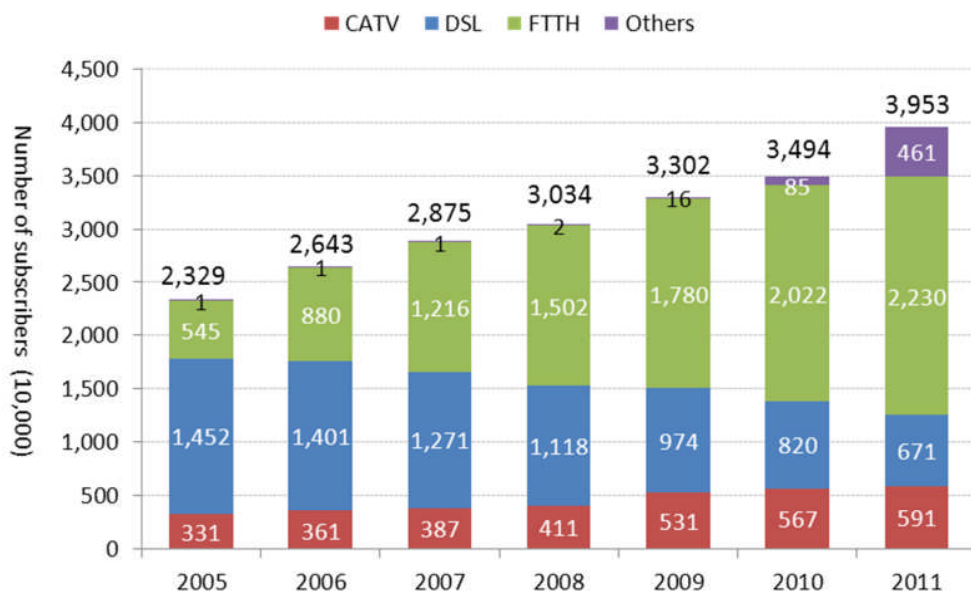


3.7.2.3 Development in broadband network

The number of broadband subscribers is shown in Figure 3-20. The broadband infrastructure in Japan is one of the most developed in the world, currently the penetration of broadband services (mostly FTTH) is nearly 70 percent of the households. The government has set the goal for super-high-speed broadband service (FTTH) to reach 100% penetration by 2015, and is expected to be promoted as an important infrastructure.

According to the 2010 survey by the Ministry of Internal Affairs and Communications, 47.1 % of the people have demonstrated their intention to use online video services, if such broadband environment has been developed¹⁸. In addition, the survey found that the consumers would increase their overall expenditure on video content by 72.2 % compared to the non-online media such as DVD (retail and rental). It estimated that the household consumption will increase, with an economic impact of 12.3 trillion Yen, which contributes to 1.5% of the total GDP in 2010. It is expected that the distribution channels of video content including films to be realized and to potentially create a large economic impact.

Figure 3-20 Number of broadband subscribers



(Source: Ministry of Internal Affairs and Communications)

¹⁸ The report defines online video services as “VOD services for movies and other videos which consumers can download and watch, and Catch-Up viewing services (including terrestrial, BS/CS multi-channel programs)”



3.8 Estimation of market size attributed to films

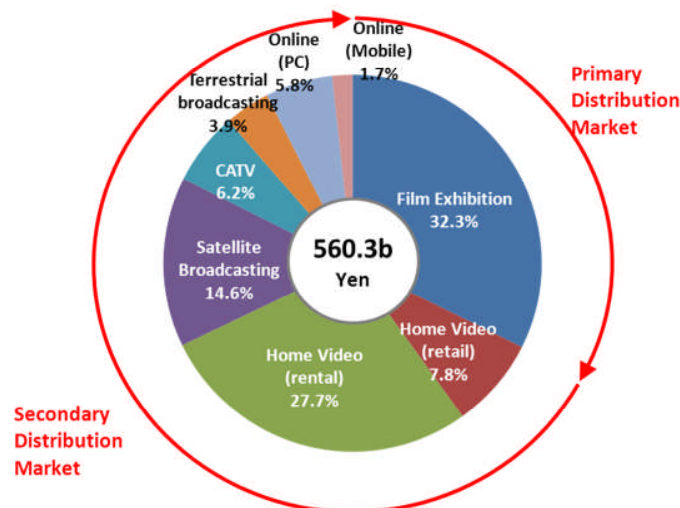
In this section, taking account the analysis in the previous sections, we estimated the market value focusing on films, for each distribution window. The results are derived from studies conducted by Institute for Information and Communications Policy (IICP).

3.8.1 Revenue within each distribution window

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 3-21 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. For example, for television broadcast, percentage of film broadcasted to total is multiplied to the whole broadcast revenue (The details are noted in the appendix). Note that the home video market (retail, rental) accounts for the retail market revenue, which covers the final consumption. The total revenue accounts for 560.3 billion Yen for 2011. Primary distribution market consists of approximately 32% and the rest is for the secondary distribution market. This means that the overall market attributed to films is three times as large as the film exhibition market. Within the latter market, home video (rental) market has the most shares at 28%, which is almost the size of the primary distribution market¹⁹.

Figure 3-21 Market revenue and share attributed to films (2011)



(Source: IICP report, Mitsubishi Research Institute estimates)

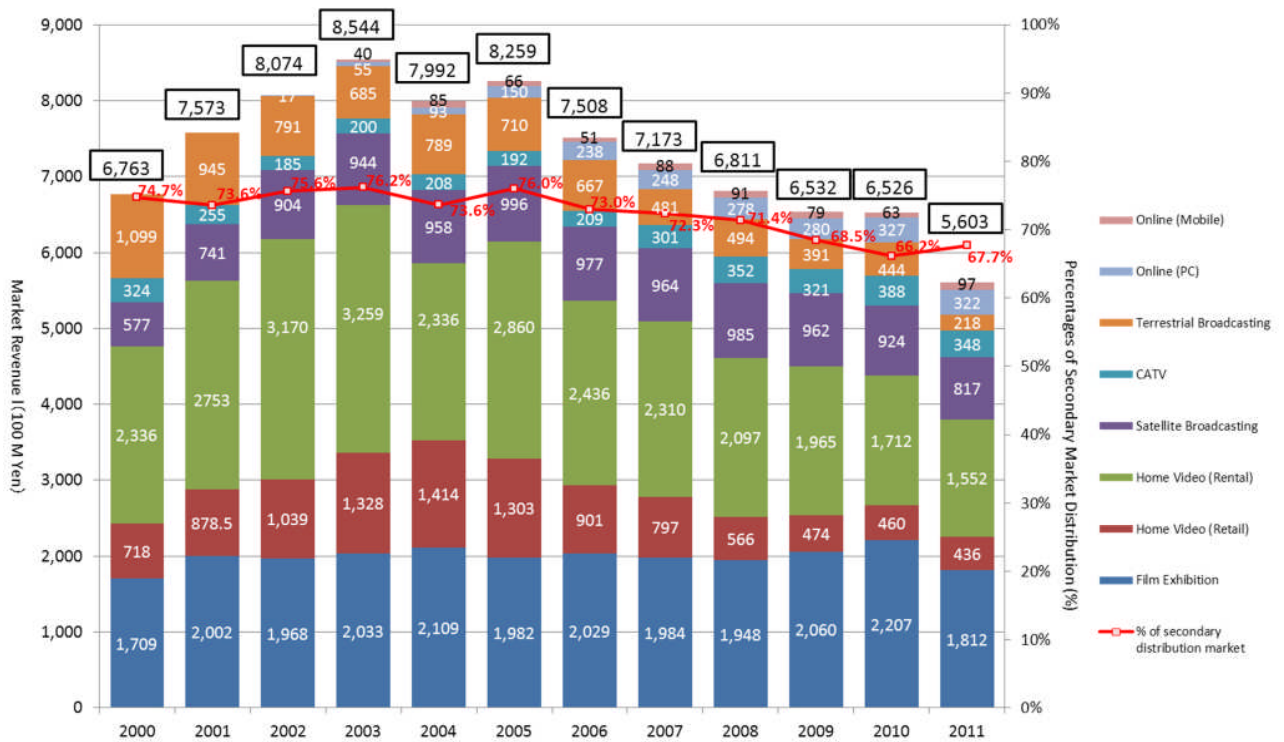
¹⁹ Note that the home video market stated in this section is retail based (see 3.6.2.2)



Figure 3-22 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 60% to 75% 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 3-22 Market revenue attributed to films (2000-2011)



(Source: IICP report, Mitsubishi Research Institute estimates)

Figure 3-23 shows the revenue for each window in line with typical duration from the release of film. When we look at the vertical access, which is the revenue attributed to films, the revenue for the film exhibition accounts for the most highest, and the market size reduces as each windows shifts.

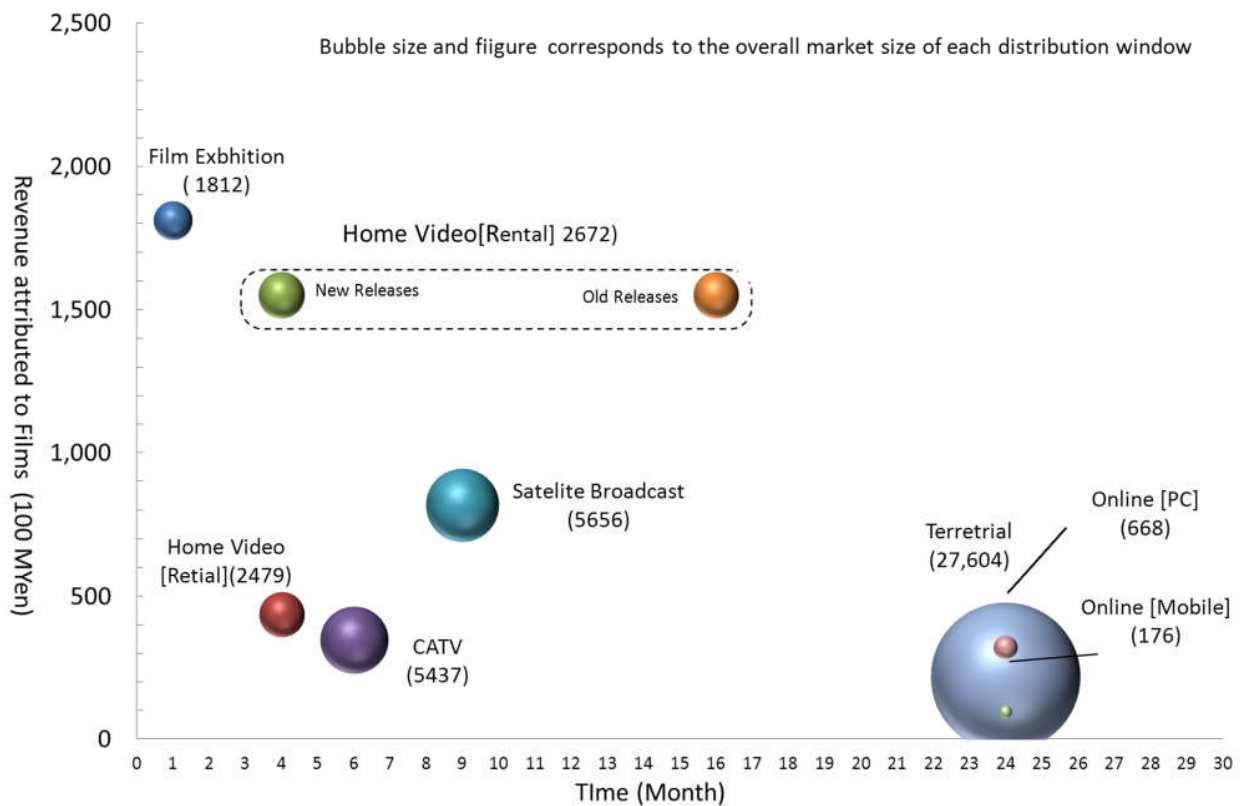
However, in recent trends, due to the development in digitization and the change in market conditions,



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the position of each window and its duration tend to change. For example, DVD released shortly after the film exhibition, or exhibition and online streaming released simultaneously. Especially in Japan, considering the fact that much visual works have been produced by TV broadcast operators, and their role in recent Japanese films, much work have originated from TV broadcasting and then distributed to home video or reproduced for film exhibition. In Japan, pay TV penetration is still low, and therefore when content are expected to reach high viewing rate, free-to-air terrestrial broadcasting is prioritized.

Figure 3-23 Market revenue vs. typical timing of distribution



* Home Video [Rental] is described as same market size for both New/Old Releases as figures cannot be distinguished

* Horizontal axis describes typical timing of distribution (it does not reflect actual market conditions)

(Source: IICP report, Mitsubishi Research Institute estimates)

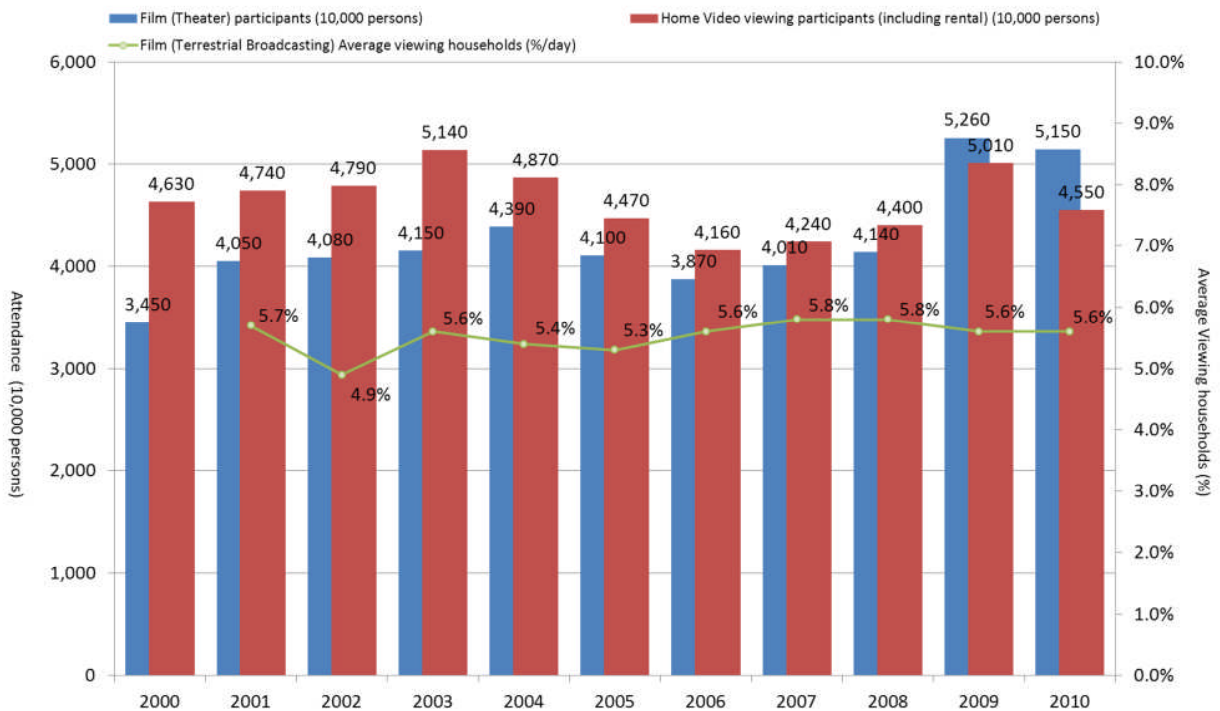


3.8.2 Trend in number of film/video viewers

Figure 3-24 describes the size of the consumers that commonly view video contents. In particular, number of film (theater) viewers and home video viewers, film (terrestrial broadcasting) average viewing rate per households, and number of online video viewers is shown. The numbers for the first three indicators have been maintaining a certain level and we can see that these activities are common in consumers recreation and leisure. Especially, numbers for film (theater) and home video viewers have recently grown.

On the other hand, as Figure 3-25 shows, it should be noted that there is a drastic growth for online video consumers. In result from the development and diversity in media, consumers can have access to video content essentially anywhere at any time. In other words, potentially more and more consumers will be viewing content including films. It is essential for the industry to correspond to these structural changes, and to deliver diversity of products and services, so as to bring benefit not only to existing customer but also to new customers. This can be a driving force for the industry development.

Figure 3-24 Number of participants / viewing households for selected window



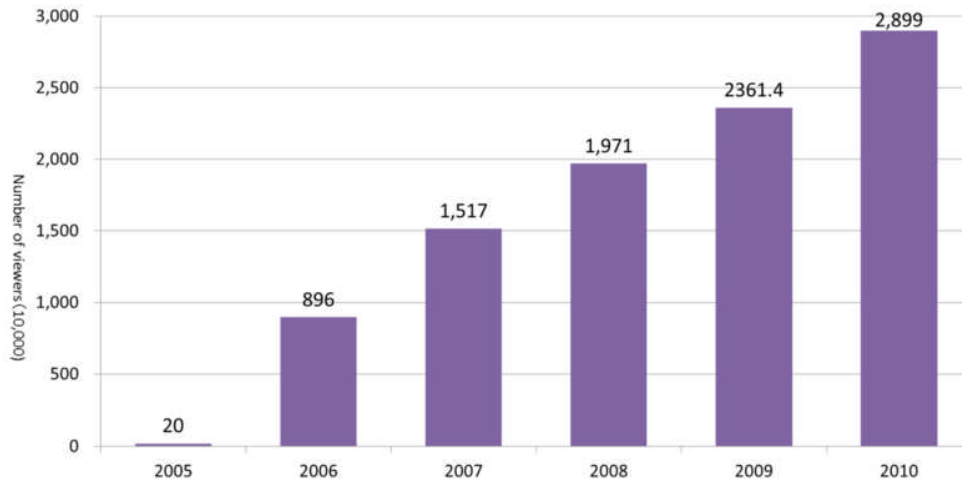
* Participants: number of people that went to theater or viewed video more once during the year

(Source: "White Paper of Leisure", The Japan Productivity Center, "2012 Information Media White Paper" Dentsu Soken")



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Figure 3-25 Number of online video viewers (YouTube)



*: Number of users at the time of survey. Survey period (month) varies for each year.

(Figures for 2010 is as of Feb.2011)

*: During 2005-2008: Users accessed from home / 2009- : Users accessed from home or workplace.

(Source: "2011 Information & Communication White Paper", Ministry of Internal Affairs and Communications.)



3.9 Case studies for economic contribution of films

In this section, the economic contribution of film industry is described based on case studies, which provides a practical image of the economic impacts originated in films, compared to the macro-economic approach explained in the previous sections. First, we define and categorize the “ripple effects” originated by films (3.9.1). Some quantitative results are shown based on external studies, as well as estimates of the direct economic impact of the international film festival (3.9.3).

3.9.1 Examples of economic ripple effects

It can be said that there are many “ripple effects” brought by films, to other industrial sectors which are not, in general, directly associated with the film industry. Table 3-10 shows examples of ripple effects. One of the aspects regarding the economic ripple effect generated from the content industry, can be defined as the value added such as product planning and production within non-content industries. One typical example would be character merchandizing from a popular animated cartoon. As revenue from rights management is growing, we can assume that various ripple effects can be observed in peripheral industries. We can distinguish these effects from the indirect or induced economic impact estimated in previous chapters, where the former is basically the input (or upstream) to the film industry and the latter is the further economic impact from increase in wages (or downstream) occurred from direct and indirect impact. However, both may overlap in terms of economic activity or value, and therefore the ripple effects mentioned in this section may partially be included in the economic contribution estimated in the previous sections.

Table 3-10 Categorization and example of ripple effects

Segment	Description
Character, Design	Product planning / marketing for apparel, toys, or general merchandizing through reconfiguration of content format and copyright management of films
Fashion	Product planning / marketing for clothing and accessories after reconfiguration of content format and copyright management of films
Culture	Product planning / marketing in related service market by expressing lifestyles of the film characters [Examples: “dance boom”, “soccer boom”]
Tourism	Consumption made by filming crew/ staff and tourists visiting film locations (lodging, meals, souvenir purchase and so on)
Transportation	Consumption made by filming crew/staff and tourists visiting filming locations on transportation
Other fields	Increase in recognition (rise in popularity) of the filming location, etc.



3.9.2 Economic ripple effects of films in the local economy

In this section, some examples of economic ripple effects that had led to the economic activation and local revitalization through production, distribution, and exhibition of films, are described based on external studies.

Here we categorize the economic effects into direct effect and ripple effect. The direct economic effects relate to consumption from filming crew/ staff lodging, meals and preparing filming sets at film locations. The ripple effects are the tourist's consumption in transportation, lodging, meals, souvenir purchases and rise in popularity of film locations induced by the location tourism, i.e. tours that visit filming location sites. As such economic ripple effects are expected, many local governments perform aggressive invitation activity of filming location; 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 some examples of economic effects (direct and ripple effects) of Japanese films, observed within a regional economy, which have been quantitatively analyzed by local authorities. We can see that these film titles generated economic effects very close to their own revenue from box-office.

Table 3-11 Examples of Ripple Effects to the Local Area

Title [year]	Economic effects	Description of the effect
Hula Girl [2006] *box-office revenue:1.4b Yen	1.17b Yen	Direct effect: cost of lodging, meals, productions of sets by filming crew Ripple effect: consumption by tourists visiting filming locations, cost of tourism advertising and invitation activities
The Samurai I Loved [2005] *box-office revenue:1.4b Yen	0.6b Yen	Direct effect: cost of lodging, meals, productions of sets by filming crew Ripple effect: consumption by tourists visiting filming locations, cost of tourism advertising and invitation activities
Tokyo Tower [2004] *box-office revenue:1.63b Yen	0.47b Yen	Direct effect: cost of lodging, meals, productions of sets by filming crew Ripple effect: consumption by tourists visiting filming locations

(Source: Tohoku Bureau of Economy, Trade and Industry)

Next, we referred to Walt Disney's various business operations in Japan, from the standpoint of economic ripple effects based on Walt Disney's films.

In Japan, the distribution of films/ TV programs and management of Tokyo Disney Resort, are considered as two pillars of Walt Disney's product market. In its film business, several box-office titles exceeded 10 billion Yen in recent years (Table 3-12). Its business spreads to management of Tokyo Disney Resort (including hotels) as well as distribution of video content (DVDs, Disney Channels), music, illustrated books, games, clothing, tableware, toys, wedding business, mobile phone and so on



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(Table 3-13). This adds up to approximately 500 billion yen per year.

Walt Disney generates its business by producing box-office hits and inducing synergistic effect with related business operation. This can be described as a form of eco-system on the basis of film/video content. Its economic effect on gross output as well as employment is assumed to be a large size, and one can say that this is one example of economic effect originated in films.

Table 3-12 Revenue from Major Disney films (Domestic market)

Title	Film exhibition	year
Alice in Wonderland	11.8b Yen	2010
Finding Nemo	11.0b Yen	2003
Pirates of the Caribbean: At World's End	10.9b Yen	2007
Toy Story 3	10.8b Yen	2010

Table 3-13 Disney-related Market in Japan

Item	Revenue	Notes
Tokyo Disney Resort	317.9b Yen	FY2011 results
Hotels	42.2b Yen	FY2011 results
Retail (Disney Stores)	14.8b Yen	FY2009 results
Winnie-the-Pooh related goods	over 100b Yen	Based on Walt Disney Japan President interview article (Oct.2010)
Disney channels (CS broadcasting)	3.6b Yen	Estimated from number of subscribers (5.75 million households as of Sept.2011)

3.9.3 Economic impact of International Film Festivals

In this section, first we estimate the economic impact of International Film Festivals. Next we describe the economic ripple effect on award-winning films based on external studies.

3.9.3.1 Estimating the direct economic impact of International Film Festival

We have analyzed the direct economic impact of the International Film Festival. When International Film Festivals are held, economic impact is mostly generated by visitors from domestic and foreign countries. As a case study, we chose Tokyo International Film Festival (TIFF), one of the largest film events in Japan and associated events with TIFF.

The Tokyo International Film Festival is a film festival held in Tokyo every October, most recent being 24th TIFF held in Roppongi Hills in October 2011. Also, various tie-up projects and related events



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(other film festivals and business meetings) were held mostly during TIFF. The public record of the 24th TIFF is as follows:

Table 3-14 Public record of the 24th TIFF

Period: Oct. 22nd (Sat.) to 30th (Sun.), 2011 (9 days)
Place: Roppongi Hills, and Sendai City, etc.
Number of films: 177 (355, if films from the tie-up projects are included)
Number of attendees: 118,038 (266,957, when those from the tie-up projects are included)
– TIFF: 118,038 persons
– Tie-up projects: 148,919 persons
Official goods:
- Brochures (1,800 Yen)
- Ecobags (2,000 Yen)
- Badges (300 Yen)

(Source: Public record and Web site of the 24th TIFF)

Based on the data above, we have estimated the economic impact generated by opening of TIFF, tie-up projects, and related events. It is estimated that the economic impact is approximately 950 million Yen. It consists of revenue from entry tickets and related goods, etc., and expenses defrayed in Japan by visitors and invited guests from overseas for transportation and staying, etc.

Table 3-15 Economic impact of 24th TIFF

Item	Unit cost (Yen)	Number of person ^{*1}	Total (million Yen)
Tickets, etc.	500-15,000 Yen ^{*1}	Approx. 267,000	540
Sales of related goods	300-2,000 Yen ^{*1}	Approx. 82,000	130
Expenditure by foreign visitors	103,197 Yen ^{*2}	Approx. 2,670	280
Total			950

*1 : Based on the public record of the 24th TIFF.

*2 : Average expenditure made by foreigners visiting Japan for attending an exhibition/trade fair (Source: "Consumption trend of foreigners visiting Japan (2011)", Japan Tourism Agency)

3.9.3.2 Economic ripple effect from film awards

The effect from winning the Academy Award (or nominated to it) is sometimes referred to as "Oscar Effect" or "Oscar Bounce". For instance, in the United States, it is estimated that the winning of the "Best Picture Award" in the Academy Award increases the revenue of the film exhibition by 20 to 40



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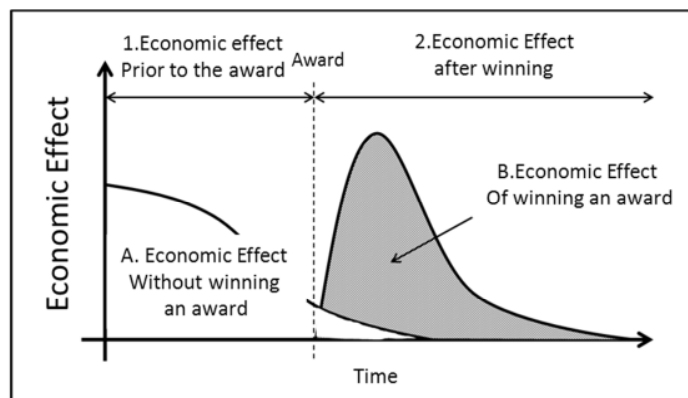
million dollars, while 4 to 5 million dollars for the "Best Actor and/or Actress Award"²⁰.

As mentioned above, winning of, or being nominated for an international film award such as Academy Award, gives an impact on the box-office revenue and DVD sales of the work. Here we will depict the example of economic ripple effect from winning of, or being nominated for the award. We take the Japanese film "Departure" as an example. The film won the "Best Foreign Language Film of the Year" in the 81st Academy Award. We have quoted the analysis from a report conducted by the Digital Contents Association of Japan (DCAJ) in 2010.

The film "Departure" is a Japanese film which was released in September 2008. It was nominated for Academy Award in January 2009 and won the "Best Foreign Language Film" in February 2009. Theater attendance was 5.6 million and the box-office revenue was 6.3 billion Yen.

In assessing the economic ripple effect, economic effect during the 7 months after winning the Academy Award is defined as "Economic effect after winning". This is considered as the incremental economic impact generated by winning the Academy Award. Also, "economic impact prior to the award", which is the economic effect during the film release and the award, is defined as "economic impact without winning the award" (see Figure 3-26). The award-winning effect is derived from the two economic effect.

Figure 3-26 Framework of analysis



- A. Economic Effect without winning an award \cong 1. Economic Effect Prior to the award
- B. Economic Effect of winning an award \cong 2. Economic Effect after winning

For both cases, direct impact, indirect and induced impacts were estimated. Direct effect has been calculated on the basis of box-office revenue, revenue from retail shops, DVDs and the diary of the mortician which is the original work. Indirect and induced impacts were calculated based on the national statistics "2005 Input-Output transaction table". When comparing with the non-awarded case,

²⁰ The estimated is based on the article in Movie Maker, "The Economics of Oscar", July 2003.



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7.77 billion Yen had been added, therefore the multiplier for the award effect equals to 2.14 (Figure 3-27).

Figure 3-27 “*Departure*’s economic ripple effect by winning Academy Award



* DVDs sales are estimated from sales volume after 1 month release

By observing these cases, it can be said that there are a wide range of economic ripple effects brought by films to peripheral industries. Taking the scale into consideration, we should not consider the economic effect of the film industry by just focusing on the exhibition revenue but try to consider widely including content industry and its peripheral industries. Taking into account the contribution to local economies such as through tourism, it can be said that the film industry has an important role in the overall economy.

Also, a wide range of efforts in the film industry including International Film Festivals can be said to have contributed to raise economic contribution, not only has it contributed to the cultural development as a film work.



4. Appendix

4.1 Methodology and Sources of data

The estimation for economic contribution (Gross Output, Value Added, Labor Income and Employment for each sub-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 “Survey of Selected Service Industries (Production and distribution of video content)” published by the Ministry of Economy Trade and Industry. Ratio of production revenue to distribution revenue from past statistics (2004), were applied to the total (production + distribution) revenue, as current statistics does not distinguish between the two.
	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 “Information and Communication Industry Input-Output transaction table” published by the Bureau of Statistics of 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 Impact	Gross Output	Indirect impact is estimated by applying multipliers for “Motion Picture and Video Production/ Distribution” contained in the I-O table to the 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.



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Value Added / Labor Income Employment	Based on the ratios of Value Added/ Labor Income to the Gross Output. As for employment, ratio of FTEs to total number of employees for each industry, are derived from national statistics “2005 Input-Output table”. (This I-O table aggregates the FTEs for all industries). We multiplied this ratio to each industry in the employment table which is contained in the “Information and Communication industry I-O table”. Next, employment coefficients (ratio of FTEs to gross output) for each industry are derived to estimate the multiplier for indirect and induced impact for employment, taking into account the increase in gross output. The multiplier is then multiplied to direct impact (employment).
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Television production / distribution

Item	Details
Direct Impact	Based on both “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.
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.
Employment	Based on FTEs provided in the “Survey of Information and Communication Industry (Television program production)”, for TV production. As for FTEs in TV distribution, ratio of Film production FTEs to Film distribution FTEs is multiplied to TV production FTEs.
Indirect /Induced Impact	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 Employment	The methodology is the same as in the previous table.



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Film Exhibition

Item		Details
Direct Impact	Gross Output	Based on the exhibition revenue statistics published by the Motion Picture Producers Association of Japan, Inc.
	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.
	Employment	Based on FTEs provided in the “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 / Employment	The methodology is the same as in the previous table.

Television Broadcasting

Item		Details
Direct Impact	Gross Output	Based on the revenue statistics from the “Survey on Information and Communication Industry”.
	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.
	Employment	Based on the employment statistics from the “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 / Employment	The methodology is the same as in the previous table.



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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.
	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.
	Employment	Based on the "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 / Employment	The methodology is the same as in the previous table.



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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 IPTV, internet video streaming (ex. VODs) to platforms such as TV/ PC/ Mobile.
	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.
	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.
	Value Added / Labor Income / Employment	The methodology is the same as in the previous table.



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4.2 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)

4.3 Currency exchange rate

The figures in dollars are converted from Yen based on average exchange rate in 2011 announced by Customs and Tariff Bureau, Ministry of Finance Japan (79.97 Yen / dollar) .



4.4 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.